Rural Area Inventory & Analysis

THE CITY OF LAKE ELMO

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Rural Area Inventory and Analysis

The City of Lake Elmo has conducted a Rural Area Analysis to study parcels with rural zoning. The study includes an analysis of each development and aims to compare infrastructure quantities for the rural land use types, as well as population and area. The intent of the study is to provide background and information to aid in future decisions regarding rural zoning and land uses.

A secondary goal of this study is to provide research illustrating the increase of community service costs associated with growth. Four scenarios were developed to calculate increased populations, infrastructure amounts and costs, as well as revenues and expenditures. These hypothetical scenarios aim to generate numbers to illustrate how development could affect the areas with rural zoning in Lake Elmo.

The research included aims to provide information to address the issues associated with rural development. The research uses several terms and vocabulary that is defined as:

High-density development:	High-density development is 4 units per acre or greater.
Large lot development:	Characterized by low-density and automobile dependence, 1 to 10 acre lots.
Low-density development:	Density of area is less than or equal to 1 unit per acre.
Urbanized:	Characterized by areas with a full range of public services, city sewer, and water.
Working land:	Land used for agriculture or open space.

Rural Area Research

Successful communities are places where residents can live, work and play. Rural areas are often subject to sprawl, especially as new developments weaken the agricultural sector. Without strong policies to support open space, rural areas can be consumed by sprawling developments with the community's rural identity consumed as well.

Many studies show that new residential development built adjacent to existing urbanized areas is more cost-effective for local governments than new residential development in rural areas, or in areas without supporting infrastructure. Many different factors contribute to the advantage of placing new development adjacent to existing cities or developed infrastructure, including the cost of public services, environmental impact concerns, and the influence of new development on the agricultural sector.

Growth can occur in two different ways: new growth in areas adjacent to already urbanized locations, and development in areas "beyond the urban fringe." These areas are typically in the rural countryside and contain low-density developments (2 or fewer houses per acre) (Heimlich and Anderson, 2001). These areas are often not connected to sewer systems or citywide water systems and require automobile transportation for travel. The term "sprawl" has been used to define this type of land use pattern. Sprawl is characterized by "scattered, low-density development that uses a lot of land, geographic separation of essential places such as home, work and shopping, and dependency on automobiles" (Freedgood, 2002).

Low-density large lot development is financially rewarding for developers, but creates a land use pattern that is unsustainable damaging to community development and successful places. While low-density large lot development is more attractive to developers, it is costly for government to provide public services to areas. In addition, low-density development that takes place outside urban areas removes land from agricultural use and converts it to a different type of open space. This change in land use can redefine the look and feel of a community and the result is impossible to reverse.

In Minnesota, the number of acres of agricultural land decreased by 2.2 million from 1982 to 1992, with about 10% being converted into urban development (Duncan et al, 1999). From 2007 to 2012, agricultural land decreased by about 882,000 acres (USDA, 2012). As urbanized areas increase, the land from which they are developed is converted from open space, pasture, or cropland. Today, land use patterns indicate that new developments are almost three times more land intensive than they have historically been (Duncan et al, 1999).

Cost of Community Services

Fire stations and emergency services are part of public and community services.

Cost of Community Services and Cost of Public Services Studies are common ways governments evaluate and study growth and its fiscal impacts. The American Farmland Trust has gathered fifteen years of Cost of Community Service Studies (COCS) from nationwide sources. The studies conclude that while residential development contributes a greater proportion of tax revenue than farm and open space lands, residential developments consume more tax revenue than they provides. Farms and open space lands consume less tax revenue than they provide, as they require fewer public services (Heimlich and Anderson, 2001).

The American Farmland Trust began conducting COCS studies to calculate a community's public service costs versus public revenues based of land use. The studies provided tangible information to disprove commonly held beliefs about planning. These myths are that open lands, such as agriculture, should be developed to their "highest and best use," that land used for agriculture receive an "unfair" tax break due to the land being valued for its current use as agriculture instead of its potential value, and that residential development will lower property taxes by increasing the tax base (Freedgood, 2002).

COCS allow the public to understand the fiscal impacts of land use and are often used as a tool to inform policy. "The special contribution of COCS studies is finding that working lands are also an important commercial land use that helps balance community budgets" (Freedgood, 2002). Agricultural land actually pays for itself and creates a surplus of revenue, helping to balance industrial and residential sectors.

As residential areas grow, the city will need to maintain the expanding infrastructure.

Land Use and COCS

The American Farmland Trust and the Land Stewardship Project conducted a study to analyze the differing costs of services in three metro area farm communities. The land uses studied were residential, industrial and agricultural. The study found that the different land uses were distinctive by the amount of revenue they produced and consumed. The study found that residential lands used $1.40 in services for every $1.00 of revenue created, while commercial and industrial lands use $0.37 in services for every $1.00 created, and agricultural lands used only $0.50 in services for every $1.00 of revenue created. The study also found that residential land uses were typically producing 90% of cities revenues, while consuming more than 98% of the revenues. In comparison, agricultural land uses produced 2% of the cities revenues, but were responsible for less than 1% of expenditures (American Farmland Trust, 1994). The total cost of serving residential lands in this study exceeded the amount produced by property taxes.

Lake Elmo Cost of Community Services

In Lake Elmo, the revenue-to-expenditure ratio for residential land showed that for every $1 in revenue generated, there was a $1.07 expenditure.

The revenue-to-expenditure ratio for commercial and industrial land showed that for every $1 in revenue generated, there was a $0.20 expenditure.

The revenue-to-expenditure ratio for working and open land showed that for every $1 in revenue generated, there was a $0.27 expenditure.

The American Farmland Trust included the City of Lake Elmo in their 1994 study. The COCS study illustrated the revenue relationships between three different land uses: Residential, Commercial and Industrial, and Working and Open Land. For Residential land, the revenue-to-expenditure ratio was 1:1.07. Every dollar of tax revenue collected required an expenditure of $1.07. For Commercial and Industrial Land, the ratio was 1:0.20, and for Working and Open Land, the ratio was 1:0.27 (American Farmland Trust, 2010).

Commercial, Industrial, and Working and Open Lands produced a surplus of revenue in 1994. Surprisingly, the Commercial and Industrial lands provided an even greater allowance than Working and Open Land. The other COCS studies included in the same report typically show Working and Open Land to have the fiscally advantageous revenue to expenditure ratio (American Farmland Trust, 2010).

Infrastructure

Sewer systems are sized over capacity to allow for higher densities, growth, and more users.

Infrastructure provides the framework for development and infrastructure upgrades are closely tied to growth. Growth requires road improvements, and road improvements or new roads are a catalyst for new development. At a critical mass, two lane roads often found in rural areas are replaced with wider roads to accommodate higher traffic volumes. These new roads attract more growth, and as old septic systems and wells fail, pressure is added in mass for the city to install sewer services, trunk lines, and city water systems. Sewer systems are typically the last infrastructure investment a city makes before higher density levels are reached (Heimlich and Anderson, 2001).

The costs accrued by growth vary depending upon where the growth occurs within a city. Low-density development costs more than compact development (Heimlich and Anderson, 2001). If development occurs adjacent to existing "urbanized" areas, or areas with existing infrastructure in place, local governments profit. A study was conducted by Real Estate Research Corporation that determined that low-density "sprawl" created 74% greater capital costs than high-density planned development (Heimlich and Anderson, 2001). The low-density large lot developments required higher land, residential construction, road, and utility costs. The study also revealed that public capital costs for streets and utilities were 120% greater for the low-density large lot developments and operating and maintenance costs were 13% higher when compared with high-density planned development.

As densities grow, rural roads will need to widen to accommodate higher traffic volumes.

A similar study was conducted in 1998 to determine what costs unchecked low-density large lot developments accrued in various parts of the country. This study determined that infrastructure costs were 5 to 25 percent higher for low-density large lot development than compact high-density development (Heimlich and Anderson, 2001).

"At typical urban-suburban densities, per capita infrastructure costs fall as densities rise. At very low densities, the use of septic systems, open drainage, and unpaved rural streets without curbs and sidewalks may result in low costs, but the equally low quality of such services becomes evident as development increases and these services prove inadequate" (Heimlich and Anderson, 2001).

Road Maintenance

Land use policies that concentrate new development in currently developed areas will tend to hold down aggregate per capita costs for maintaining all local streets and roads.

The Minnesota Department of Agriculture's Cost of Public Services Study revealed an inverse relationship between per capita road maintenance expenditures and density, residential market value and percentage of city dwellers (Duncan et al, 1999). Road maintenance is the largest expenditure item for local governments. The per capita cost of maintaining roads within a county declines as density, residential market value, and percent of residents in cities increases. The MDA Cost of Public Services Study concludes that the preferred strategy to lower per capita road costs in counties is to encourage new growth to take place in cities and existing developed land.

Urbanized areas and high traffic streets often require a more expensive road that is built to withstand traffic volumes and frequency of use. A typical residential street in Lake Elmo is estimated to cost $158 per linear foot for construction, whereas a typical rural road is estimated at $104 per linear foot.

Road maintenance costs vary depending upon the size of the city or township. Statewide findings report that average per capita costs are $58 for cities, and $47 for townships. These costs reflect the higher urban road standards required by cities (Duncan et al, 1999).

The MDA Cost of Public Services study shows a relationship between per capita residential market value, per capita road costs and density. The report confirms that as per capita market value increases; per capita road costs will rise. However, as both per capita residential market value and density increase, per capita road costs decline (Duncan et al, 1999).

The study results also show a strong relationship between the percent of residents living within a city and the counties per capita outlays for road maintenance. As more residents move to the city, the county's per capita outlays for maintenance of county roads decreases. Similarly, the study determined a linear relationship between density and the per capita cost for maintaining roads. As density increases within the township, the per capita cost for maintaining roads decreases. The road maintenance costs for local government are affected by changes in land use and are subject to variance by available state aid. The study concludes that "land use policies that concentrate new development in currently developed areas will tend to hold down aggregate per capita costs for maintaining all local streets and roads within a county (Duncan et al, 1999).

Snow removal maintenance during winter months adds to annual expenditures.

Schools

As development increases, the per pupil operating cost of schools increase.

Winona, MN, grew 7.5% between 1980 and 1995; per pupil operating costs increased $34.

As city populations expand, schools must acquire more students. State and federal aid are not available to schools with expanding student populations if the new student population is above the poverty line. As a result, school systems with growing student populations must constantly pursue new ways to come up with tax revenues to maintain the quality of the education they provide or find ways to cut spending per pupil (Heimlich and Anderson, 2001).

Generally, as development increase and population increases, per pupil operating cost of schools increase. The new students require transportation, and thus, the per pupil transportation costs increase. Often, school districts must accumulate long-term debt to manage new growth and as a result, per pupil long-term debt increases.

NOTE: The Stillwater School District predicts enrollment to stay level with development.

School operating costs were analyzed within the Minnesota Cost of Public Services Study. Per pupil market value of real property within the district directly influenced per pupil operating costs. In Minnesota, as per pupil market value increases, the amount of state aid the school district receives per pupil declines. The study found that schools with higher per pupil market values of real property tended to spend more in local revenues, partially due to state aid, and partially due to income levels (Duncan et al, 1999).

Winona Area School District in Winona County, MN, experienced a 6% increase of population between 1980 and 1995,. The City of Winona experienced a 7.5% increase in population during this time. It is estimated that 75% of the county's population lived within cities in 1996. Between 1988 and 1997, the Winona Area School District, which serves the City of Winona, Wilson Township and the surrounding cities, increased an average of 0.6 percent annually. As a result, per pupil operating costs increased by two percent per pupil transportation costs increased from $382 to $416, and the long-term debt per pupil increased from $163 to $1,298.

Schools

Prior Lake's growth occurred near existing schools, allowing student to walk to school.

School transportation costs are higher in MN due to the severe weather.

Prior Lake Area School District is another example, with a much higher level of growth. The City of Prior Lake increased 42.7% between 1985 and 1995, with the Scott County expanding only 35.4%. The Prior Lake Area School District serves most of Prior Lake, part of Savage, and portions of Spring Lake and Credit River Townships. Between 1988 and 1997, enrollment increased four percent annually and per pupil operating outlays increased 2.7 percent annually. The increased enrollment rate resulted in an increase in per pupil transportation costs from $358 to $390. A large factor positively influencing transportation costs was that new growth had occurred within the Prior Lake School District and was near the District's schools. This case study revealed that per pupil transportation costs for students residing within the area's cities were much lower than those outside of the cities. In this case, development occurred near existing schools, and students were able to walk to school, keeping per pupil transportation costs low.

School transportation costs are also affected by development. Minnesota has severe weather, and per pupil transportation costs statewide are elevated. Density, location and form of development, and costs for pupil transportation are strongly related. An increase in density results in a decline of per pupil transportation costs. Areas with high densities produce lower per pupil transportation costs than areas of low density. As the number of pupils using the transportation increases, costs decrease. Areas of growth that maximize the number of pupils per square mile and create new development in areas located adjacent to existing developments will have lower per pupil transportation costs. Encouraging students to walk to school also lowers per pupil transportation costs, and new development can be strategically built near existing schools to maximize this effect (Duncan et al, 1999).

School and municipal annual operating costs for low-density development were found to be 2-5 percent greater than compact high-density development (Heimlich and Anderson, 2001).

Public Safety

Public safety is one of the highest expenditure items for local governments.

Public safety services include law enforcement, fire protection, and ambulance services. As population increases, the per capita cost of law enforcement increases, as expected. Similarly, as per capita residential market value increases, the per capita cost of law enforcement increases. Lower governmental outlays are typically found in areas with a strong agricultural sector (Duncan et al, 1999).

Fire protection and ambulance service costs mirror those of law enforcement. Per capita fire protection costs are strongly related to density, population, and per capita market value. As density, population and/or per capita market value increase, there is a need for more firefighter, firehouses, and other public safety amenities. These additional and expanded services increase per capita costs (Duncan et al, 1999).

Environment

As snow melts, road salt dissolves and flows into water bodies affecting water quality.

Development and land use change, especial low-density growth, can have detrimental impacts to water quality, air pollution, public safety, soil quality, and wildlife habitats. Low–density growth converts large amounts of agricultural land, natural habitats, wetland areas, flood plains, and aquifer recharge areas into developments. With compact development, the impact to the environment can be limited, wildlife habitats and natural ecosystems would remain intact, and water runoff volumes and quality changes would be minimized (Heimlich and Anderson, 2001).

Numerous issues relating to water are created with low-density development. The largest impact is the increased impervious surface area and paved areas. Paved areas interfere with ground water recharge and disrupt natural hydraulic cycles (Gallagher, 2001). Sheet flow across parking lots and streets carry pollutants, chemicals, and litter to surface waters. A watershed is ecologically stressed when just 10 to 20% of its area is impervious (Gallagher, 2001). Stomwater regulations and restrictions are in place and help off-set these impacts.

Low-density large lot developments consume large amounts of land and wetlands. Unfortunately, almost half of all wetland losses are due to low-density development. Wildlife habitat is also impacted and wetland areas are one the most coveted habitats as they provide a source of water. Uninhibited growth can have serious impact on natural habitat fragmentation. Fragmentation is the leading cause of the decrease of biodiversity in extreme cases can lead to extinction (Heimlich and Anderson, 2001). In cases where low-density development does not destroy habitat, the loss of fragments of habitat decrease its ecological value and can impact migration patterns (Gallagher, 2001).

Wastewater Systems

Low density development increased chemicals and pollutants that harm water quality.

Higher densities increase the amount of septic tanks and effluent within the ecosystem.

Wastewater Treatment & Environmental Cost:

Several studies have addressed the non-monetary cost of different wastewater systems. The environmental effects of susceptible systems, such as septic tanks, can endanger ecosystems, poison groundwater, and damage the areas residents cherish. One study calculated the environmental benefits of wastewater treatment in monetary terms by quantifying the potential undesirable outputs and the costs the outputs would accrue. The undesirable outputs included increased levels of suspended solids, phosphorus, nitrogen, and other pollutants entering the ecosystem. The study concluded that the cost of wastewater treated through sanitary sewer conveyance to a wastewater treatment plant outweighs the cost of potential undesirable outputs to the environment (Molinos-Senate et al, 2010).

Density Increase & Septic Systems:

In rural areas, septic tanks discharge to drain fields where the effluent is "cleaned" as it travels downward between sand and soil particles. The drain field is designed to filter out potentially harmful chemicals and contaminants, and the filtered water is left to help recharge the groundwater. Higher densities increase the amount of septic tanks and effluent within the ecosystem. Studies show that increased density in rural areas result in ecosystems receiving increased pollutant loads. Most notable are the presence of pharmaceuticals and hormones, with pharmaceuticals being detected more frequently (Standley et al, 2008). The study analyzed high-density residential areas and compared water quality results with low-density residential areas, both in rural locations beyond the sewer line. The pharmaceuticals and hormones were detected at higher concentrations in the high-density areas with impacts to nearby bodies of water and well water quality (Standley et al, 2008).

Farming and the Agricultural Sector

Development occurring next to agricultural land increases pressure for development.

Development and land use change affect the agricultural sector and the market value of agricultural land. The land use changes and new developments do not necessarily mean the end of agriculture, however, in order for the agricultural sector to survive, it must adapt to development by changing the products and services offered (Heimlich and Anderson, 2001).

A national-scale analysis of the determinants of agricultural land values predicted the effects of potential land development on agricultural land prices. The study found that a number of factors, including policy, discourage the preservation of agricultural land and encouraged development. Agricultural land in close proximity to urban centers increased in value as development occurred, and landowners in these areas were under great pressures to develop their land. The value of the land includes potential uses, and the land price reflects the sum of expected net returns the land would accrue if changed to its most profitable use. If the land is currently profitable as agriculture, but projected to yield large returns in the future from development, these yields are included in the current land value. As a result, the development of land in close proximity to agricultural land increases the value of the agricultural land, and adds pressure for development. The study found that to conserve the land, or to use the land for agricultural use would require a significant financial compensation (Plantinga et al, 2002) to the landowner. The influence of new development on agricultural land values must be of consideration and should influence future planning decisions. Strategic planning is needed to prevent the loss of agricultural land and open spaces.

Agricultural land value is influenced by its proximity to urban areas.

The study found strong relationships between potential density increases and the value of agricultural land. If the density in a county increased by one unit, the land value increased by $65.14 per acre, and the increase in highway density, or greater traffic, increased agricultural land value by $1264 per acre. Finally, the study determined that if the county had a large amount of agricultural land, the value of the land diminished, allowing the land use to remain agricultural. These results are for an average of three thousand counties across the United States (Plantinga et al, 2002).

Agricultural land value is also based on its proximity to urban areas. The closer the agricultural land is to an urban center, the higher the land is valued. Agricultural land near an urban center is more likely to develop than land located farther from the urban center (Colver et al, 1997). It is necessary for the City of Lake Elmo to understand the effects of the estimated population growth within the Twin Cities Metro. The increased density will increase the value of agricultural land in Lake Elmo, and the increased density within Lake Elmo will add to the value.

Agricultural Preservation

Agricultural land and open space help define Lake Elmo's rural identity. Agricultural areas provide benefits to the City as they limit public service costs.

Minnesota's Agricultural Land Preservation Act

In response to the large amounts of agricultural land being converted to other uses, Minnesota adopted the Agricultural Land Preservation Act in 1984. The purpose of the Act is to preserve farmland for future generations to use, and to help farmers develop long term plans for their land (Duncan, 1996). The Act allows the land to be preserved for agricultural use and the farmers receive tax credits and other benefits for their commitment.

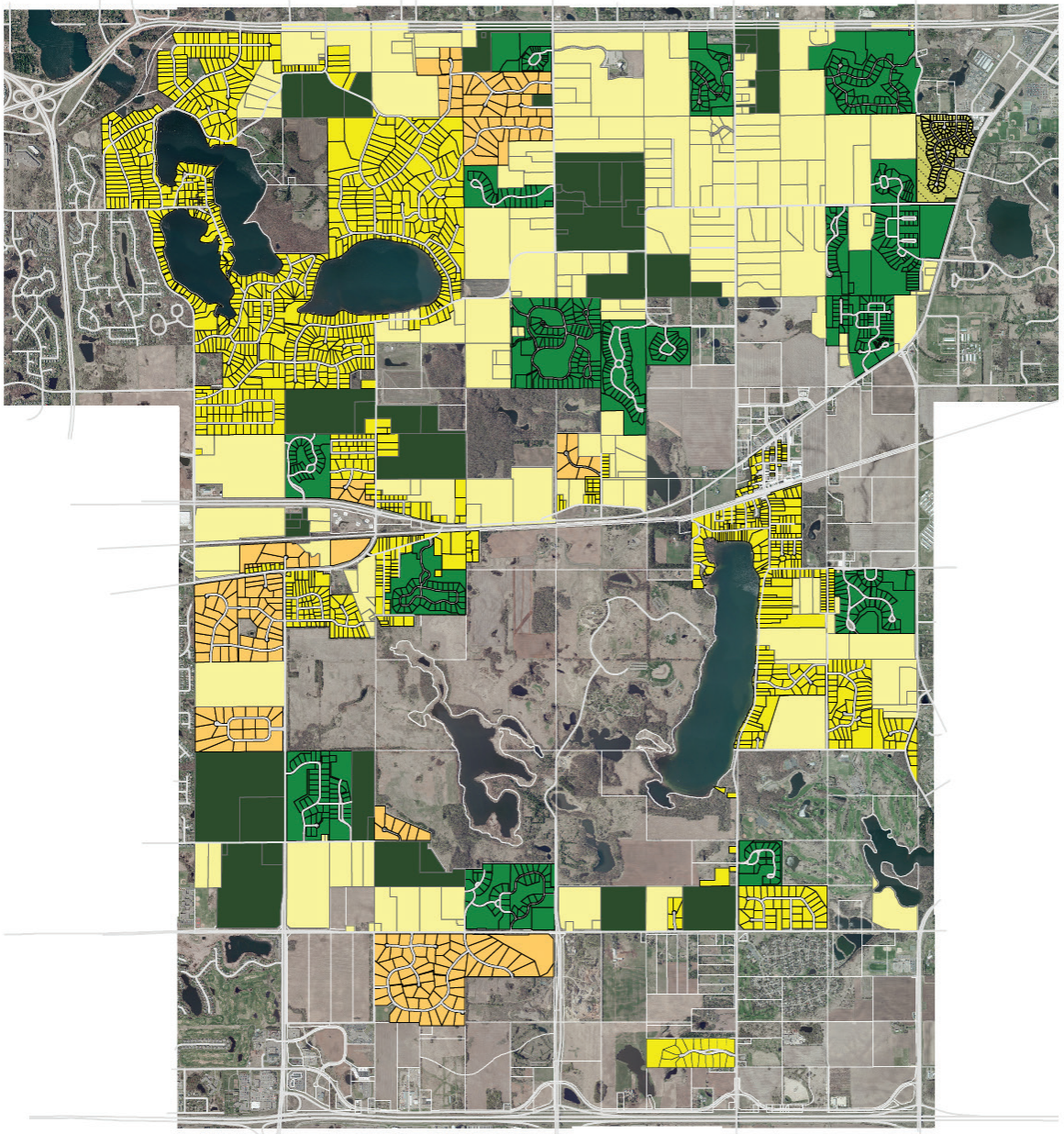
The land protected by the Act as the "agricultural preserve" has advantages such as the prohibition of public facility siting in preserve areas, expanded protection in eminent domain actions, and exemptions for local ordinances that restrict or inhibit normal agricultural practices. The Preservation Act also provides benefits to the City as it limits public service costs in rural areas and places responsible limits on non-farm development in the agriculture sector (Duncan, 1996).

Sense of Place and Rural Identity

The costs associated with growth must consider the impact of development to the landscape. The natural environment and open space areas contribute to quality of life by providing recreation, pleasant views, clean air, and an identity. Low-density development consumes open space and the effects are lasting (Heimlich and Anderson, 2001).

Area Profiles: Rural Land Use Areas in Lake Elmo

Rural Area Zoning Map



The rural areas of Lake Elmo are zoned as Agricultural (A), Rural Residential (RR), Rural Single Family (RS), Residential Estates (RE), and Open Space Preservation (OP).

Several Open Space Preservation (OP) subdivisions have been processed through a conditional use permit, but retain Agricultural or Rural Residential zoning.

This inventory aims to guide stakeholders and policymakers by summarizing the infrastructural quantities, areas, and densities of each subdivision. The following provides an analysis of the subdivisions found in the Rural Planning Area of Lake Elmo.

A summary of all findings can be found in Appendix A, located at the end of this document.

Open Space Preservation Zoning

Open Space Preservation Zoning Totals

Zoning	OP
Average Number of Lots	33
Estimate Average Population per Development	117 persons
Total Mean Lot Size	0.74 acres

Water

Estimated Total Mean Cost for Water Infrastructure	$307,495
Estimated Mean Cost for Water Infrastructure per Lot	$9,760

Roads

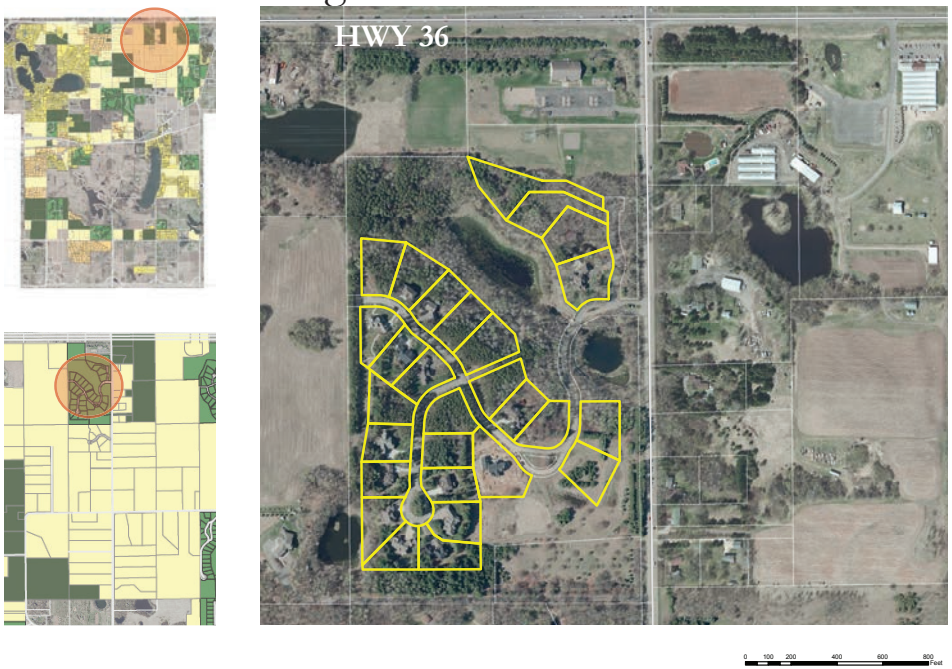
Average Linear Feet of Road	5,257 LF
Average Linear Feet of Road per Lot	156 LF
Estimated Total Mean Road Cost	$861,469
Estimated Mean Road Cost Per Lot	$25,603

Sanitary System

Estimated Total Mean Linear Feet of Sanitary Sewer Pipe	3,999 LF
Estimated Mean Linear Feet of Sanitary Sewer Pipe per Lot	122 LF
Estimated Total Mean Cost of Sanitary Sewer Pipe	$496,491
Estimated Mean Cost of Sanitary Sewer Pipe per Lot	$15,116

Bluestem at Fields of St. Croix

Discover Crossing



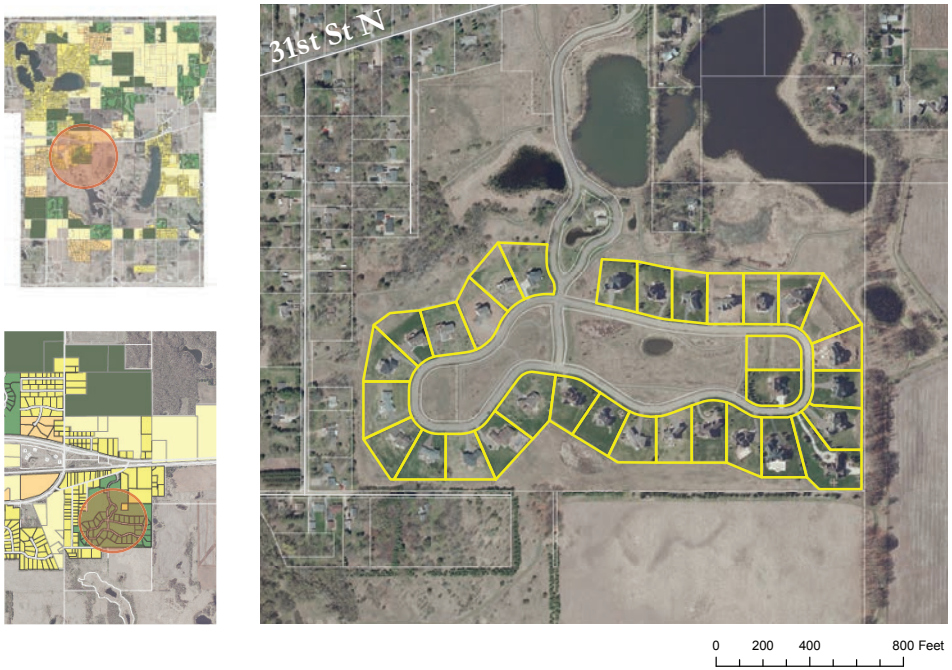
Bluestem at Fields of St. Croix Totals

Zoning	OP	Water System Type	City
Estimate Population	49 persons	Linear Feet of Pipe	793 feet
Secondary Access	No	Linear Feet of Pipe per Lot	57 feet
Number of Lots	14	Estimate Cost of Water System Total	$32,513
Mean Lot Size	0.08 acres		
Sum of All Lot Sizes	1.12 acres	Estimate Cost of Water System per Lot	$2,322
Linear Feet of Road	868 feet	Sanitary System Type	Community
Linear Feet of Road per Lot	62 feet	Estimate DWF (gal/day)	2,848 g/d
Estimate Cost of Road Reconstruction Total	$142,165	Linear Feet of Pipe	616 feet
		Linear Feet of Pipe per Lot	44 feet
Estimate Cost of Road Reconstruction per Lot	$10,155	Estimate Cost of Sanitary System Total	$76,487
		Estimate Cost of Sanitary System per Lot	$5,463

Discover Crossing Totals

Zoning	OP	Water System Type	City
Estimate Population	98 persons	Linear Feet of Pipe	3,798 feet
Secondary Access	No	Linear Feet of Pipe per Lot	136 feet
Number of Lots	28	Estimate Cost of Water System Total	$155,718
Mean Lot Size	0.86 acres		
Sum of All Lot Sizes	24.13 acres	Estimate Cost of Water System per Lot	$5,561
Linear Feet of Road	3,345 feet	Sanitary System Type	Community
Linear Feet of Road per Lot	119 feet	Estimate DWF (gal/day)	5,695 g/d
Estimate Cost of Road Reconstruction Total	$548,112	Linear Feet of Pipe	3,659 feet
		Linear Feet of Pipe per Lot	131 feet
Estimate Cost of Road Reconstruction per Lot	$19,575	Estimate Cost of Sanitary System Total	$454,268
		Estimate Cost of Sanitary System per Lot	$16,224

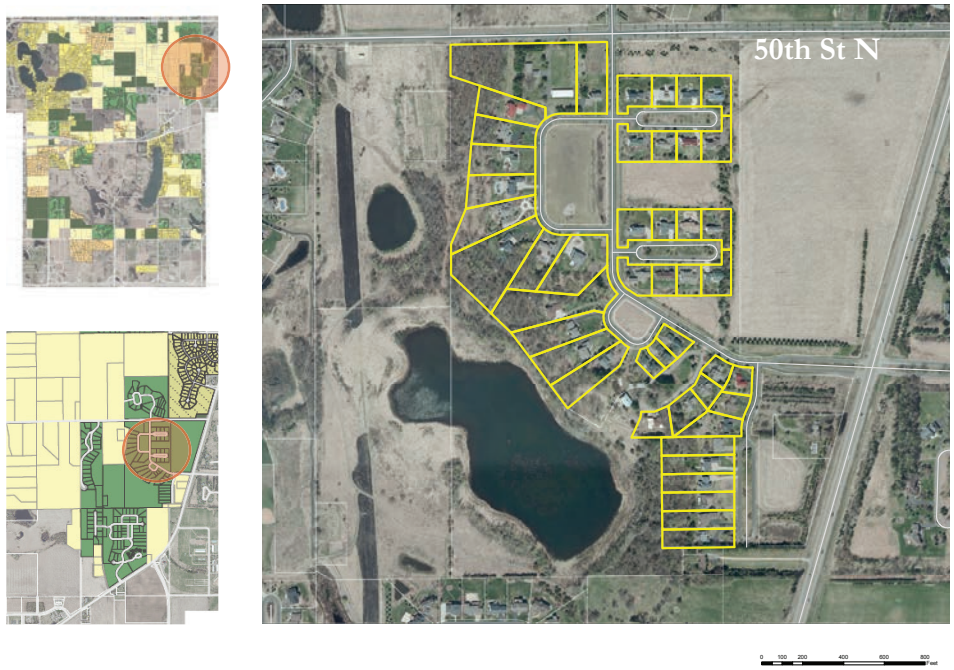
Farms of Lake Elmo



Farms of Lake Elmo Totals

Zoning	OP	Water System Type	City
Estimate Population	112 persons	Linear Feet of Pipe	6,518 Feet
Secondary Access	No	Linear Feet of Pipe per Lot	204 feet
Number of Lots	32	Estimate Cost of Water System Total	$267,238
Mean Lot Size	0.82 acres		
Sum of All Lot Sizes	26.22 acres	Estimate Cost of Water System per Lot	$8,351
Linear Feet of Road	6,926 feet	Sanitary System Type	Community
Linear Feet of Road per Lot	216 feet	Estimate DWF (gal/day)	6,509 g/d
Estimate Cost of Road Reconstruction Total	$1,134,894	Linear Feet of Pipe	5,425 feet
		Linear Feet of Pipe per Lot	170 feet
Estimate Cost of Road Reconstruction per Lot	$35,466	Estimate Cost of Sanitary System Total	$673,617
		Estimate Cost of Sanitary System per Lot	$21,051

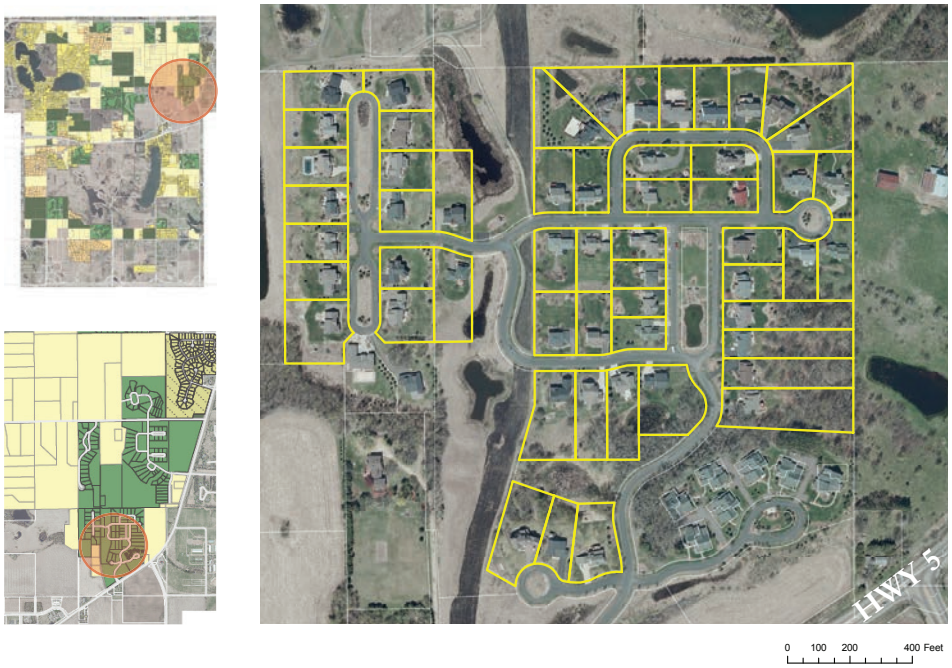
Fields of St. Croix 1



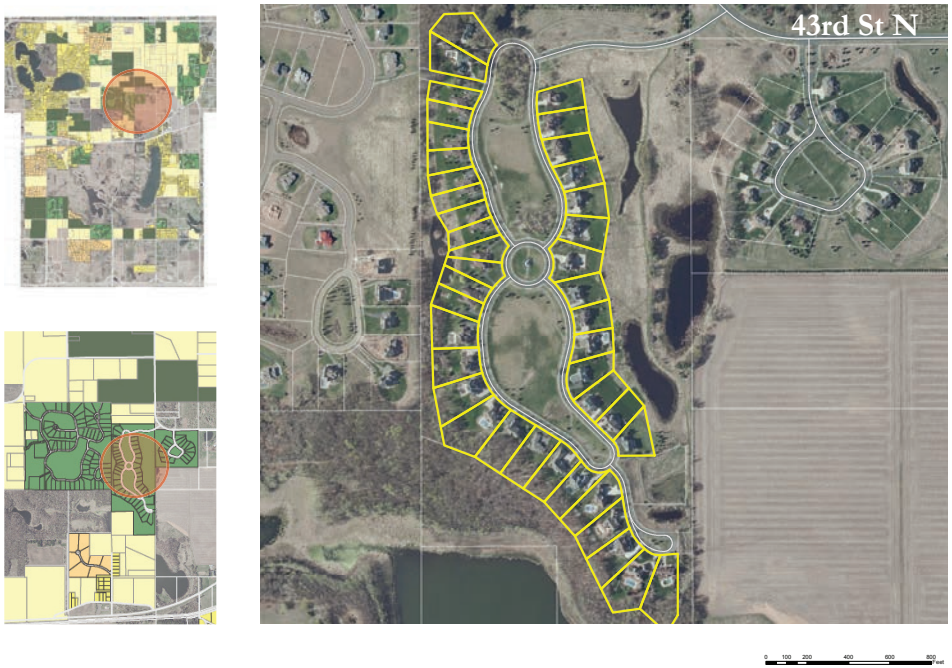
Fields of St. Croix 1 Totals

Zoning	OP	Water System Type	Private Well
Estimate Population	161 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	46	Estimate Cost of Water System Total	$621,000
Mean Lot Size	0.74 acres		
Sum of All Lot Sizes	36.53 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	3,345 feet	Sanitary System Type	Community
Linear Feet of Road per Lot	119 feet	Estimate DWF (gal/day)	9,357 g/d
Estimate Cost of Road Reconstruction Total	$1,230,589	Linear Feet of Pipe	4,416 feet
		Linear Feet of Pipe per Lot	96 feet
Estimate Cost of Road Reconstruction per Lot	$26,752	Estimate Cost of Sanitary System Total	$548,419
		Estimate Cost of Sanitary System per Lot	$11,922

Fields of St. Croix 2nd Addition



Hamlet on Sunfish Lake



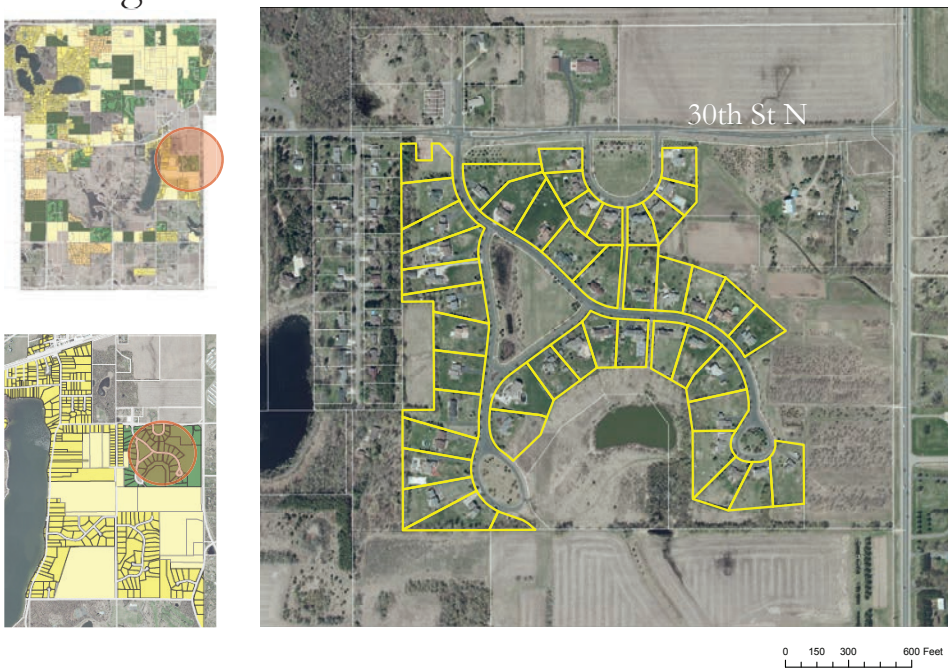
Fields of St. Croix 2nd Addition Totals

Zoning	OP	Water System Type	City
Estimate Population	189 persons	Linear Feet of Pipe	5,913 feet
Secondary Access	No	Linear Feet of Pipe per Lot	110 feet
Number of Lots	54	Estimate Cost of Water System Total	$242,433
Mean Lot Size	0.35 acres		
Sum of All Lot Sizes	1.24 acres	Estimate Cost of Water System per Lot	$4,490
Linear Feet of Road	7,476 feet	Sanitary System Type	Community
Linear Feet of Road per Lot	138 feet	Estimate DWF (gal/day)	10,984 g/d
Estimate Cost of Road Reconstruction Total	$1,224,935	Linear Feet of Pipe	4,112 feet
		Linear Feet of Pipe per Lot	76 feet
Estimate Cost of Road Reconstruction per Lot	$22,684	Estimate Cost of Sanitary System Total	$510,573
		Estimate Cost of Sanitary System per Lot	$9,455

Hamlet on Sunfish Lake Totals

Zoning	OP	Water System Type	Private Well
Estimate Population	144 persons	Linear Feet of Pipe	N/A
Secondary Access	No	Linear Feet of Pipe per Lot	N/A
Number of Lots	41	Estimate Cost of Water System Total	$553,500
Mean Lot Size	0.73 acres		
Sum of All Lot Sizes	29.80 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	6,630 feet	Sanitary System Type	Community
Linear Feet of Road per Lot	162 feet	Estimate DWF (gal/day)	8,340 g/d
Estimate Cost of Road Reconstruction Total	$1,086,392	Linear Feet of Pipe	1903 feet
		Linear Feet of Pipe per Lot	46 feet
Estimate Cost of Road Reconstruction per Lot	$26,497	Estimate Cost of Sanitary System Total	$236,329
		Estimate Cost of Sanitary System per Lot	$5,764

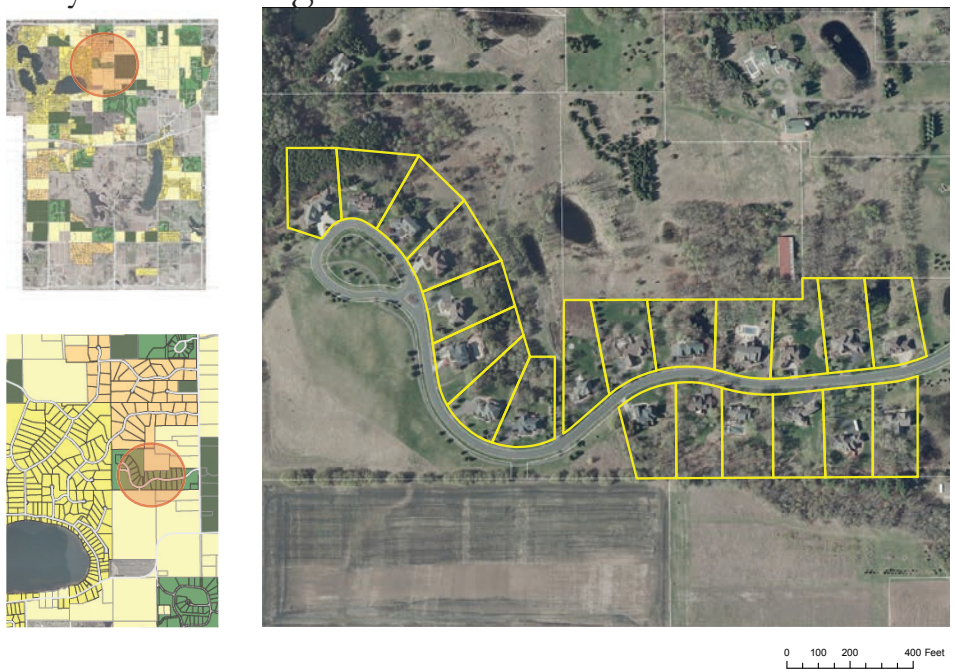
Heritage Farm



Heritage Farm Totals

Zoning	OP	Water System Type	City
Estimate Population	161 persons	Linear Feet of Pipe	6,188 feet
Secondary Access	No	Linear Feet of Pipe per Lot	135 feet
Number of Lots	46	Estimate Cost of Water System Total	$253,708
Mean Lot Size	0.85 acres		
Sum of All Lot Sizes	39 acres	Estimate Cost of Water System per Lot	$6,515
Linear Feet of Road	5,991 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	130 feet	Estimate DWF (gal/day)	9,357 g/d
Estimate Cost of Road Reconstruction Total	$981,751	Linear Feet of Pipe *	*5,991 feet*
		Linear Feet of Pipe per Lot *	*130 feet*
Estimate Cost of Road Reconstruction per Lot	$21,342	Estimate Cost of Sanitary System Total *	*$743,883*
		Estimate Cost of Sanitary System per Lot *	*$16,171*

Meyer's Pineridge

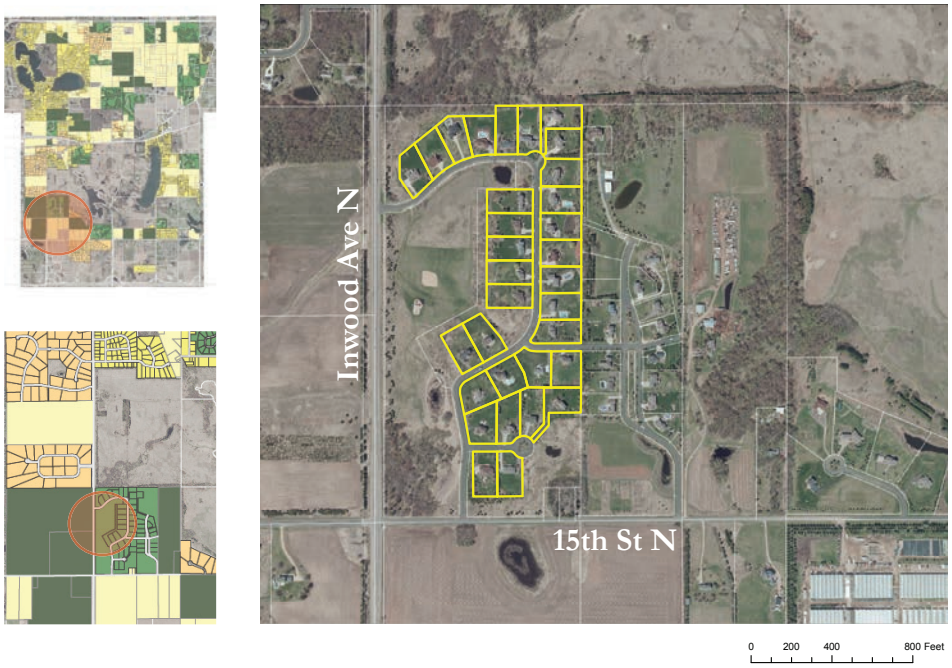


Meyer's Pineridge Totals

Zoning	OP	Water System Type	Private Well
Estimate Population	74 persons	Linear Feet of Pipe	N/A
Secondary Access	No	Linear Feet of Pipe per Lot	N/A
Number of Lots	21	Estimate Cost of Water System Total	$283,500
Mean Lot Size	0.9 acres		
Sum of All Lot Sizes	22 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	3,449 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	164 feet	Estimate DWF (gal/day)	4,272 g/d
Estimate Cost of Road Reconstruction Total	$565,088	Linear Feet of Pipe *	*3,449 feet*
		Linear Feet of Pipe per Lot *	*164 feet*
Estimate Cost of Road Reconstruction per Lot	$26,909	Estimate Cost of Sanitary System Total *	*$438,201*
		Estimate Cost of Sanitary System per Lot *	*$20,391*

* If the development uses private septic systems, a sanitary system cost was estimated.

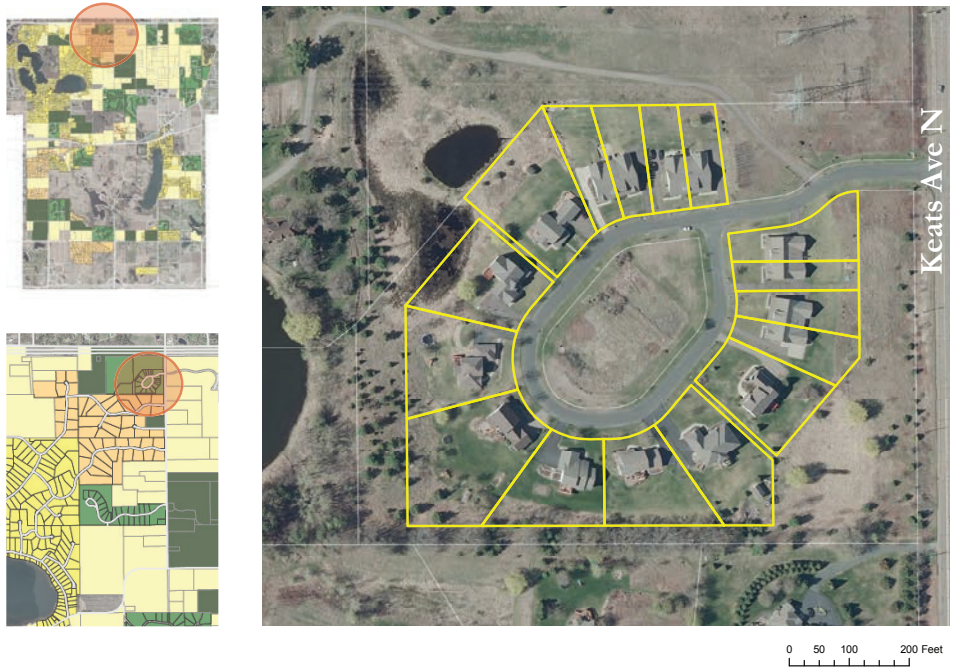
Parkview Estates



Parkview Estates Totals

Zoning	OP	Water System Type	Private Well
Estimate Population	112 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	32	Estimate Cost of Water System Total	$432,000
Mean Lot Size	1 acre		
Sum of All Lot Sizes	32 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	4,598 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	144 feet	Estimate DWF (gal/day)	6,509 g/d
Estimate Cost of Road Reconstruction Total	$753,428	Linear Feet of Pipe	* *4,598 feet*
		Linear Feet of Pipe per Lot	* *144 feet*
Estimate Cost of Road Reconstruction per Lot	$23,544	Estimate Cost of Sanitary System Total	* *$570,918*
		Estimate Cost of Sanitary System per Lot	* *$17,841*

Prairie Hamlet

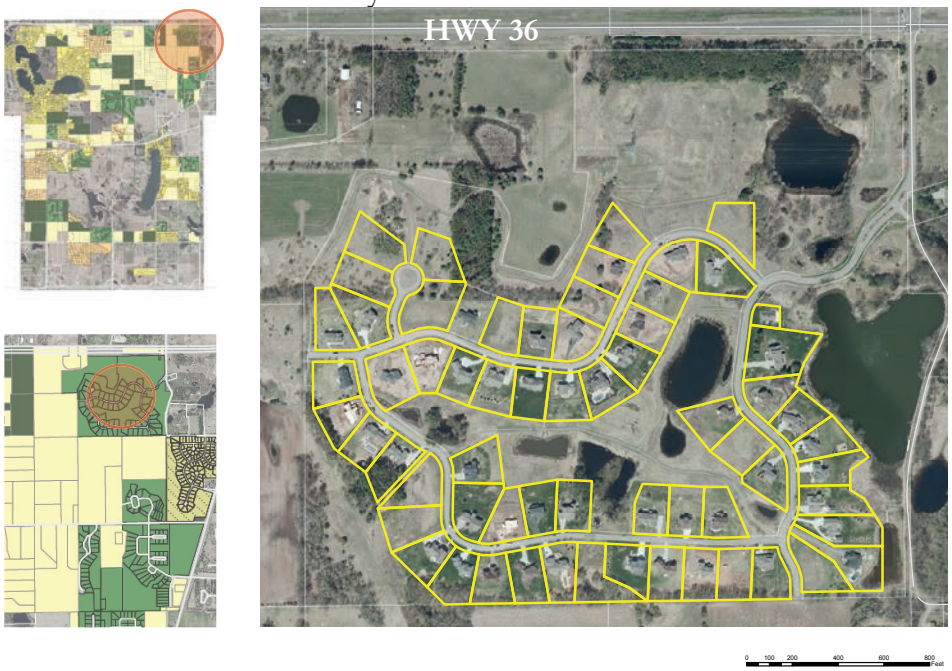


Prairie Hamlet Totals

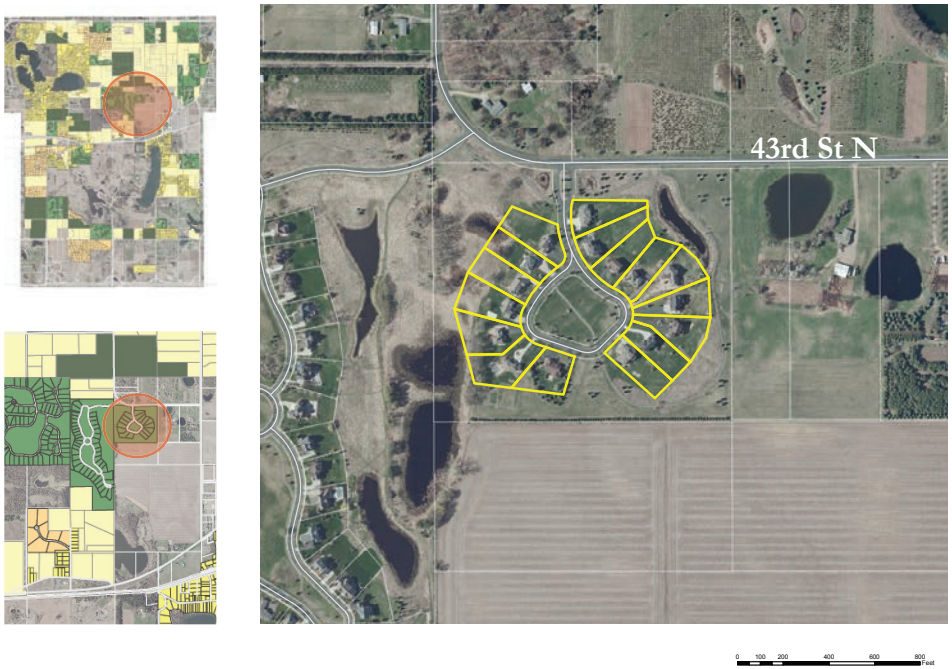
Zoning	OP	Water System Type	Private Well
Estimate Population	56 persons	Linear Feet of Pipe	N/A
Secondary Access	No	Linear Feet of Pipe per Lot	N.A
Number of Lots	16	Estimate Cost of Water System Total	$216,000
Mean Lot Size	0.45 acres		
Sum of All Lot Sizes	7.16 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	1,426 feet	Sanitary System Type	Community
Linear Feet of Road per Lot	89 feet	Estimate DWF (gal/day)	3,255 g/d
Estimate Cost of Road Reconstruction Total	$233,714	Linear Feet of Pipe	370 feet
		Linear Feet of Pipe per Lot	23 feet
Estimate Cost of Road Reconstruction per Lot	$14,607	Estimate Cost of Sanitary System Total	$45,942
		Estimate Cost of Sanitary System per Lot	$2,871

* If the development uses private septic systems, a sanitary system cost was estimated.

St. Croix's Sanctuary



Sunfish Ponds



St. Croix's Sanctuary Totals

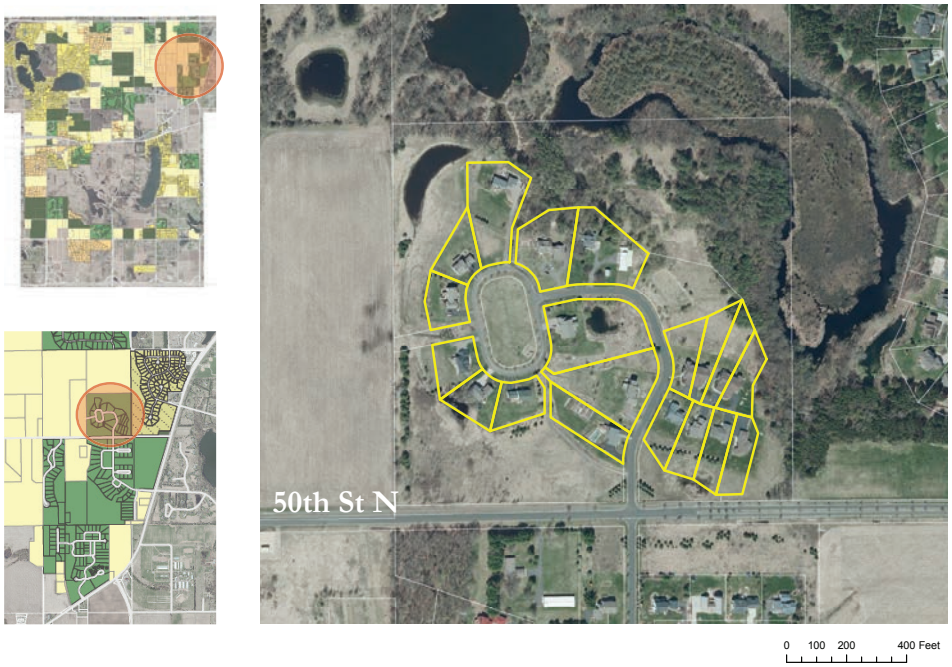
Zoning	OP	Water System Type	City
Estimate Population	217 persons	Linear Feet of Pipe	8,665 feet
Secondary Access	No	Linear Feet of Pipe per Lot	140 feet
Number of Lots	62	Estimate Cost of Water System Total	$355,265
Mean Lot Size	0.83 acres		
Sum of All Lot Sizes	52 acres	Estimate Cost of Water System per Lot	$5,730
Linear Feet of Road	7,785 feet	Sanitary System Type	Community
Linear Feet of Road per Lot	126 feet	Estimate DWF (gal/day)	12,611 g/d
Estimate Cost of Road Reconstruction Total	$1,275,650	Linear Feet of Pipe	7,887 feet
		Linear Feet of Pipe per Lot	127 feet
Estimate Cost of Road Reconstruction per Lot	$20,575	Estimate Cost of Sanitary System Total	$979,243
		Estimate Cost of Sanitary System per Lot	$15,794

Sunfish Ponds Totals

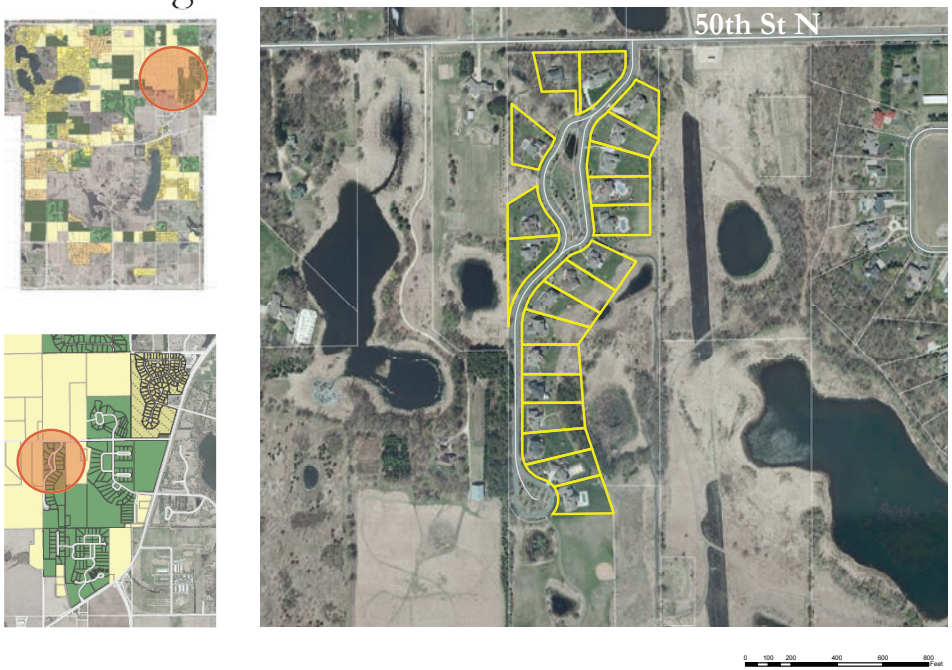
Zoning	OP	Water System Type	Private Well
Estimate Population	56 persons	Linear Feet of Pipe	N/A
Secondary Access	No	Linear Feet of Pipe per Lot	N/A
Number of Lots	16	Estimate Cost of Water System Total	$216,000
Mean Lot Size	0.81 acres		
Sum of All Lot Sizes	12.95 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	1,660 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	104 feet	Estimate DWF (gal/day)	3,255 g/d
Estimate Cost of Road Reconstruction Total	$272,008	Linear Feet of Pipe	* *1,600 feet*
		Linear Feet of Pipe per Lot	* *104 feet*
Estimate Cost of Road Reconstruction per Lot	$17,001	Estimate Cost of Sanitary System Total	* *$206,117*
		Estimate Cost of Sanitary System per Lot	* *$12,882*

* If the development uses private septic systems, a sanitary system cost was estimated.

Tamarack Farm Estates



Tana Ridge



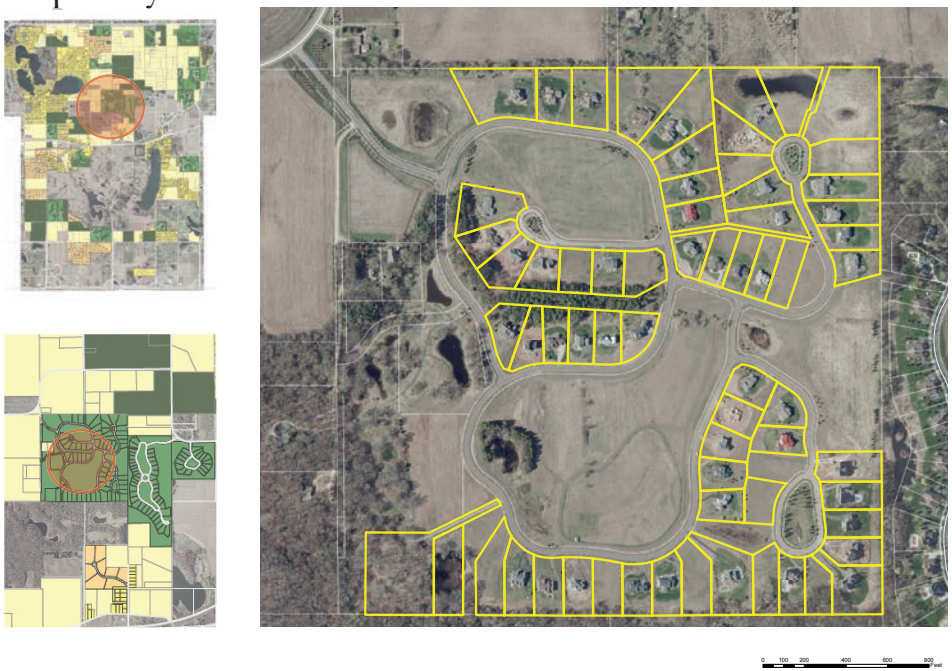
Tamarack Farm Estates Totals

Zoning	OP	Water System Type	Private Well
Estimate Population	67 persons	Linear Feet of Pipe	N/A
Secondary Access	No	Linear Feet of Pipe per Lot	N/A
Number of Lots	19	Estimate Cost of Water System Total	$256,500
Mean Lot Size	0.69 acres		
Sum of All Lot Sizes	13.25 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	2,044 feet	Sanitary System Type	Community
Linear Feet of Road per Lot	108 feet	Estimate DWF (gal/day)	3,865 g/d
Estimate Cost of Road Reconstruction Total	$334,848	Linear Feet of Pipe	2,044 feet
		Linear Feet of Pipe per Lot	108 feet
Estimate Cost of Road Reconstruction per Lot	$17,624	Estimate Cost of Sanitary System Total	$253,735
		Estimate Cost of Sanitary System per Lot	$13,354

Tana Ridge Totals

Zoning	OP	Water System Type	City
Estimate Population	70 persons	Linear Feet of Pipe	3,635 feet
Secondary Access	No	Linear Feet of Pipe per Lot	182 feet
Number of Lots	20	Estimate Cost of Water System Total	$149,035
Mean Lot Size	0.77 acres		
Sum of All Lot Sizes	15.34 acres	Estimate Cost of Water System per Lot	$7,452
Linear Feet of Road	3,435 feet	Sanitary System Type	Community
Linear Feet of Road per Lot	172 feet	Estimate DWF (gal/day)	4,068 g/d
Estimate Cost of Road Reconstruction Total	$562,859	Linear Feet of Pipe	1,903feet
		Linear Feet of Pipe per Lot	95 feet
Estimate Cost of Road Reconstruction per Lot	$28,143	Estimate Cost of Sanitary System Total	$236,329
		Estimate Cost of Sanitary System per Lot	$11,816

Tapestry at Charlotte's Grove



The Homestead

Tapestry at Charlotte's Grove Totals

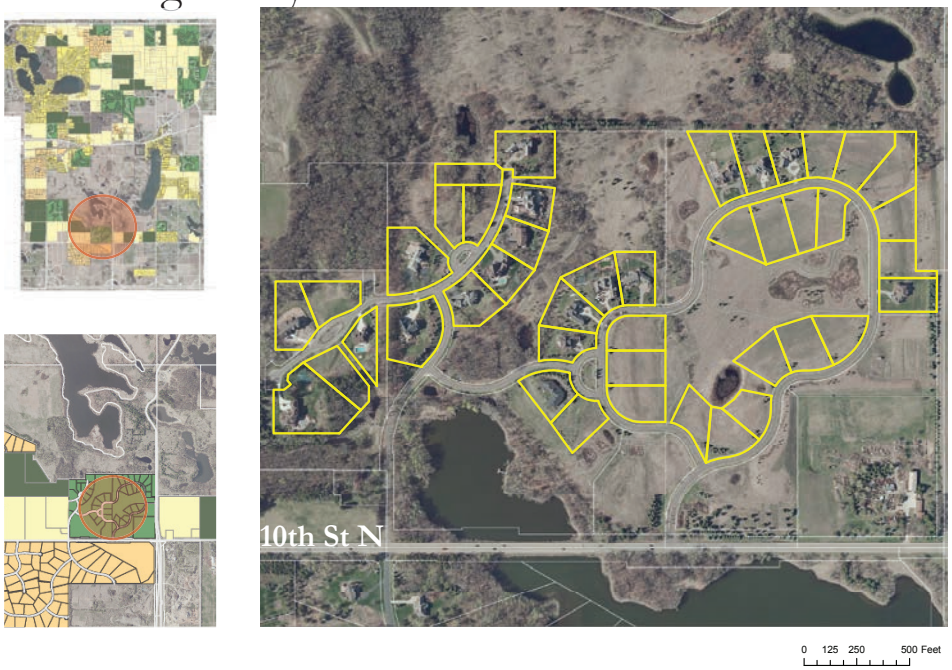
Zoning	OP	Water System Type	City
Estimate Population	235 persons	Linear Feet of Pipe	11,452 feet
Secondary Access	No	Linear Feet of Pipe per Lot	171 feet
Number of Lots	67	Estimate Cost of Water System Total	$459,532
Mean Lot Size	0.99 acres		
Sum of All Lot Sizes	67.6 acres	Estimate Cost of Water System per Lot	$7,008
Linear Feet of Road	12,090 feet	Sanitary System Type	Community
Linear Feet of Road per Lot	180 feet	Estimate DWF (gal/day)	13,628 g/d
Estimate Cost of Road Reconstruction Total	$1,981,067	Linear Feet of Pipe	7,945 feet
		Linear Feet of Pipe per Lot	119 feet
Estimate Cost of Road Reconstruction per Lot	$29,568	Estimate Cost of Sanitary System Total	$986,688
		Estimate Cost of Sanitary System per Lot	$14,727

The Homestead Totals

Zoning	OP	Water System Type	Private Well
Estimate Population	67 persons	Linear Feet of Pipe	N/A
Secondary Access	No	Linear Feet of Pipe per Lot	N/A
Number of Lots	19	Estimate Cost of Water System Total	$256,500
Mean Lot Size	0.86 acres		
Sum of All Lot Sizes	16.4 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	6,684 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	352 feet	Estimate DWF (gal/day)	3,864.8 g/d
Estimate Cost of Road Reconstruction Total	$1,095,299	Linear Feet of Pipe	* *6,684 feet*
		Linear Feet of Pipe per Lot	* *352 feet*
Estimate Cost of Road Reconstruction per Lot	$57,647	Estimate Cost of Sanitary System Total	* *$829,975*
		Estimate Cost of Sanitary System per Lot	* *$43,683*

* If the development uses private septic systems, a sanitary system cost was estimated.

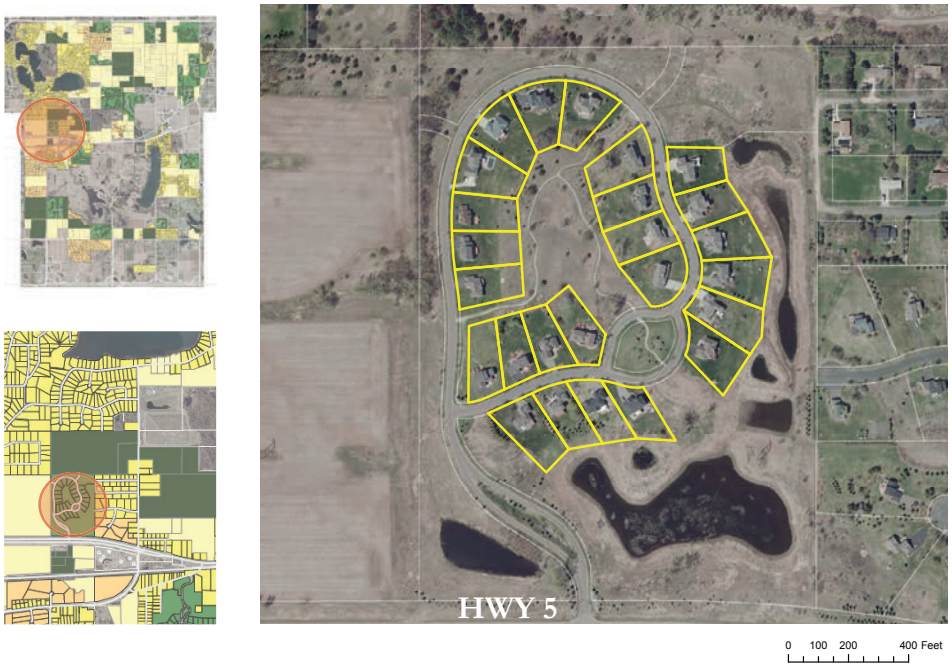
Whistling Valley



Whistling Valley Totals

Zoning	OP	Water System Type	Private
Estimate Population	151 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	43	Estimate Cost of Water System Total	$580,500
Mean Lot Size	1.02 acres		
Sum of All Lot Sizes	43.81 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	7,500 feet	Sanitary System Type	Community
Linear Feet of Road per Lot	174 feet	Estimate DWF (gal/day)	8,747 g/d
Estimate Cost of Road Reconstruction Total	$1,228,950	Linear Feet of Pipe	6,523 feet
		Linear Feet of Pipe per Lot	152 feet
Estimate Cost of Road Reconstruction per Lot	$28,580	Estimate Cost of Sanitary System Total	$809,939
		Estimate Cost of Sanitary System per Lot	$18,835

Wildflower Shores



Wildflower Shores Totals

Zoning	OP	Water System Type	City
Estimate Population	88 persons	Linear Feet of Pipe	4,731 feet
Secondary Access	No	Linear Feet of Pipe per Lot	189 feet
Number of Lots	25	Estimate Cost of Water System Total	$193,971
Mean Lot Size	0.63 acres		
Sum of All Lot Sizes	15.8 acres	Estimate Cost of Water System per Lot	$7,759
Linear Feet of Road	5,216 feet	Sanitary System Type	Community
Linear Feet of Road per Lot	209 feet	Estimate DWF (gal/day)	5,085 g/d
Estimate Cost of Road Reconstruction Total	$854,694	Linear Feet of Pipe	2,788 feet
		Linear Feet of Pipe per Lot	112 feet
Estimate Cost of Road Reconstruction per Lot	$34,188	Estimate Cost of Sanitary System Total	$346,177
		Estimate Cost of Sanitary System per Lot	$13,847

Residential Estates Zoning

Residential Estates Zoning Totals

Zoning	RE
Average Number of Lots	19
Estimate Average Population per Development	66 persons
Total Mean Lot Size	3.41 acres

Water

Estimated Total Mean Cost for Water Infrastructure	$216,266
Estimated Mean Cost for Water Infrastructure per Lot	$11,235

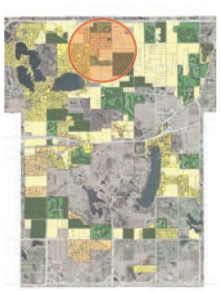
Roads

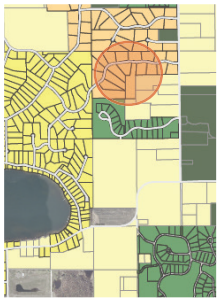
Average Linear Feet of Road	3,330 LF
Average Linear Feet of Road per Lot	179 LF
Estimated Total Mean Road Cost	$543,799
Estimated Mean Road Cost Per Lot	$29,394

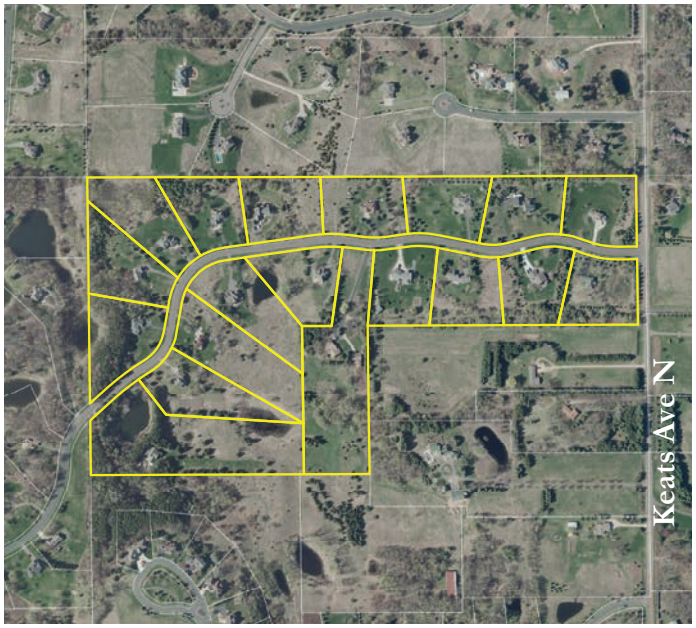
Sanitary System

Estimated Total Mean Linear Feet of Sanitary Sewer Pipe	3,330 LF
Estimated Mean Linear Feet of Sanitary Sewer Pipe per Lot	179 LF
Estimated Total Mean Cost of Sanitary Sewer Pipe	$413,527
Estimated Mean Cost of Sanitary Sewer Pipe per Lot	$22,273

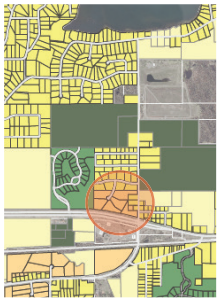
Arabian Hills

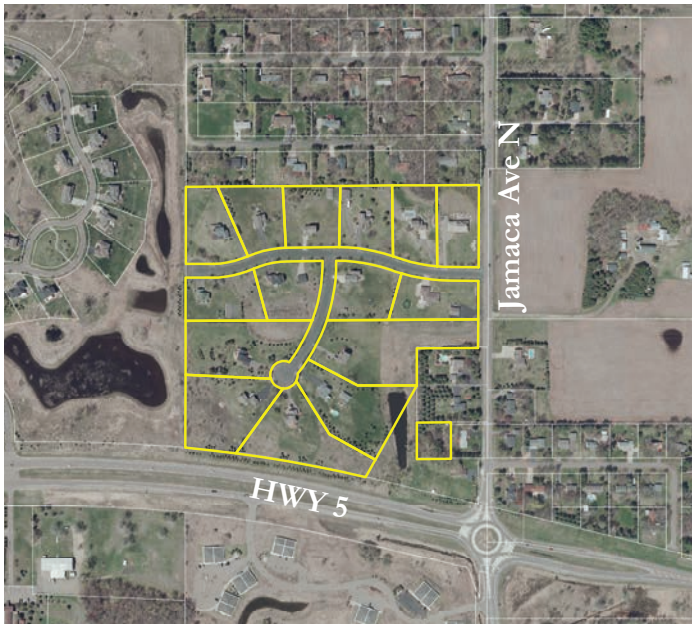






Beau Crest





Arabian Hills Totals

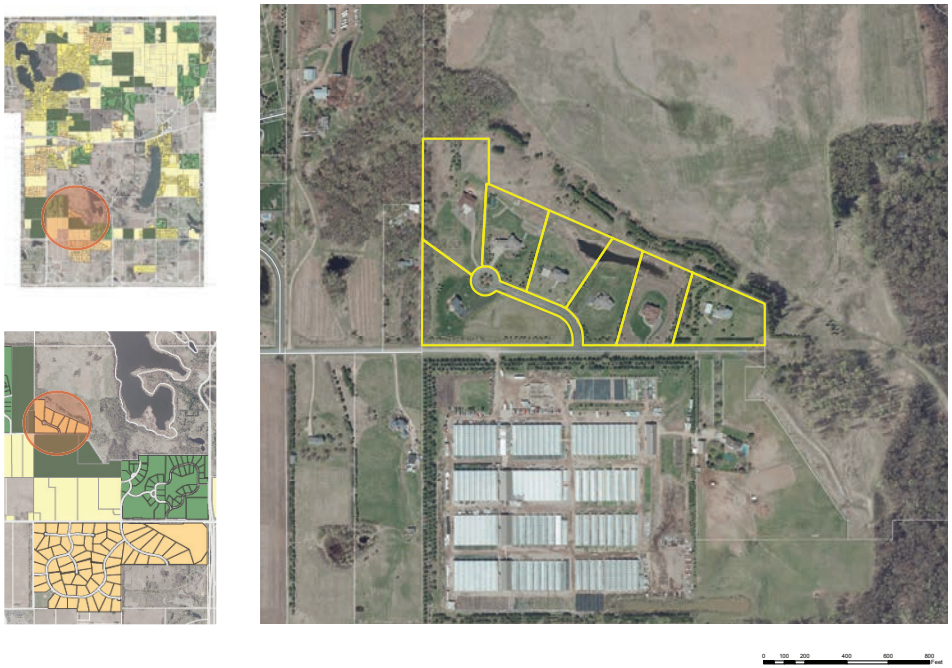
Zoning	RE	Water System Type	Private Well
		Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
		Estimate Cost of Water System Total	$256,500
		Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	3,049 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	160 feet	Estimate DWF (gal/day)	3,865 g/d
Estimate Cost of Road Reconstruction Total	$499,544	Linear Feet of Pipe	* *3,049 feet*
		Linear Feet of Pipe per Lot	* *160 feet*
Estimate Cost of Road Reconstruction per Lot	$26,292	Estimate Cost of Sanitary System Total	* *$378,535*
		Estimate Cost of Sanitary System per Lot	* *$19,923*

Beau Crest Totals

Zoning	RE	Water System Type	City
Estimate Population	56 persons	Linear Feet of Pipe	1,933 feet
Secondary Access	No	Linear Feet of Pipe per Lot	121 feet
Number of Lots	16	Estimate Cost of Water System Total	$79,253
Mean Lot Size	1.84 acres		
Sum of All Lot Sizes	29.5 acres	Estimate Cost of Water System per Lot	$4,953
Linear Feet of Road	1,904 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	119 feet	Estimate DWF (gal/day)	3,255 g/d
Estimate Cost of Road Reconstruction Total	$312,022	Linear Feet of Pipe	* *1,904 feet*
		Linear Feet of Pipe per Lot	* *119 feet*
Estimate Cost of Road Reconstruction per Lot	$19,501	Estimate Cost of Sanitary System Total	* *$236,438*
		Estimate Cost of Sanitary System per Lot	* *$14,777*

* If the development uses private septic systems, a sanitary system cost was estimated.

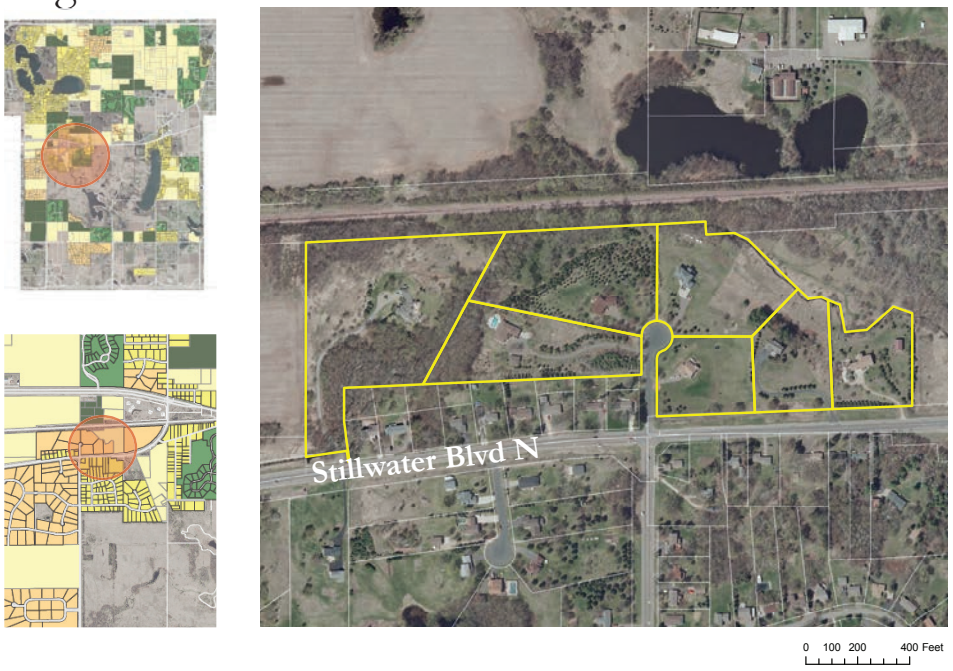
Cardinal View



Cardinal View Totals

Zoning	RE	Water System Type	Private
Estimate Population	25 persons	Linear Feet of Pipe	N/A
Secondary Access	No	Linear Feet of Pipe per Lot	N/A
Number of Lots	7	Estimate Cost of Water System Total	$94,500
Mean Lot Size	3.04 acres		
Sum of All Lot Sizes	21.3 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	1,400 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	200 feet	Estimate DWF (gal/day)	1,4234 g/d
Estimate Cost of Road Reconstruction Total	$229,404	Linear Feet of Pipe	* *1,400 feet*
		Linear Feet of Pipe per Lot	* *200 feet*
Estimate Cost of Road Reconstruction per Lot	$32,772	Estimate Cost of Sanitary System Total	* *$173,833*
		Estimate Cost of Sanitary System per Lot	* *$24,833*

Eagle Point Creek Estates

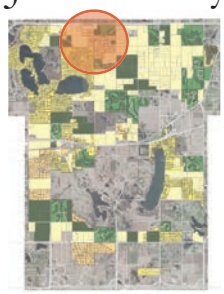


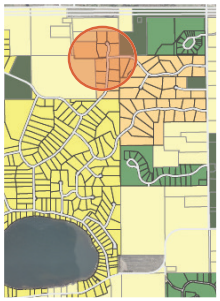
Eagle Point Creek Totals

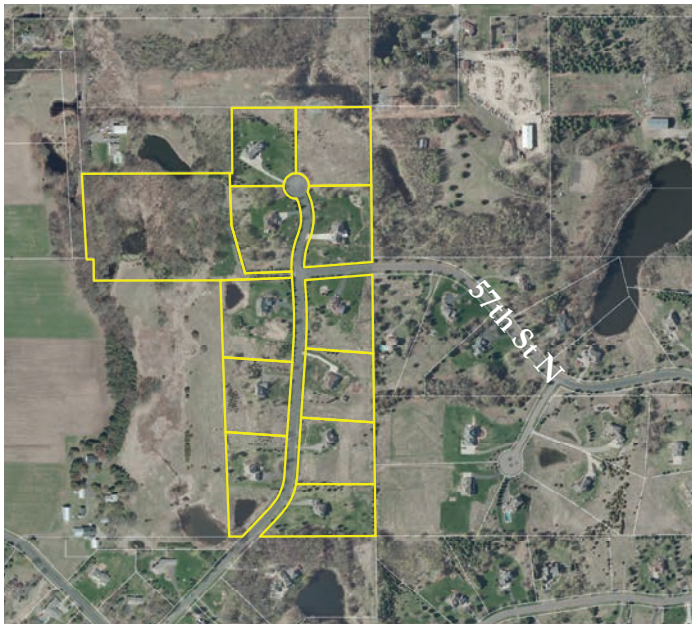
Zoning	RE	Water System Type	City
Estimate Population	25 persons	Linear Feet of Pipe	600 feet
Secondary Access	No	Linear Feet of Pipe per Lot	86 feet
Number of Lots	7	Estimate Cost of Water System Total	$24,600
Mean Lot Size	4.33 acres		
Sum of All Lot Sizes	30.3 acres	Estimate Cost of Water System per Lot	$3,514
Linear Feet of Road	396 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	57 feet	Estimate DWF (gal/day)	1,424
Estimate Cost of Road Reconstruction Total	$64,889	Linear Feet of Pipe	* *396 feet*
		Linear Feet of Pipe per Lot	* *57 feet*
Estimate Cost of Road Reconstruction per Lot	$9,270	Estimate Cost of Sanitary System Total	* *$49,170*
		Estimate Cost of Sanitary System per Lot	* *$7,024*

* If the development uses private septic systems, a sanitary system cost was estimated.

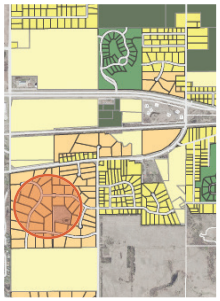
Judith Mary Manor

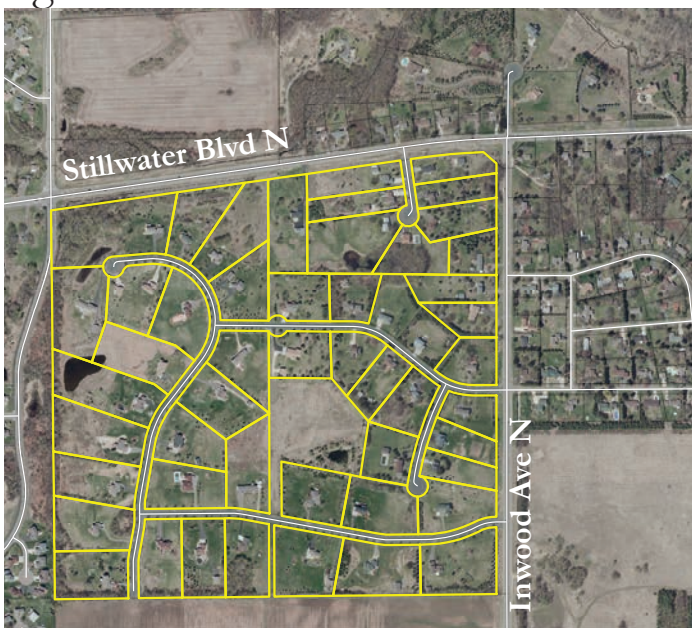






Lake Elmo Heights





Judith Mary Manor Totals

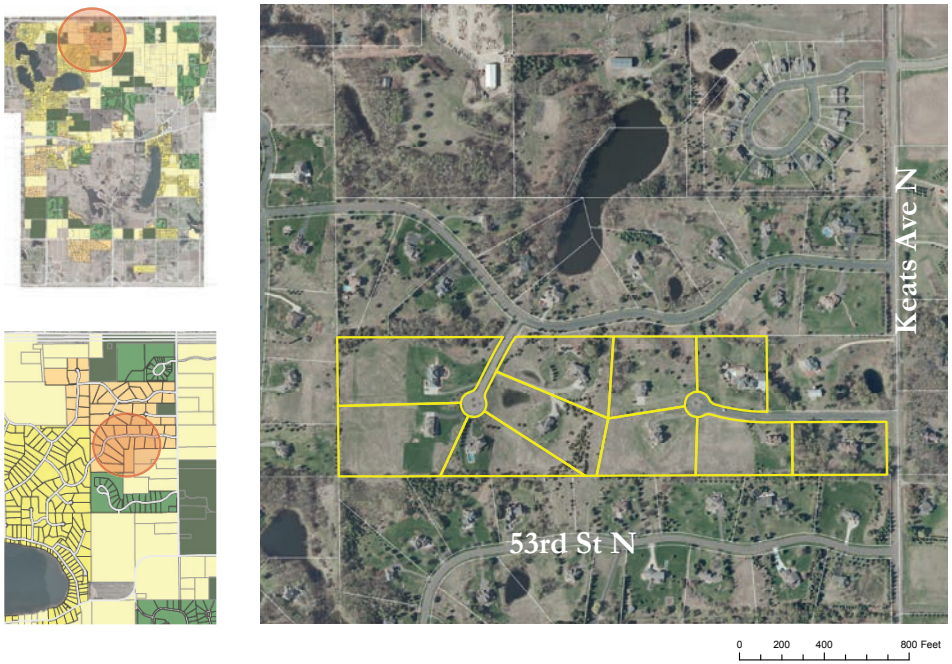
Zoning	RE	Water System Type	Private
Estimate Population	42 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	12	Estimate Cost of Water System Total	$162,000
Mean Lot Size	3.08 acres		
Sum of All Lot Sizes	37.0 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	2,147 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	179 feet	Estimate DWF (gal/day)	2,441 g/d
Estimate Cost of Road Reconstruction Total	$351,807	Linear Feet of Pipe	* *2,147 feet*
		Linear Feet of Pipe per Lot	* *179 feet*
Estimate Cost of Road Reconstruction per Lot	$29,317	Estimate Cost of Sanitary System Total	* *$266,586*
		Estimate Cost of Sanitary System per Lot	* *$22,215*

Lake Elmo Heights Totals

Zoning	RE	Water System Type	City
Estimate Population	140 persons	Linear Feet of Pipe	6,420 feet
Secondary Access	Yes	Linear Feet of Pipe per Lot	161 feet
Number of Lots	40	Estimate Cost of Water System Total	$263,220
Mean Lot Size	2.56 acres		
Sum of All Lot Sizes	102.4 acres	Estimate Cost of Water System per Lot	$6,581
Linear Feet of Road	6,420 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	161 feet	Estimate DWF (gal/day)	8,136 g/d
Estimate Cost of Road Reconstruction Total	$1,051,981	Linear Feet of Pipe	* *6,420 feet*
		Linear Feet of Pipe per Lot	* *161 feet*
Estimate Cost of Road Reconstruction per Lot	$26,300	Estimate Cost of Sanitary System Total	* *$797,150*
		Estimate Cost of Sanitary System per Lot	* *$19,929*

* If the development uses private septic systems, a sanitary system cost was estimated.

Lake Elmo Vista



Midland Meadows

Lake Elmo Vista Totals

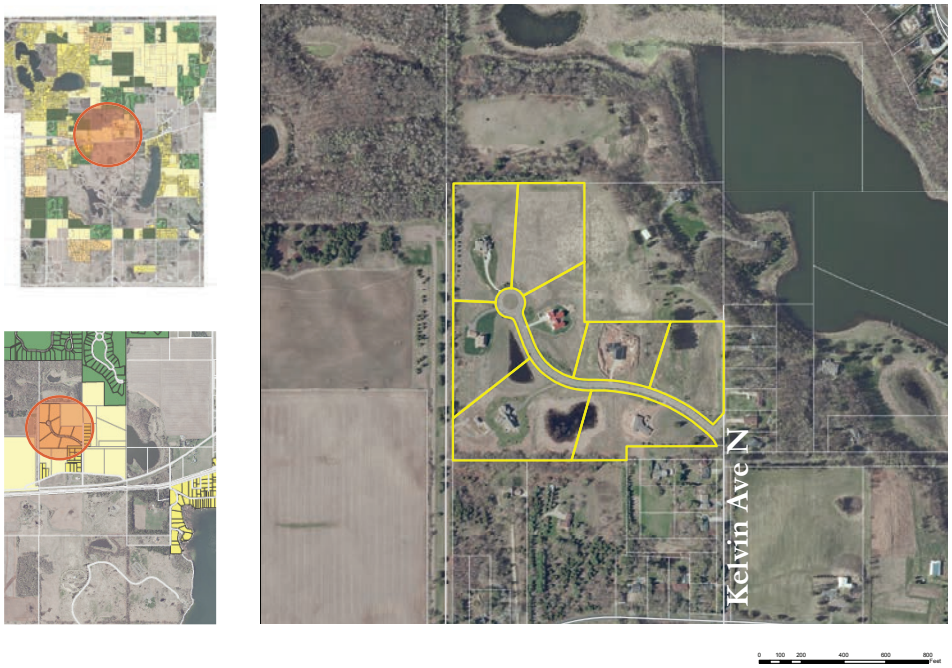
Zoning	RE	Water System Type	Private
Estimate Population	35 persons	Linear Feet of Pipe	N/A
Secondary Access	No	Linear Feet of Pipe per Lot	N/A
Number of Lots	10	Estimate Cost of Water System Total	$135,000
Mean Lot Size	3.25 acres		
Sum of All Lot Sizes	32.5 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	1,692 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	169 feet	Estimate DWF (gal/day)	2,034 g/d
Estimate Cost of Road Reconstruction Total	$277,251	Linear Feet of Pipe	* *1,692 feet*
		Linear Feet of Pipe per Lot	* *169 feet*
Estimate Cost of Road Reconstruction per Lot	$27,725	Estimate Cost of Sanitary System Total	* *$210,090*
		Estimate Cost of Sanitary System per Lot	* *$21,009*

Midland Meadows Totals

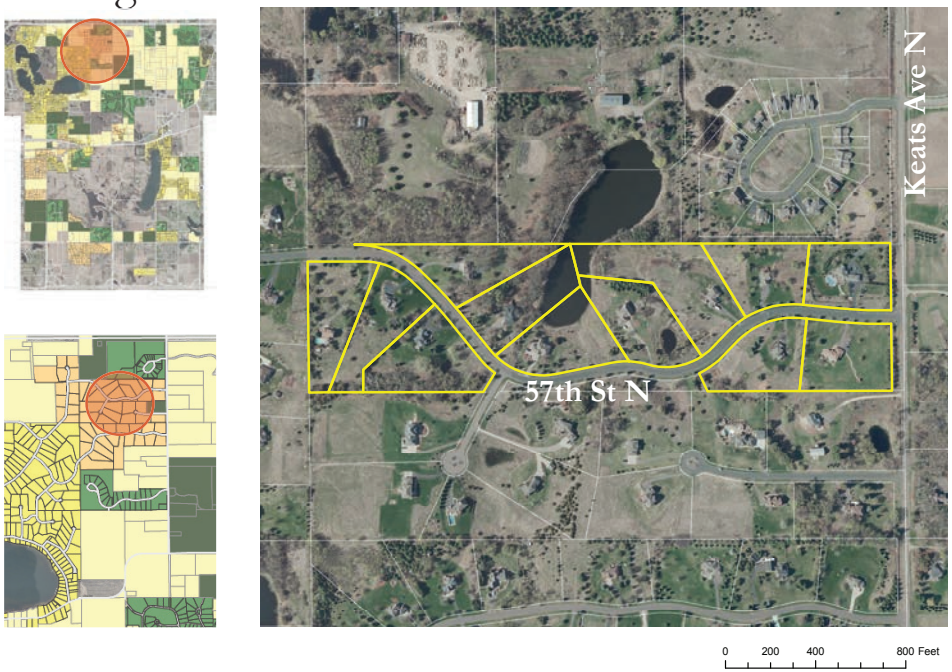
Zoning	RE	Water System Type	Private
Estimate Population	46 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	13	Estimate Cost of Water System Total	$175,500
Mean Lot Size	7.87 acres		
Sum of All Lot Sizes	102.3 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	4,505 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	346 feet	Estimate DWF (gal/day)	2,644 g/d
Estimate Cost of Road Reconstruction Total	$738,091	Linear Feet of Pipe	* *4,504 feet*
		Linear Feet of Pipe per Lot	* *346 feet*
Estimate Cost of Road Reconstruction per Lot	$56,776	Estimate Cost of Sanitary System Total	* *$559,296*
		Estimate Cost of Sanitary System per Lot	* *$43,023*

* If the development uses private septic systems, a sanitary system cost was estimated.

Park Meadows



Rolling Hills



Park Meadows Totals

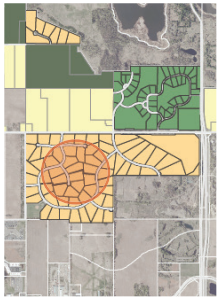
Zoning	RE	Water System Type	City
Estimate Population	28 persons	Linear Feet of Pipe	2,320 feet
Secondary Access	No	Linear Feet of Pipe per Lot	290 feet
Number of Lots	8	Estimate Cost of Water System Total	$95,120
Mean Lot Size	3.28 acres		
Sum of All Lot Sizes	26.3 acres	Estimate Cost of Water System per Lot	$11,890
Linear Feet of Road	1,290 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	161 feet	Estimate DWF (gal/day)	1,627 g/d
Estimate Cost of Road Reconstruction Total	$211,379	Linear Feet of Pipe	* *1,290 feet*
		Linear Feet of Pipe per Lot	* *161 feet*
Estimate Cost of Road Reconstruction per Lot	$26,422	Estimate Cost of Sanitary System Total	* *$160,175*
		Estimate Cost of Sanitary System per Lot	* *$20,022*

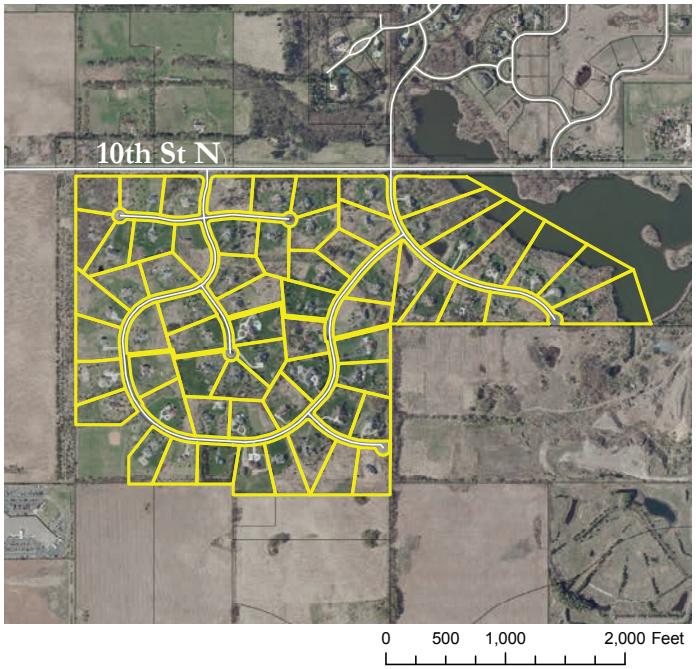
Rolling Hills Totals

Zoning	RE	Water System Type	Private
Estimate Population	42 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	12	Estimate Cost of Water System Total	$162,000
Mean Lot Size	2.81 acres		
Sum of All Lot Sizes	33.8 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	2,943 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	245 feet	Estimate DWF (gal/day)	2,440 g/d
Estimate Cost of Road Reconstruction Total	$482,207	Linear Feet of Pipe	* *2,943 feet*
		Linear Feet of Pipe per Lot	* *245 feet*
Estimate Cost of Road Reconstruction per Lot	$40,184	Estimate Cost of Sanitary System Total	* *$365,398*
		Estimate Cost of Sanitary System per Lot	* *$30,500*

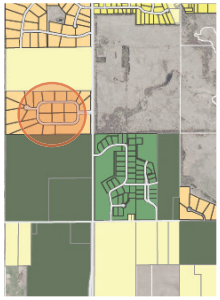
* If the development uses private septic systems, a sanitary system cost was estimated.

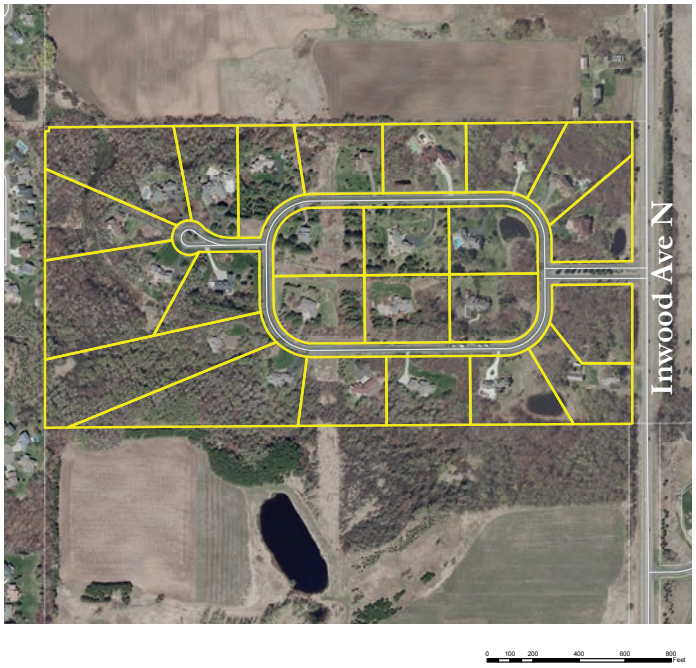
Stonegate





Torre Pines





Stonegate Totals

Zoning	RE	Water System Type	Private
Estimate Population	224 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	64	Estimate Cost of Water System Total	$864,000
Mean Lot Size	2.8 acres		
Sum of All Lot Sizes	179.2 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	10,070 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	157 feet	Estimate DWF (gal/day)	13,018 g/d
Estimate Cost of Road Reconstruction Total	$1,650,070	Linear Feet of Pipe	* *10,070 feet*
		Linear Feet of Pipe per Lot	* *157 feet*
Estimate Cost of Road Reconstruction per Lot	$25,782	Estimate Cost of Sanitary System Total	* *$1,250,358*
		Estimate Cost of Sanitary System per Lot	* *$19,537*

Torre Pines Totals

Zoning	RE	Water System Type	Private
Estimate Population	74 persons	Linear Feet of Pipe	N/A
Secondary Access	No	Linear Feet of Pipe per Lot	N/A
Number of Lots	21	Estimate Cost of Water System Total	$283,500
Mean Lot Size	2.93 acres		
Sum of All Lot Sizes	70.4 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	4,150 feet	Sanitary System Type	Community
Linear Feet of Road per Lot	198 feet	Estimate DWF (gal/day)	4,272 g/d
Estimate Cost of Road Reconstruction Total	$656,945	Linear Feet of Pipe	* *4,150 feet*
		Linear Feet of Pipe per Lot	* *198 feet*
Estimate Cost of Road Reconstruction per Lot	$32,382	Estimate Cost of Sanitary System Total	* *$515,292*
		Estimate Cost of Sanitary System per Lot	* *$24,538*

* If the development uses private septic systems, a sanitary system cost was estimated.

Rural Single Family Zoning

Rural Single Family Zoning

Zoning	RS
Average Number of Lots	50
Estimate Average Population per Development	176 persons
Total Mean Lot Size	1.27 acres

Rural Single Family Zoning Totals

Water

Estimated Total Mean Cost for Water Infrastructure	$603,971
Estimated Mean Cost for Water Infrastructure per Lot	$12,161

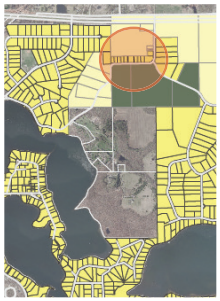
Roads

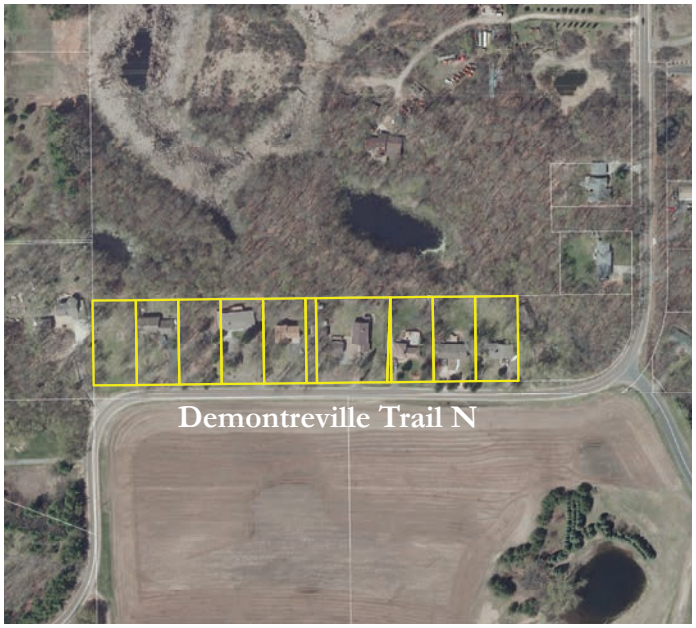
Average Linear Feet of Road	5,503 LF
Average Linear Feet of Road per Lot	129 LF
Estimated Total Mean Road Cost	$659,306
Estimated Mean Road Cost Per Lot	$16,256

Sanitary System

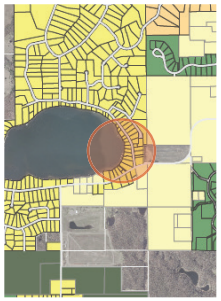
Estimated Total Mean Linear Feet of Sanitary Sewer Pipe	5,503 LF
Estimated Mean Linear Feet of Sanitary Sewer Pipe per Lot	129 LF
Estimated Total Mean Cost of Sanitary Sewer Pipe	$683,265
Estimated Mean Cost of Sanitary Sewer Pipe per Lot	$16,037

Bergman Addition





Berschen's Shores



Bergman Addition Totals

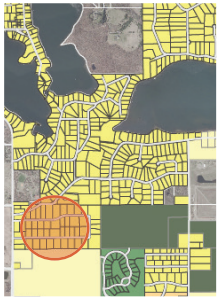
Zoning	RS	Water System Type	Private
Estimate Population	39 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	11	Estimate Cost of Water System Total	$148,500
Mean Lot Size	0.42 acres		
Sum of All Lot Sizes	4.6 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	1,025 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	93 feet	Estimate DWF (gal/day)	2,238 g/d
Estimate Cost of Road Reconstruction Total	$106,928	Linear Feet of Pipe	* *1,025 feet*
		Linear Feet of Pipe per Lot	* *93 feet*
Estimate Cost of Road Reconstruction per Lot	$9,721	Estimate Cost of Sanitary System Total	* *$127,271*
		Estimate Cost of Sanitary System per Lot	* *$11,570*

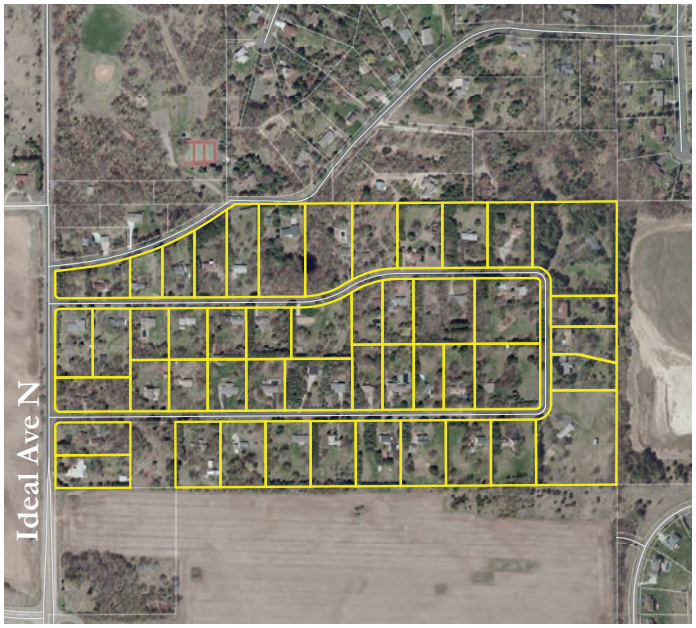
Berschen's Shores Totals

Zoning	RS	Water System Type	Private
Estimate Population	84 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	24	Estimate Cost of Water System Total	$324,000
Mean Lot Size	0.67 acres		
Sum of All Lot Sizes	16.0 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	2,860 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	119 feet	Estimate DWF (gal/day)	4,882 g/d
Estimate Cost of Road Reconstruction Total	$298,355	Linear Feet of Pipe	* *2,860 feet*
		Linear Feet of Pipe per Lot	* *119 feet*
Estimate Cost of Road Reconstruction per Lot	$12,431	Estimate Cost of Sanitary System Total	* *$355,117*
		Estimate Cost of Sanitary System per Lot	* *$14,797*

* If the development uses private septic systems, a sanitary system cost was estimated.

Bordners Garner Farmettes



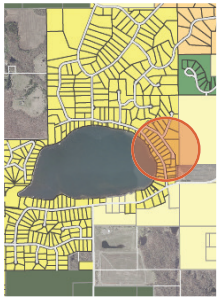


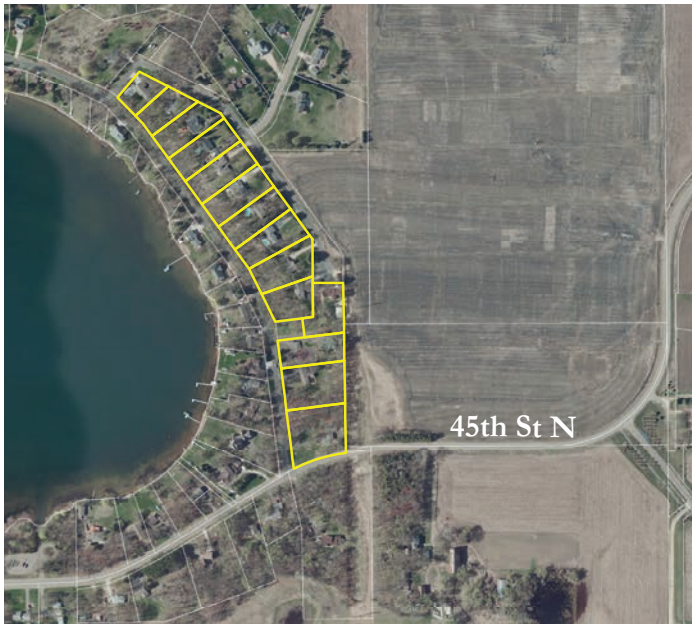
Bordners Garner Farmettes Totals

Zoning	RS	Water System Type	Private
Estimate Population	168 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	48	Estimate Cost of Water System Total	$648,000
Mean Lot Size	1.42 acres		
Sum of All Lot Sizes	67.9 acres	Estimate Cost of Water System per Lot	$13,500

Linear Feet of Road	5,220 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	109 feet	Estimate DWF (gal/day)	9,764 g/d
Estimate Cost of Road Reconstruction Total	$855,349	Linear Feet of Pipe	* *5,220 feet*
		Linear Feet of Pipe per Lot	* *109 feet*
Estimate Cost of Road Reconstruction per Lot	$17,820	Estimate Cost of Sanitary System Total	* *$648,150*
		Estimate Cost of Sanitary System per Lot	* *$13,503*

Darwin Acres





Darwin Acres Totals

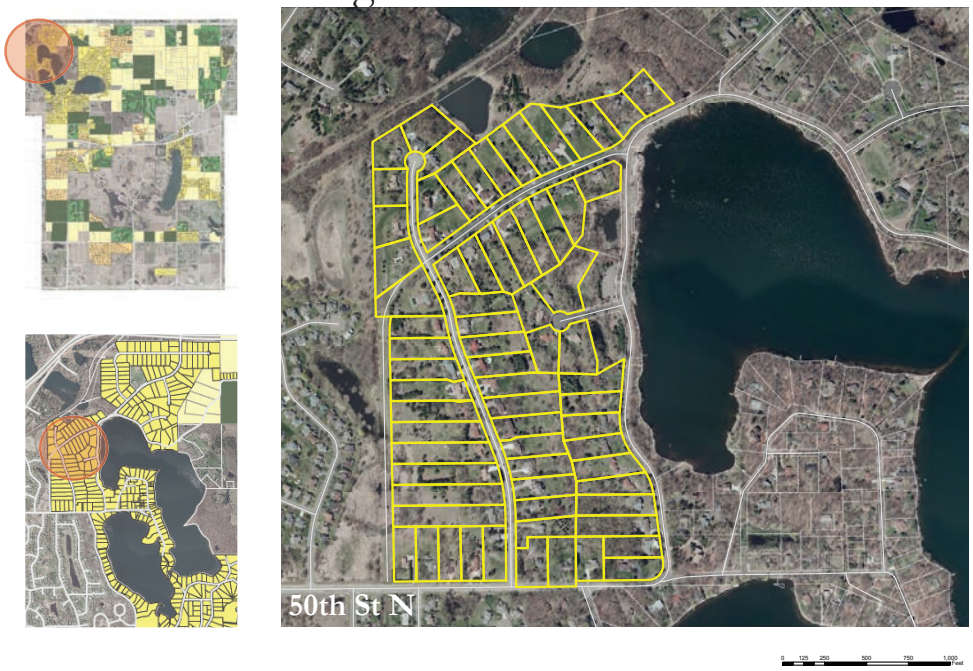
Zoning	RS	Water System Type	Private
Estimate Population	49 persons	Linear Feet of Pipe	N/A
Secondary Access	No	Linear Feet of Pipe per Lot	N/A
Number of Lots	14	Estimate Cost of Water System Total	$189,000
Mean Lot Size	0.87 acres		
Sum of All Lot Sizes	12.2 acres	Estimate Cost of Water System per Lot	$13,500

Linear Feet of Road	3,432 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	245 feet	Estimate DWF (gal/day)	2,848 g/d
Estimate Cost of Road Reconstruction Total	$358,026	Linear Feet of Pipe	* *3,432 feet*
		Linear Feet of Pipe per Lot	* *245 feet*
Estimate Cost of Road Reconstruction per Lot	$25,573	Estimate Cost of Sanitary System Total	* *$426,140*
		Estimate Cost of Sanitary System per Lot	* *$30,439*

* If the development uses private septic systems, a sanitary system cost was estimated.

David Nelson Estates

Demontreville Highlands



David Nelson Estates Totals

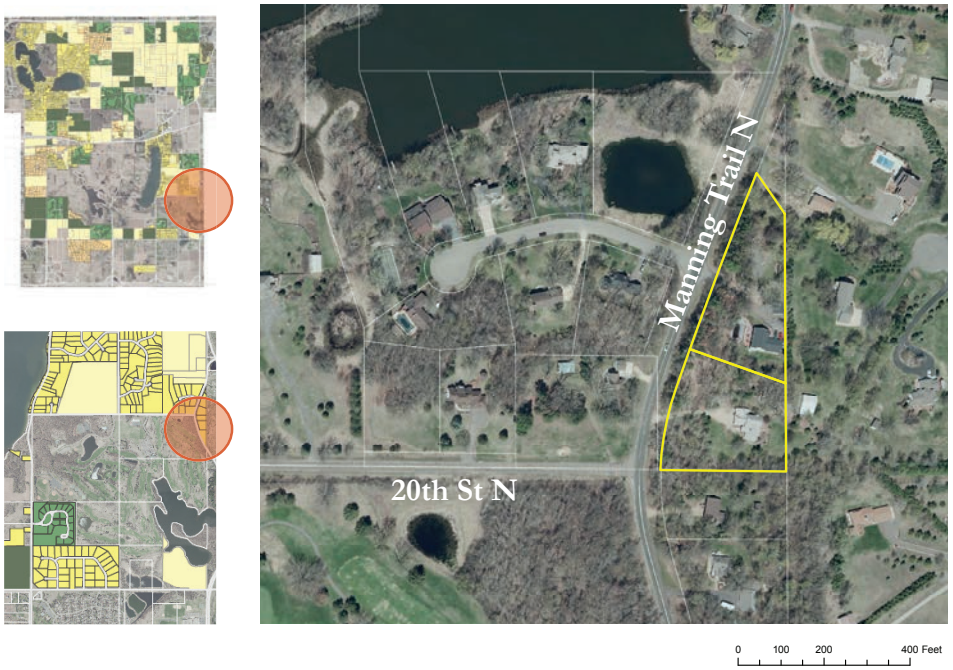
Zoning	RS	Water System Type	Private
Estimate Population	18 persons	Linear Feet of Pipe	N/A
Secondary Access	No	Linear Feet of Pipe per Lot	N/A
Number of Lots	5	Estimate Cost of Water System Total	$67,500
Mean Lot Size	1.68 acres		
Sum of All Lot Sizes	8.4 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	588 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	118 feet	Estimate DWF (gal/day)	1,017 g/d
Estimate Cost of Road Reconstruction Total	$96,350	Linear Feet of Pipe *	*588 feet*
		Linear Feet of Pipe per Lot *	*118 feet*
Estimate Cost of Road Reconstruction per Lot	$19,270	Estimate Cost of Sanitary System Total *	*$73,010*
		Estimate Cost of Sanitary System per Lot *	*$14,602*

Demontreville Highlands Totals

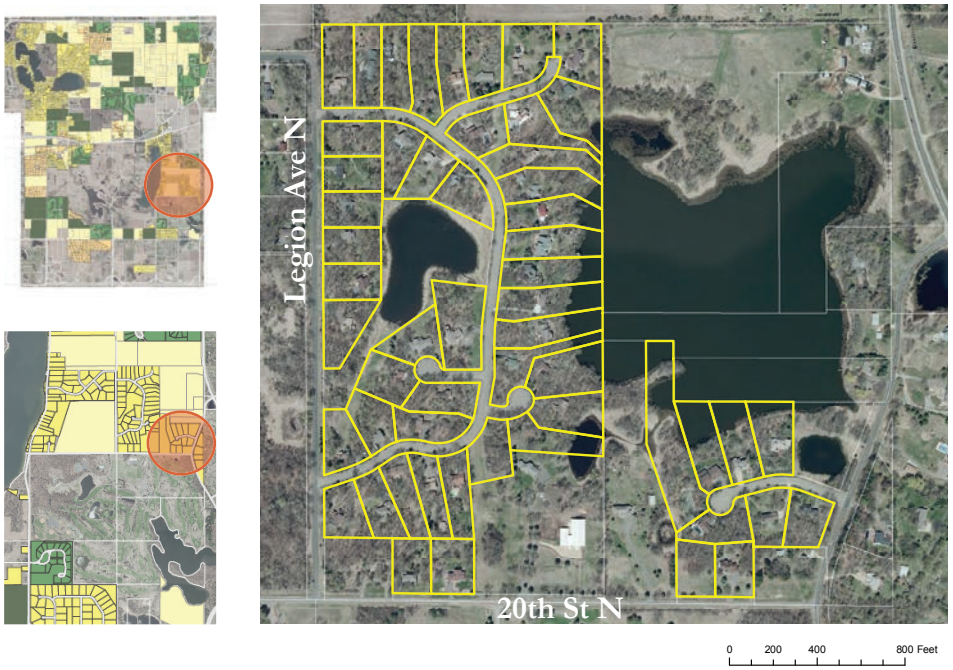
Zoning	RS	Water System Type	Private
Estimate Population	490 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	140	Estimate Cost of Water System Total	$1,890,000
Mean Lot Size	1.18 acres		
Sum of All Lot Sizes	83.9 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	8,345 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	60 feet	Estimate DWF (gal/day)	28,477 g/d
Estimate Cost of Road Reconstruction Total	$870,550	Linear Feet of Pipe *	*8,345 feet*
		Linear Feet of Pipe per Lot *	*60 feet*
Estimate Cost of Road Reconstruction per Lot	$6,218	Estimate Cost of Sanitary System Total *	*$1,036,171*
		Estimate Cost of Sanitary System per Lot *	*$7,401*

* If the development uses private septic systems, a sanitary system cost was estimated.

Down's Lake



Eden Park



Down's Lake Totals

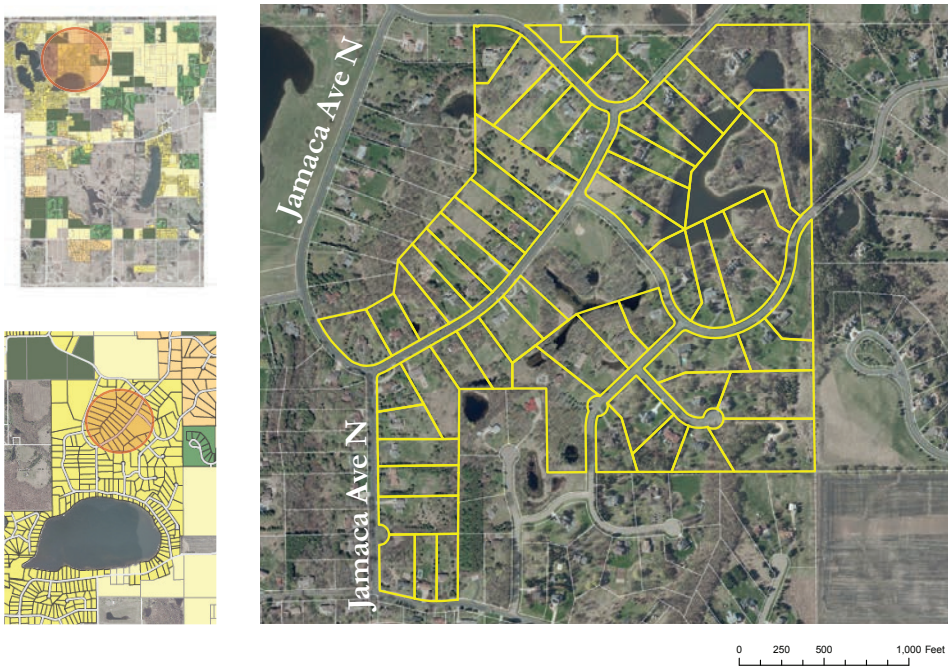
Zoning	RS	Water System Type	Private
Estimate Population	7 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	2	Estimate Cost of Water System Total	$27,000
Mean Lot Size	1.51 acres		
Sum of All Lot Sizes	3.0 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	767 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	384 feet	Estimate DWF (gal/day)	407 g/d
Estimate Cost of Road Reconstruction Total	$80,013	Linear Feet of Pipe	* *767 feet*
		Linear Feet of Pipe per Lot	* *384 feet*
Estimate Cost of Road Reconstruction per Lot	$40,007	Estimate Cost of Sanitary System Total	* *$95,236*
		Estimate Cost of Sanitary System per Lot	* *$47,618*

Eden Park Totals

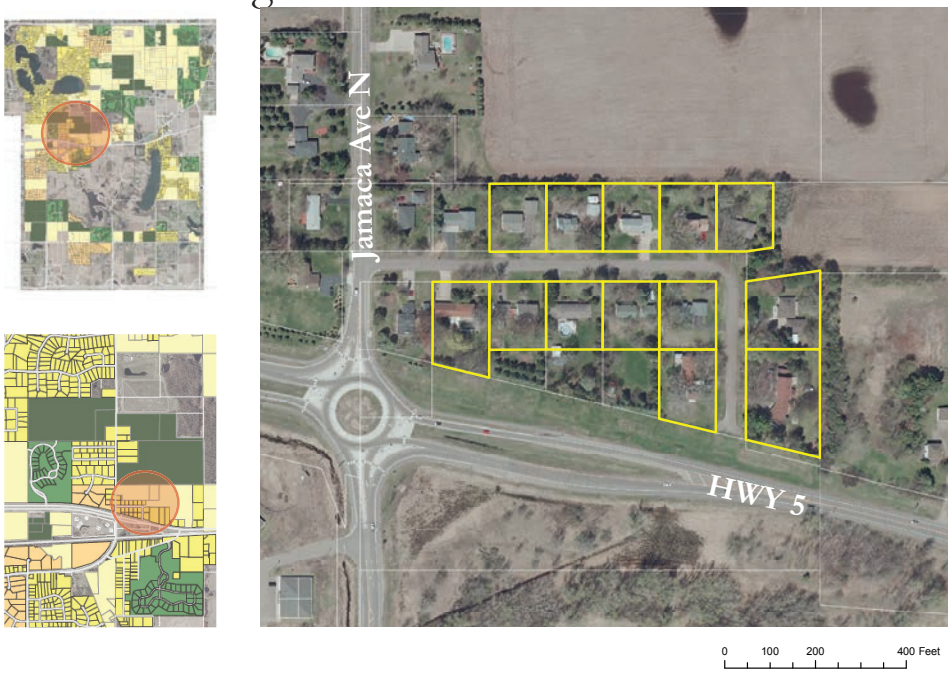
Zoning	RS	Water System Type	Private
Estimate Population	193 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes/No	Linear Feet of Pipe per Lot	N/A
Number of Lots	55	Estimate Cost of Water System Total	$742,500
Mean Lot Size	1.20 acres		
Sum of All Lot Sizes	66.1 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	4,600 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	84 feet	Estimate DWF (gal/day)	11,188 g/d
Estimate Cost of Road Reconstruction Total	$753,756	Linear Feet of Pipe	* *4,600 feet*
		Linear Feet of Pipe per Lot	* *84 feet*
Estimate Cost of Road Reconstruction per Lot	$13,705	Estimate Cost of Sanitary System Total	* *$571,167*
		Estimate Cost of Sanitary System per Lot	* *$10,385*

* If the development uses private septic systems, a sanitary system cost was estimated.

Fox Fire Estates



Friedrich Heights



Fox Fire Estates Totals

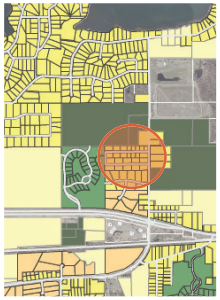
Zoning	RS	Water System Type	Private
Estimate Population	203 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	58	Estimate Cost of Water System Total	$783,000
Mean Lot Size	2.11 acres		
Sum of All Lot Sizes	122.3 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	9,199 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	159 feet	Estimate DWF (gal/day)	11,798 g/d
Estimate Cost of Road Reconstruction Total	$959,640	Linear Feet of Pipe	* *9,199 feet*
		Linear Feet of Pipe per Lot	* *159 feet*
Estimate Cost of Road Reconstruction per Lot	$16,546	Estimate Cost of Sanitary System Total	* *$1,142,209*
		Estimate Cost of Sanitary System per Lot	* *$19,693*

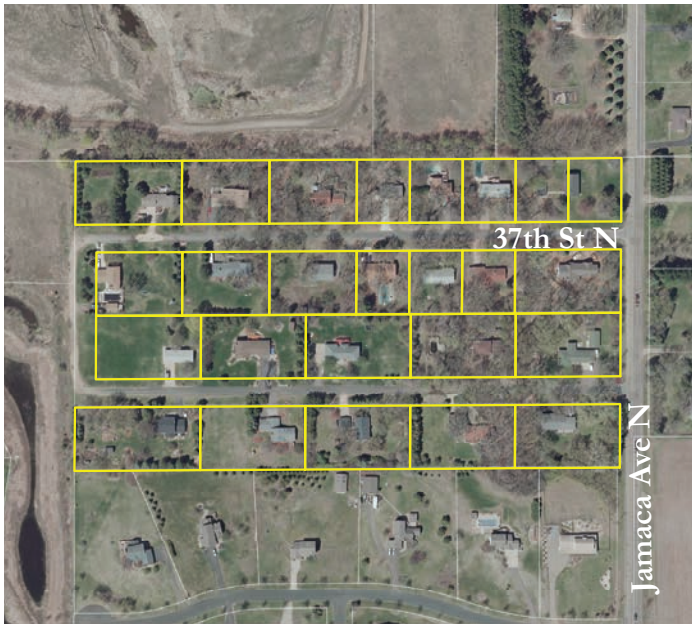
Friedrich Heights Totals

Zoning	RS	Water System Type	Private
Estimate Population	46 persons	Linear Feet of Pipe	N/A
Secondary Access	No	Linear Feet of Pipe per Lot	N/A
Number of Lots	13	Estimate Cost of Water System Total	$175,500
Mean Lot Size	0.49 acres		
Sum of All Lot Sizes	6.3 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	1,171 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	90 feet	Estimate DWF (gal/day)	2,644 g/d
Estimate Cost of Road Reconstruction Total	$122,159	Linear Feet of Pipe	* *1,171 feet*
		Linear Feet of Pipe per Lot	* *90 feet*
Estimate Cost of Road Reconstruction per Lot	$9,397	Estimate Cost of Sanitary System Total	* *$145,399*
		Estimate Cost of Sanitary System per Lot	* *$11,185*

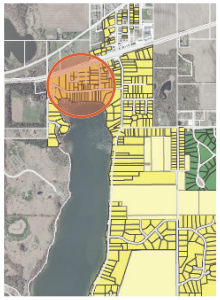
* If the development uses private septic systems, a sanitary system cost was estimated.

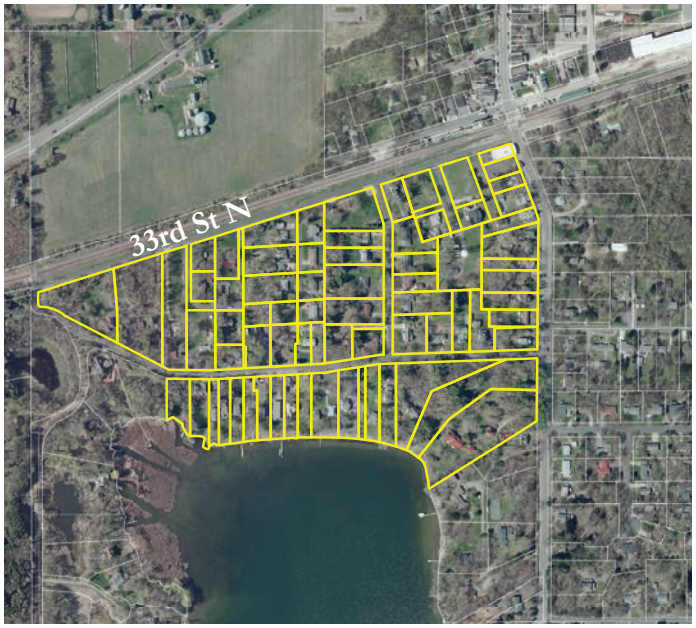
Kenridge





Lake Elmo Park





Kenridge Totals

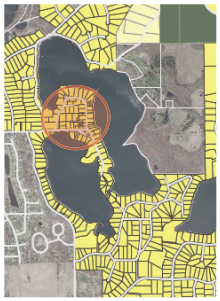
Zoning	RS	Water System Type	City
Estimate Population	88 persons	Linear Feet of Pipe	3,384 feet
Secondary Access	Yes	Linear Feet of Pipe per Lot	135 feet
Number of Lots	25	Estimate Cost of Water System Total	$138,744
Mean Lot Size	0.69 acres		
Sum of All Lot Sizes	17.4 acres	Estimate Cost of Water System per Lot	$5,550
Linear Feet of Road	3,000 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	120 feet	Estimate DWF (gal/day)	5,085 g/d
Estimate Cost of Road Reconstruction Total	$491,580	Linear Feet of Pipe	* *3,000 feet*
		Linear Feet of Pipe per Lot	* *120 feet*
Estimate Cost of Road Reconstruction per Lot	$19,663	Estimate Cost of Sanitary System Total	* *$372,500*
		Estimate Cost of Sanitary System per Lot	* *$14,900*

Lake Elmo Park Totals

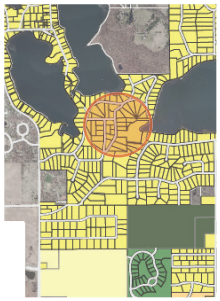
Zoning	RS	Water System Type	City
Estimate Population	256 persons	Linear Feet of Pipe	3,203 feet
Secondary Access	Yes	Linear Feet of Pipe per Lot	44 feet
Number of Lots	73	Estimate Cost of Water System Total	$131,323
Mean Lot Size	0.57 acres		
Sum of All Lot Sizes	45.0 acres	Estimate Cost of Water System per Lot	$1,799
Linear Feet of Road	3,203 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	44 feet	Estimate DWF (gal/day)	14,849 g/d
Estimate Cost of Road Reconstruction Total	$334,137	Linear Feet of Pipe	* *3,203 feet*
		Linear Feet of Pipe per Lot	* *44 feet*
Estimate Cost of Road Reconstruction per Lot	$4,577	Estimate Cost of Sanitary System Total	* *$397,706*
		Estimate Cost of Sanitary System per Lot	* *$5,448*

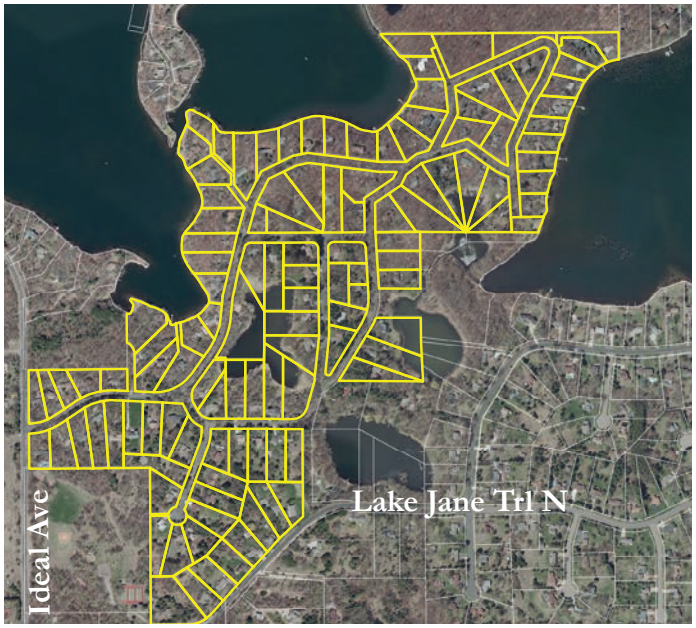
* If the development uses private septic systems, a sanitary system cost was estimated.

Lane's Demontreville Country Club



Oace Acres





Lane's Demontreville Country Club Totals

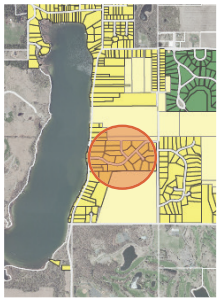
Zoning	RS	Water System Type	Private
Estimate Population	305 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes/No	Linear Feet of Pipe per Lot	N/A
Number of Lots	87	Estimate Cost of Water System Total	$1,174,500
Mean Lot Size	0.56 acres		
Sum of All Lot Sizes	48.6 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	6,050 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	70 feet	Estimate DWF (gal/day)	17,697 g/d
Estimate Cost of Road Reconstruction Total	$991,353	Linear Feet of Pipe	* *6,050 feet*
		Linear Feet of Pipe per Lot	* *70 feet*
Estimate Cost of Road Reconstruction per Lot	$11,393	Estimate Cost of Sanitary System Total	* *$751,208*
		Estimate Cost of Sanitary System per Lot	* *$8,635*

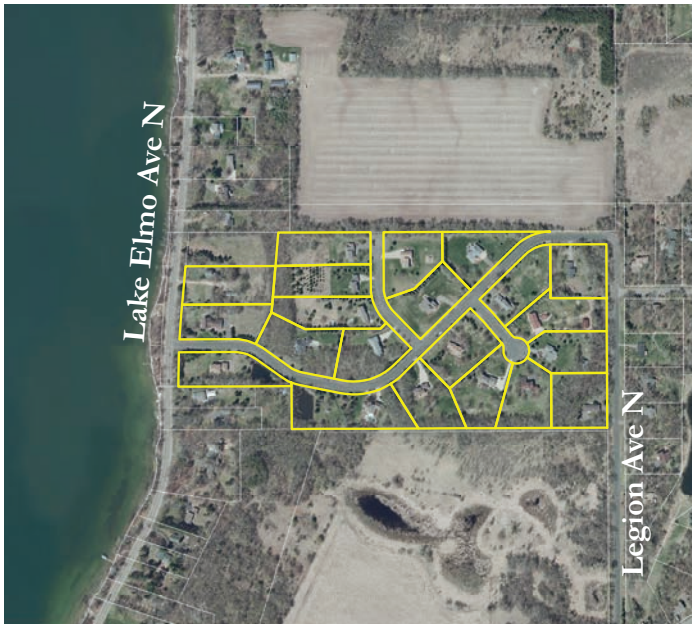
Oace Acres Totals

Zoning	RS	Water System Type	Private
Estimate Population	424 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	121	Estimate Cost of Water System Total	$1,633,500
Mean Lot Size	0.98 acres		
Sum of All Lot Sizes	118.6 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	13,569 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	112 feet	Estimate DWF (gal/day)	24,613 g/d
Estimate Cost of Road Reconstruction Total	$1,415,487	Linear Feet of Pipe	* *13,569 feet*
		Linear Feet of Pipe per Lot	* *112 feet*
Estimate Cost of Road Reconstruction per Lot	$11,698	Estimate Cost of Sanitary System Total	* *$1,684,780*
		Estimate Cost of Sanitary System per Lot	* *$13,923*

* If the development uses private septic systems, a sanitary system cost was estimated.

Packard Park

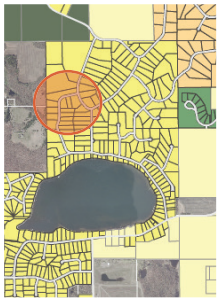


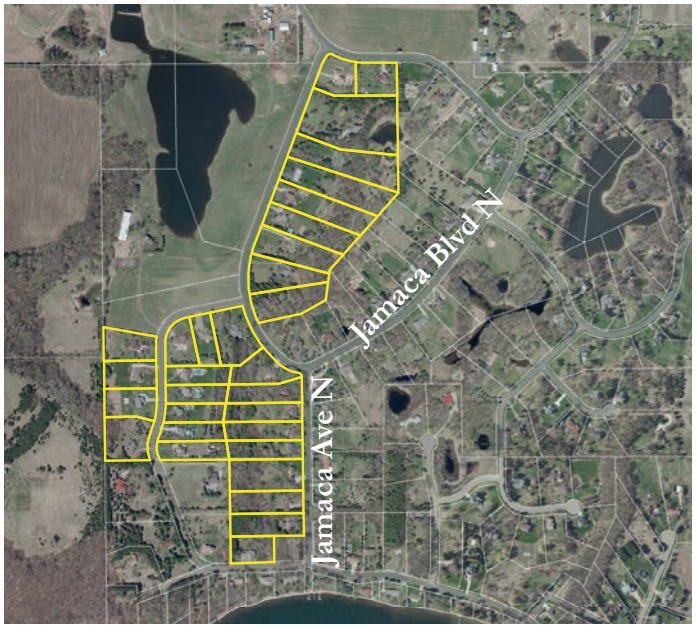


Packard Park Totals

Zoning	RS	Water System Type	Private
Estimate Population	74 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	21	Estimate Cost of Water System Total	$283,500
Mean Lot Size	1.57 acres		
Sum of All Lot Sizes	33.1 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	3,264 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	155 feet	Estimate DWF (gal/day)	4,272 g/d
Estimate Cost of Road Reconstruction Total	$534,855	Linear Feet of Pipe	* *3,264 feet*
		Linear Feet of Pipe per Lot	* *155 feet*
Estimate Cost of Road Reconstruction per Lot	$25,469	Estimate Cost of Sanitary System Total	* *$405,292*
		Estimate Cost of Sanitary System per Lot	* *$19,300*

Springborn's Green Acres



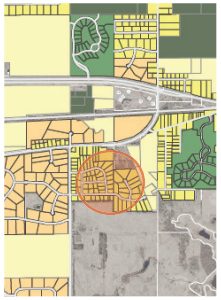


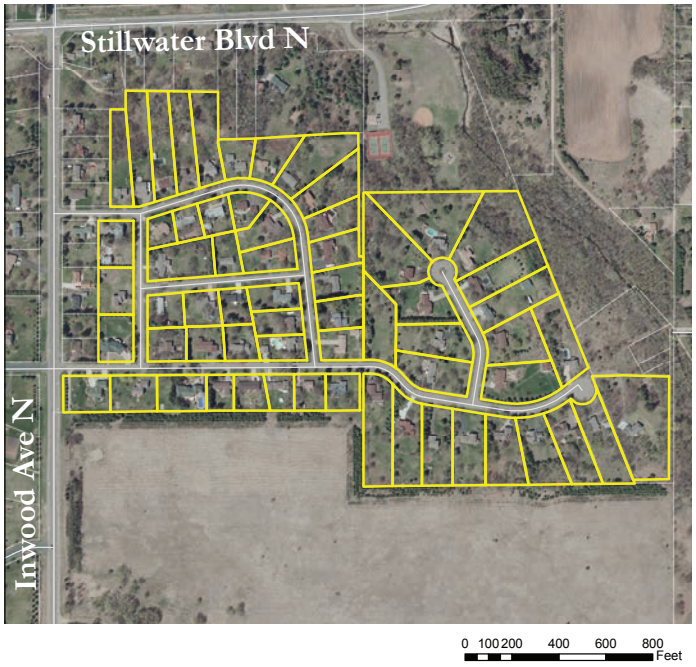
Springborn's Green Acres Totals

Zoning	RS	Water System Type	Private
Estimate Population	109 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	31	Estimate Cost of Water System Total	$418,500
Mean Lot Size	1.82 acres		
Sum of All Lot Sizes	56.5 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	5,760 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	186 feet	Estimate DWF (gal/day)	6,306 g/d
Estimate Cost of Road Reconstruction Total	$600,883	Linear Feet of Pipe	* *5,760 feet*
		Linear Feet of Pipe per Lot	* *186 feet*
Estimate Cost of Road Reconstruction per Lot	$19,383	Estimate Cost of Sanitary System Total	* *$715,200*
		Estimate Cost of Sanitary System per Lot	* *$23,071*

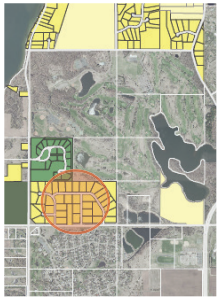
* If the development uses private septic systems, a sanitary system cost was estimated.

Tablyn Park





Tartan Meadows



Tablyn Park Totals

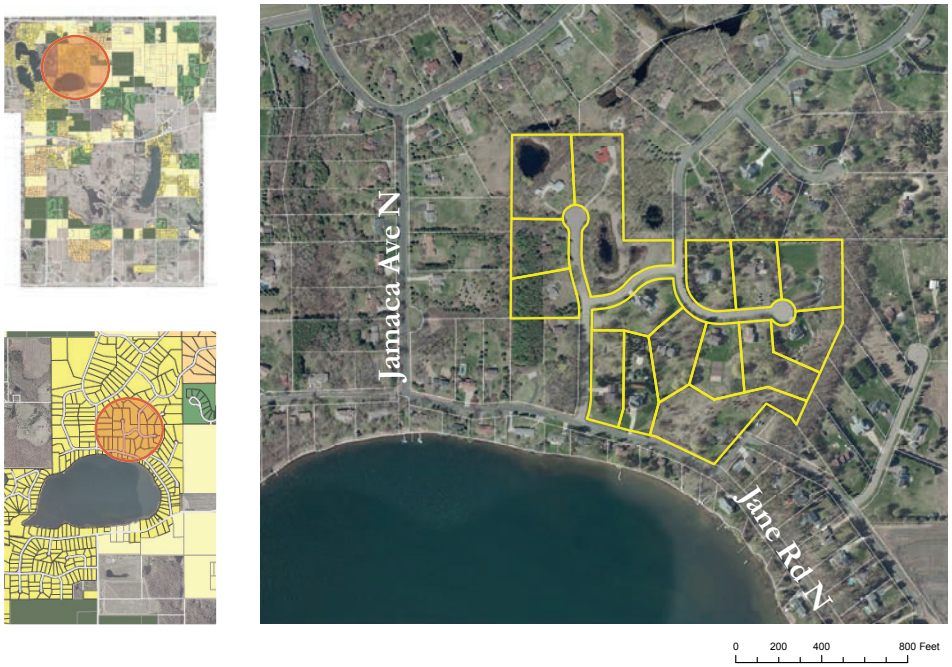
Zoning	RS	Water System Type	City
Estimate Population	221 persons	Linear Feet of Pipe	5678 feet
Secondary Access	Yes	Linear Feet of Pipe per Lot	90 feet
Number of Lots	63	Estimate Cost of Water System Total	$232,789
Mean Lot Size	0.84 acres		
Sum of All Lot Sizes	52.7 acres	Estimate Cost of Water System per Lot	$3,695
Linear Feet of Road	5,920 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	94 feet	Estimate DWF (gal/day)	12,815 g/d
Estimate Cost of Road Reconstruction Total	$617,574	Linear Feet of Pipe *	*5,920 feet*
		Linear Feet of Pipe per Lot *	*94 feet*
Estimate Cost of Road Reconstruction per Lot	$9,803	Estimate Cost of Sanitary System Total *	*$735,067*
		Estimate Cost of Sanitary System per Lot *	*$11,668*

Tartan Meadows Totals

Zoning	RS	Water System Type	Private
Estimate Population	133 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	38	Estimate Cost of Water System Total	$513,000
Mean Lot Size	1.6 acres		
Sum of All Lot Sizes	60.8 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	4,800 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	126 feet	Estimate DWF (gal/day)	7,730 g/d
Estimate Cost of Road Reconstruction Total	$786,528	Linear Feet of Pipe *	*4,800 feet*
		Linear Feet of Pipe per Lot *	*126 feet*
Estimate Cost of Road Reconstruction per Lot	$20,698	Estimate Cost of Sanitary System Total *	*$596,000*
		Estimate Cost of Sanitary System per Lot *	*$15,684*

* If the development uses private septic systems, a sanitary system cost was estimated.

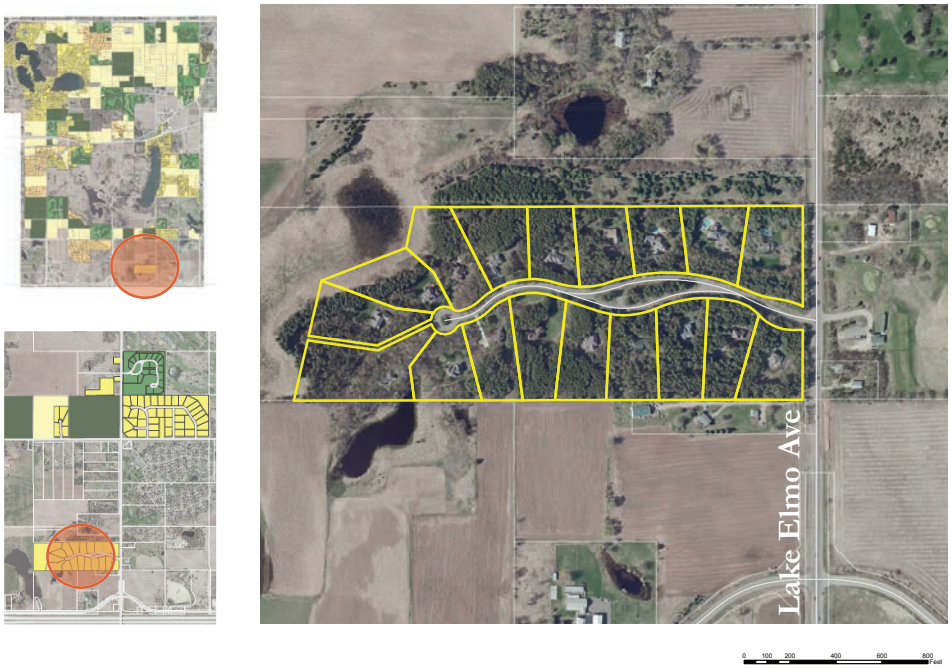
Teal Pass Estates



Teal Pass Estates Totals

Zoning	RS	Water System Type	Private
Estimate Population	53 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	15	Estimate Cost of Water System Total	$202,500
Mean Lot Size	1.94 acres		
Sum of All Lot Sizes	29.2 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	2,304 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	154 feet	Estimate DWF (gal/day)	3,051 g/d
Estimate Cost of Road Reconstruction Total	$377,533	Linear Feet of Pipe	* *2,304 feet*
		Linear Feet of Pipe per Lot	* *154 feet*
Estimate Cost of Road Reconstruction per Lot	$25,169	Estimate Cost of Sanitary System Total	* *$286,080*
		Estimate Cost of Sanitary System per Lot	* *$19,072*

The Forest

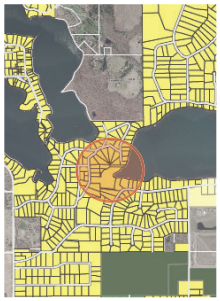


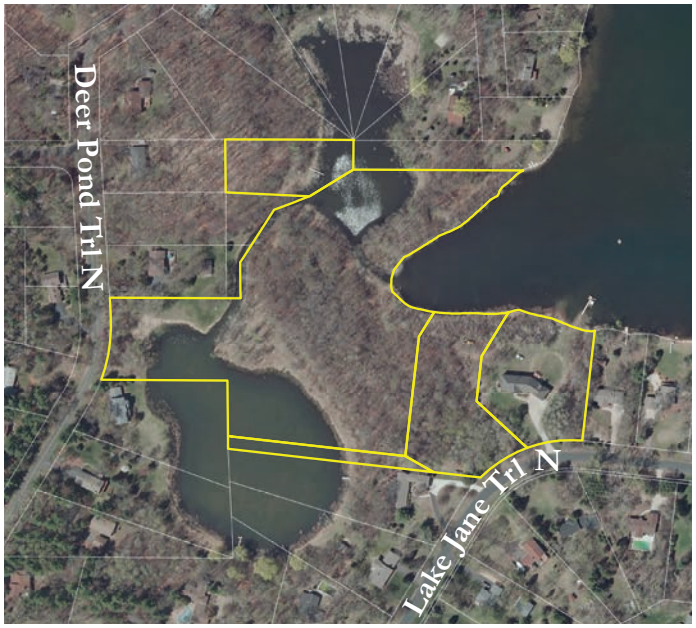
The Forest Totals

Zoning	RS	Water System Type	Private
Estimate Population	63 persons	Linear Feet of Pipe	N/A
Secondary Access	No	Linear Feet of Pipe per Lot	N/A
Number of Lots	18	Estimate Cost of Water System Total	$243,000
Mean Lot Size	1.96 acres		
Sum of All Lot Sizes	35.2 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	1,675 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	93 feet	Estimate DWF (gal/day)	3,661 g/d
Estimate Cost of Road Reconstruction Total	$274,466	Linear Feet of Pipe	* *1,675 feet*
		Linear Feet of Pipe per Lot	* *93 feet*
Estimate Cost of Road Reconstruction per Lot	$15,248	Estimate Cost of Sanitary System Total	* *$207,979*
		Estimate Cost of Sanitary System per Lot	* *$11,554*

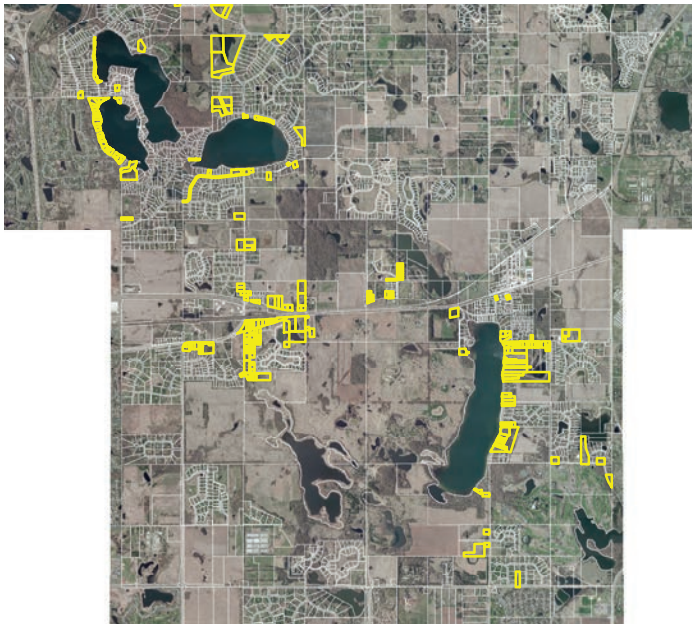
* If the development uses private septic systems, a sanitary system cost was estimated.

Water's Bay





All Other RS



Water's Bay Totals

Zoning	RS	Water System Type	Private
Estimate Population	18 persons	Linear Feet of Pipe	N/A
Secondary Access	No	Linear Feet of Pipe per Lot	N/A
Number of Lots	5	Estimate Cost of Water System Total	$67,500
Mean Lot Size	2.39 acres		
Sum of All Lot Sizes	12.0 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	440 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	88 feet	Estimate DWF (gal/day)	1,017 g/d
Estimate Cost of Road Reconstruction Total	$45,901	Linear Feet of Pipe	* *440 feet*
		Linear Feet of Pipe per Lot	* *88 feet*
Estimate Cost of Road Reconstruction per Lot	$9,180	Estimate Cost of Sanitary System Total	* *$54,633*
		Estimate Cost of Sanitary System per Lot	* *$10,927*

All Other Rural Single Family Totals

Zoning	RS	Water System Type	Varies
Estimate Population	844 persons	Linear Feet of Pipe	N/A
Secondary Access	Varies	Linear Feet of Pipe per Lot	N/A
Number of Lots	241	Estimate Cost of Water System Total	$3,253,500
Mean Lot Size	1.5 acres		
Sum of All Lot Sizes	359 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	33,870 feet	Sanitary System Type	Varies
Linear Feet of Road per Lot	141 feet	Estimate DWF (gal/day)	49,022 g/d
Estimate Cost of Road Reconstruction Total	$3,533,318	Linear Feet of Pipe	* *33,870 feet*
		Linear Feet of Pipe per Lot	* *141 feet*
Estimate Cost of Road Reconstruction per Lot	$14,661	Estimate Cost of Sanitary System Total	* *$4,205,525*
		Estimate Cost of Sanitary System per Lot	* *$17,450*

* If the development uses private septic systems, a sanitary system cost was estimated.

Rural Residential Zoning

Rural Residential Zoning Totals

Zoning	RR
Average Number of Lots	7
Estimate Average Population per Development	20 persons
Total Mean Lot Size	16.5 acres

Water

Estimated Total Mean Cost for Water Infrastructure	$110,000
Estimated Mean Cost for Water Infrastructure per Lot	$13,500

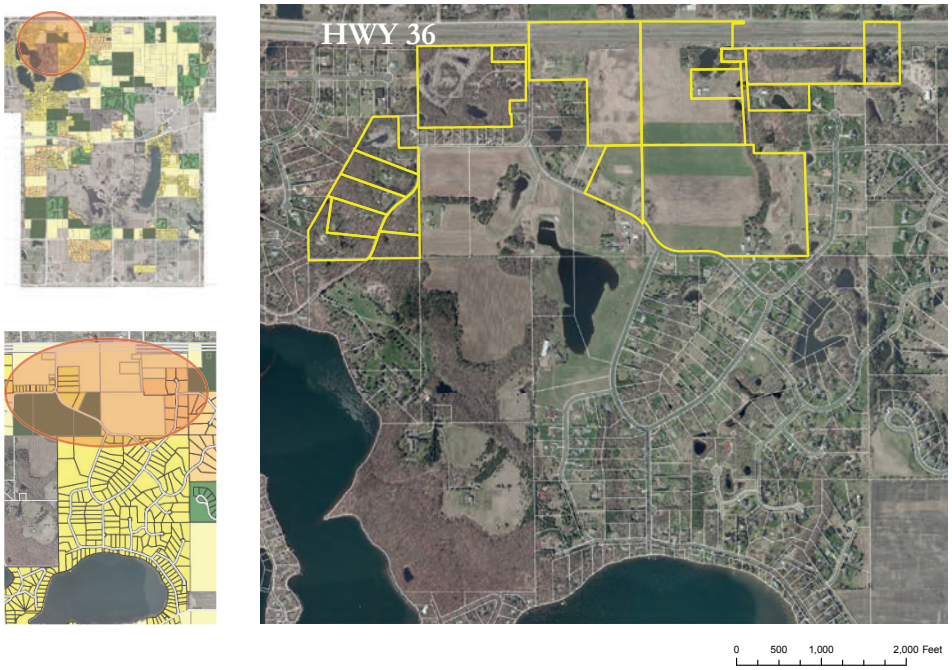
Roads

Average Linear Feet of Road	2,616 LF
Average Linear Feet of Road per Lot	468 LF
Estimated Total Mean Road Cost	$272,930
Estimated Mean Road Cost Per Lot	$48,832

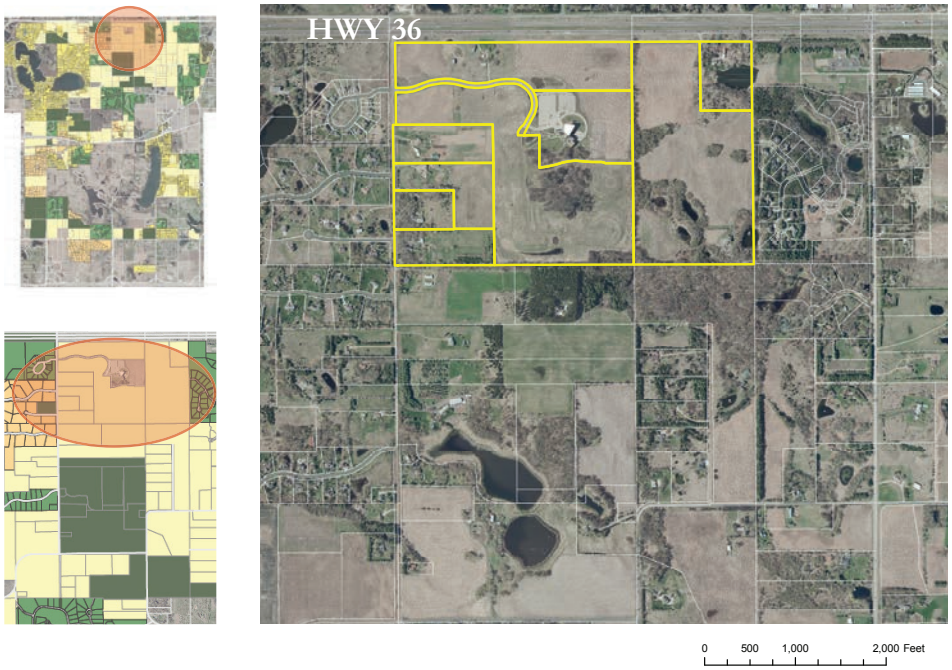
Sanitary System

Estimated Total Mean Linear Feet of Sanitary Sewer Pipe	2,645 LF
Estimated Mean Linear Feet of Sanitary Sewer Pipe per Lot	478 LF
Estimated Total Mean Cost of Sanitary Sewer Pipe	$328,432
Estimated Mean Cost of Sanitary Sewer Pipe per Lot	$59,315

Rural Residential 1



Rural Residential 2



Rural Residential 1 Totals

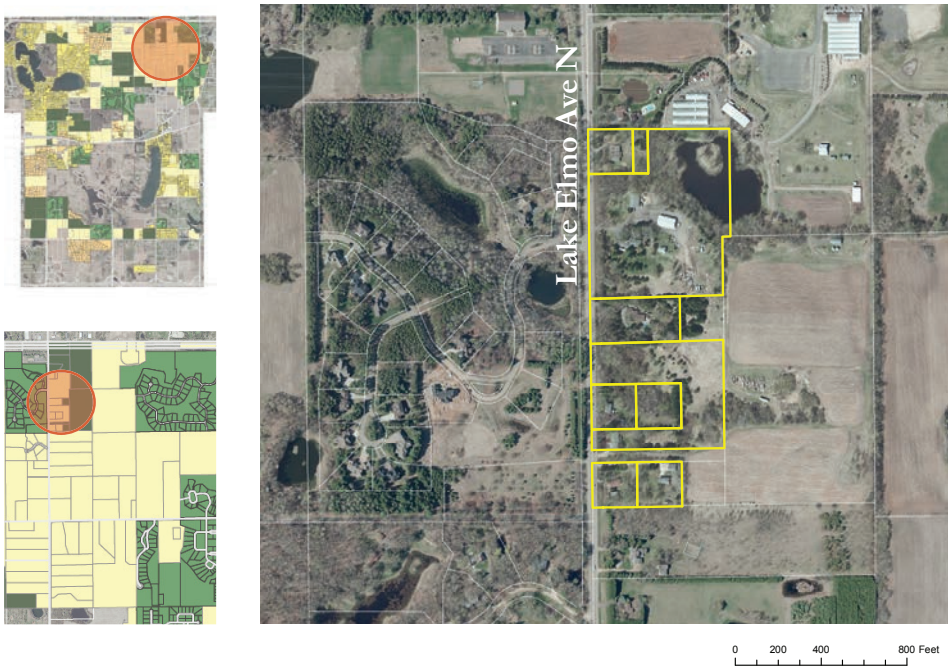
Zoning	RR	Water System Type	Private
Estimate Population	63 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	18	Estimate Cost of Water System Total	$243,000
Mean Lot Size	12.46 acres		
Sum of All Lot Sizes	224.3 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	3,881 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	216 feet	Estimate DWF (gal/day)	3,661 g/d
Estimate Cost of Road Reconstruction Total	$404,878	Linear Feet of Pipe	* *3,881 feet*
		Linear Feet of Pipe per Lot	* *216 feet*
Estimate Cost of Road Reconstruction per Lot	$22,493	Estimate Cost of Sanitary System Total	* *$481,906*
		Estimate Cost of Sanitary System per Lot	* *$26,773*

Rural Residential 2 Totals

Zoning	RR	Water System Type	City
Estimate Population	32 persons	Linear Feet of Pipe	6,970
Secondary Access	Yes	Linear Feet of Pipe per Lot	774 feet
Number of Lots	9	Estimate Cost of Water System Total	$285,770
Mean Lot Size	24.42 acres		
Sum of All Lot Sizes	219.8 acres	Estimate Cost of Water System per Lot	$31,752
Linear Feet of Road	2,477 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	275 feet	Estimate DWF (gal/day)	1,831 g/d
Estimate Cost of Road Reconstruction Total	$258,369	Linear Feet of Pipe	* *2,477 feet*
		Linear Feet of Pipe per Lot	* *275 feet*
Estimate Cost of Road Reconstruction per Lot	$28,708	Estimate Cost of Sanitary System Total	* *$307,524*
		Estimate Cost of Sanitary System per Lot	* *$34,169*

* If the development uses private septic systems, a sanitary system cost was estimated.

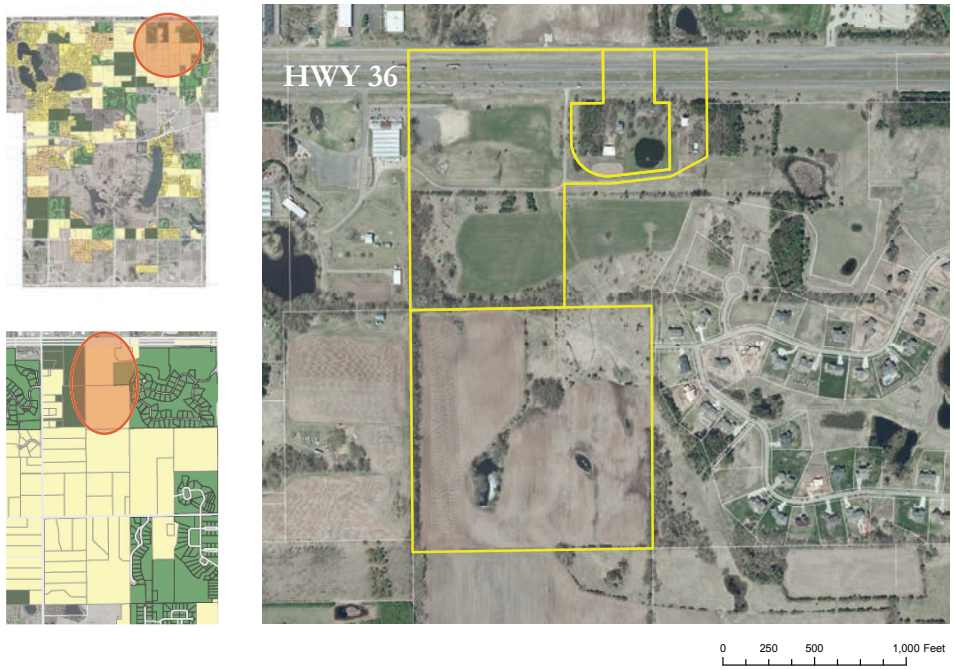
Rural Residential 3



Rural Residential 3 Totals

Zoning	RR	Water System Type	Private
Estimate Population	32 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	9	Estimate Cost of Water System Total	$121,500
Mean Lot Size	2.52 acres		
Sum of All Lot Sizes	22.6 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	1,700 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	189 feet	Estimate DWF (gal/day)	1,831 g/d
Estimate Cost of Road Reconstruction Total	$177,344	Linear Feet of Pipe	* *1,700 feet*
		Linear Feet of Pipe per Lot	* *189 feet*
Estimate Cost of Road Reconstruction per Lot	$19,705	Estimate Cost of Sanitary System Total	* *$211,083*
		Estimate Cost of Sanitary System per Lot	* *$23,454*

Rural Residential 4

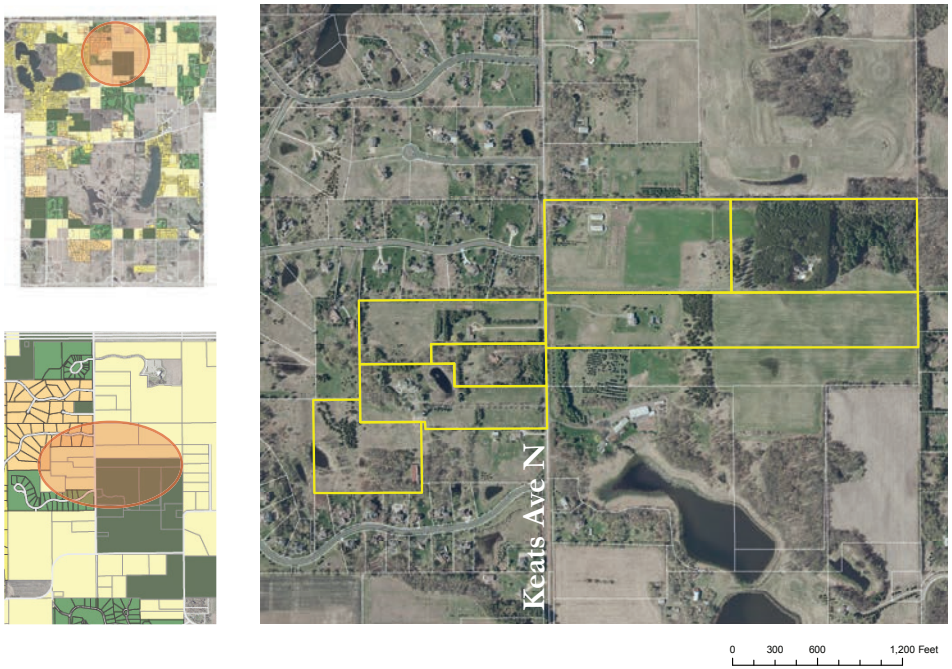


Rural Residential 4 Totals

Zoning	RR	Water System Type	City
Estimate Population	11 persons	Linear Feet of Pipe	1,396 feet
Secondary Access	Yes	Linear Feet of Pipe per Lot	465 feet
Number of Lots	3	Estimate Cost of Water System Total	$57,236
Mean Lot Size	26.57 acres		
Sum of All Lot Sizes	79.8 acres	Estimate Cost of Water System per Lot	$19,079
Linear Feet of Road	1,630 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	543 feet	Estimate DWF (gal/day)	610 g/d
Estimate Cost of Road Reconstruction Total	$170,042	Linear Feet of Pipe	* *1,630 feet*
		Linear Feet of Pipe per Lot	* *543 feet*
Estimate Cost of Road Reconstruction per Lot	$56,681	Estimate Cost of Sanitary System Total	* *$202,392*
		Estimate Cost of Sanitary System per Lot	* *$67,464*

* If the development uses private septic systems, a sanitary system cost was estimated.

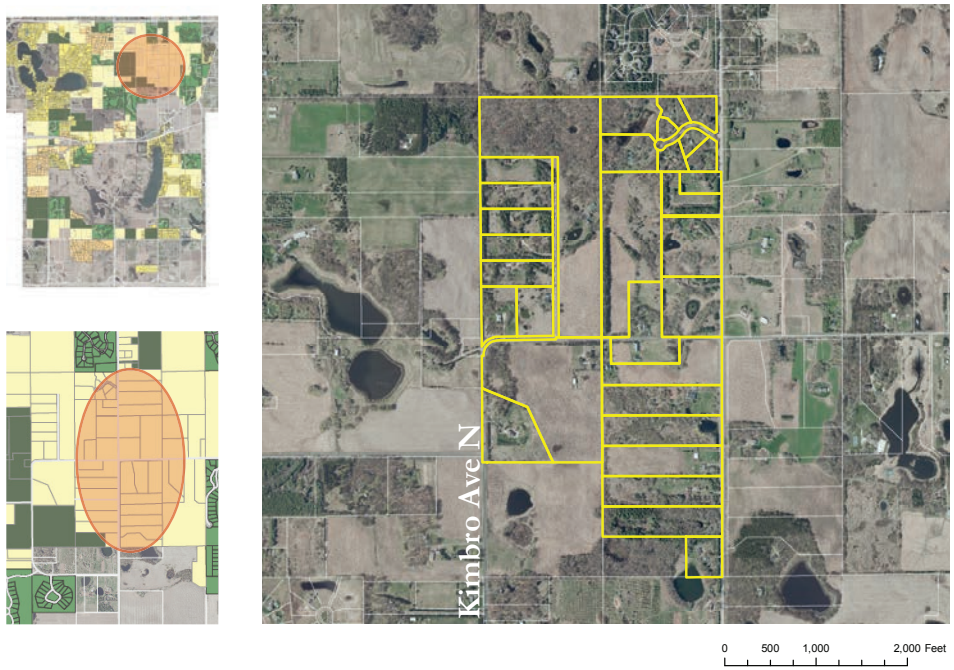
Rural Residential 5



Rural Residential 5 Totals

Zoning	RR	Water System Type	City/Private
Estimate Population	25 persons	Linear Feet of Pipe	1,625 feet
Secondary Access	Yes	Linear Feet of Pipe per Lot	325 feet
Number of Lots	7	Estimate Cost of Water System Total	$93,625
Mean Lot Size	14.3 acres		
Sum of All Lot Sizes	100.2 acres	Estimate Cost of Water System per Lot	City: $11,447 Private: $13,500
Linear Feet of Road	1,620 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	231 feet	Estimate DWF (gal/day)	1,424 g/d
Estimate Cost of Road Reconstruction Total	$168,998	Linear Feet of Pipe	* *1,620 feet*
		Linear Feet of Pipe per Lot	* *321 feet*
Estimate Cost of Road Reconstruction per Lot	$24,143	Estimate Cost of Sanitary System Total	* *$201,150*
		Estimate Cost of Sanitary System per Lot	* *$28,734*

Rural Residential 6

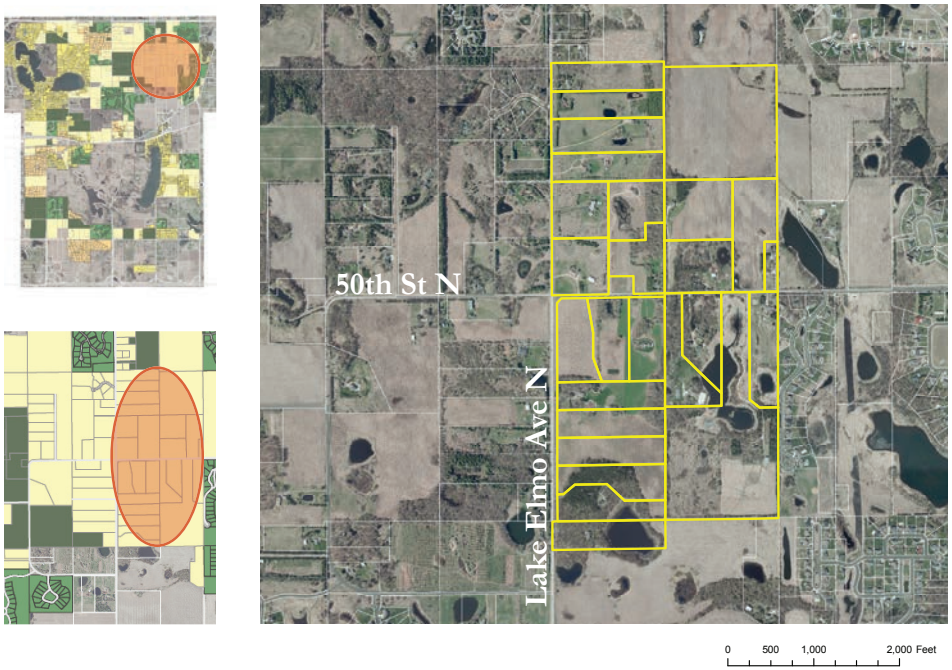


Rural Residential 6 Totals

Zoning	RR	Water System Type	Private
Estimate Population	112 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	32	Estimate Cost of Water System Total	$432,000
Mean Lot Size	8.29 acres		
Sum of All Lot Sizes	265.1 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	11,373 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	355 feet	Estimate DWF (gal/day)	6,509 g/d
Estimate Cost of Road Reconstruction Total	$1,286,454	Linear Feet of Pipe	* *11,373 feet*
		Linear Feet of Pipe per Lot	* *355 feet*
Estimate Cost of Road Reconstruction per Lot	$37,077	Estimate Cost of Sanitary System Total	* *$1,412,175*
		Estimate Cost of Sanitary System per Lot	* *$44,130*

* If the development uses private septic systems, a sanitary system cost was estimated.

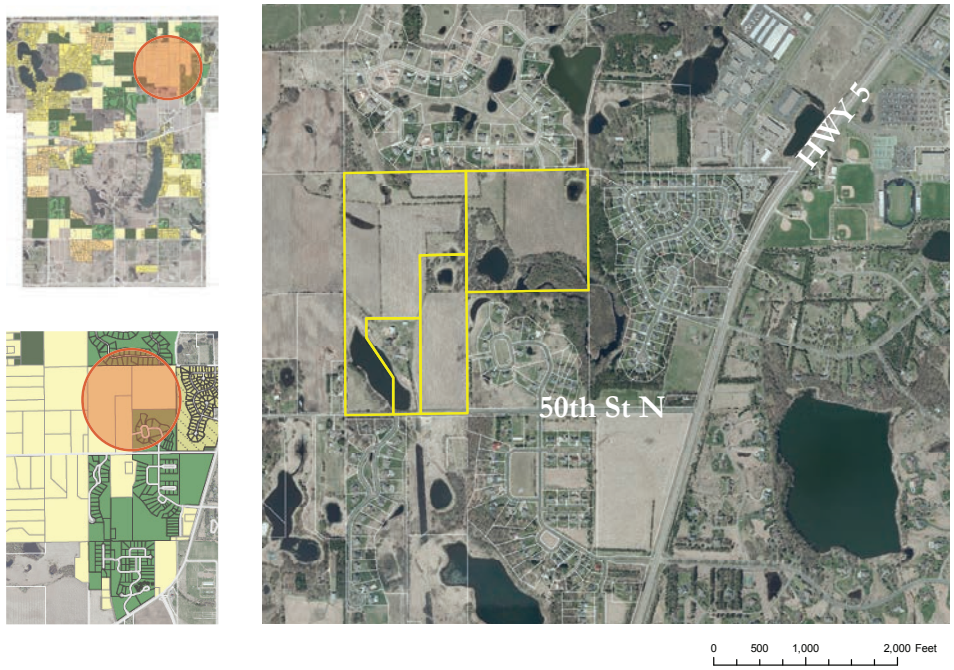
Rural Residential 7



Rural Residential 7 Totals

Zoning	RR	Water System Type	Private
Estimate Population	91 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	26	Estimate Cost of Water System Total	$351,000
Mean Lot Size	12.44 acres		
Sum of All Lot Sizes	324 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	8,357 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	321 feet	Estimate DWF (gal/day)	5,289 g/d
Estimate Cost of Road Reconstruction Total	$871,760	Linear Feet of Pipe	* *8,357 feet*
		Linear Feet of Pipe per Lot	* *321 feet*
Estimate Cost of Road Reconstruction per Lot	$33,529	Estimate Cost of Sanitary System Total	* *$1,037,611*
		Estimate Cost of Sanitary System per Lot	* *$39,908*

Rural Residential 8

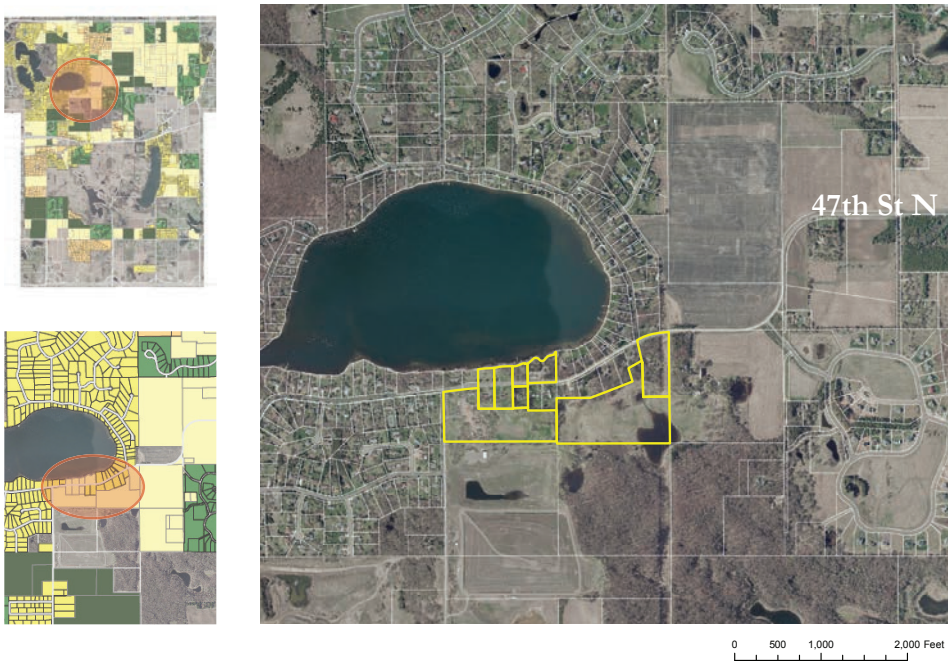


Rural Residential 8 Totals

Zoning	RR	Water System Type	Private
Estimate Population	14 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	4	Estimate Cost of Water System Total	$540,000
Mean Lot Size	30 acres		
Sum of All Lot Sizes	120 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	1,326 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	331 feet	Estimate DWF (gal/day)	814 g/d
Estimate Cost of Road Reconstruction Total	$138,287	Linear Feet of Pipe	* *1,326 feet*
		Linear Feet of Pipe per Lot	* *331 feet*
Estimate Cost of Road Reconstruction per Lot	$34,572	Estimate Cost of Sanitary System Total	* *$164,595*
		Estimate Cost of Sanitary System per Lot	* *$41,149*

* If the development uses private septic systems, a sanitary system cost was estimated.

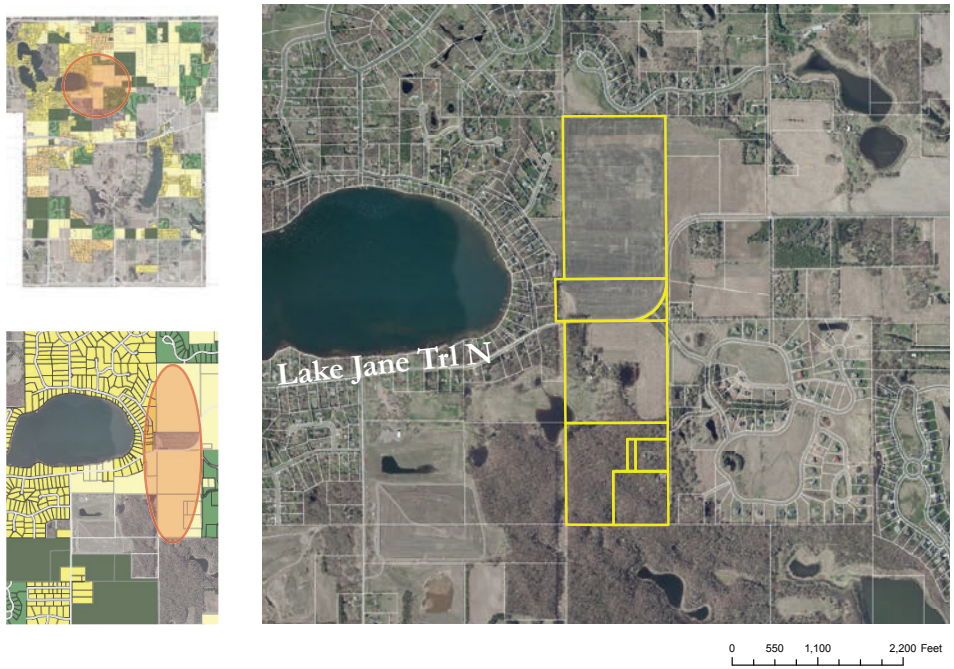
Rural Residential 9



Rural Residential 9 Totals

Zoning	RR	Water System Type	City
Estimate Population	18 persons	Linear Feet of Pipe	2,261 feet
Secondary Access	Yes	Linear Feet of Pipe per Lot	283 feet
Number of Lots	8	Estimate Cost of Water System Total	$92,701
Mean Lot Size	5.66 acres		
Sum of All Lot Sizes	45.3 acres	Estimate Cost of Water System per Lot	$11,588
Linear Feet of Road	1,719 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	215 feet	Estimate DWF (gal/day)	1,627 g/d
Estimate Cost of Road Reconstruction Total	$179,297	Linear Feet of Pipe	* *1,719 feet*
		Linear Feet of Pipe per Lot	* *215 feet*
Estimate Cost of Road Reconstruction per Lot	$22,412	Estimate Cost of Sanitary System Total	* *$213,408*
		Estimate Cost of Sanitary System per Lot	* *$26,676*

Rural Residential 10

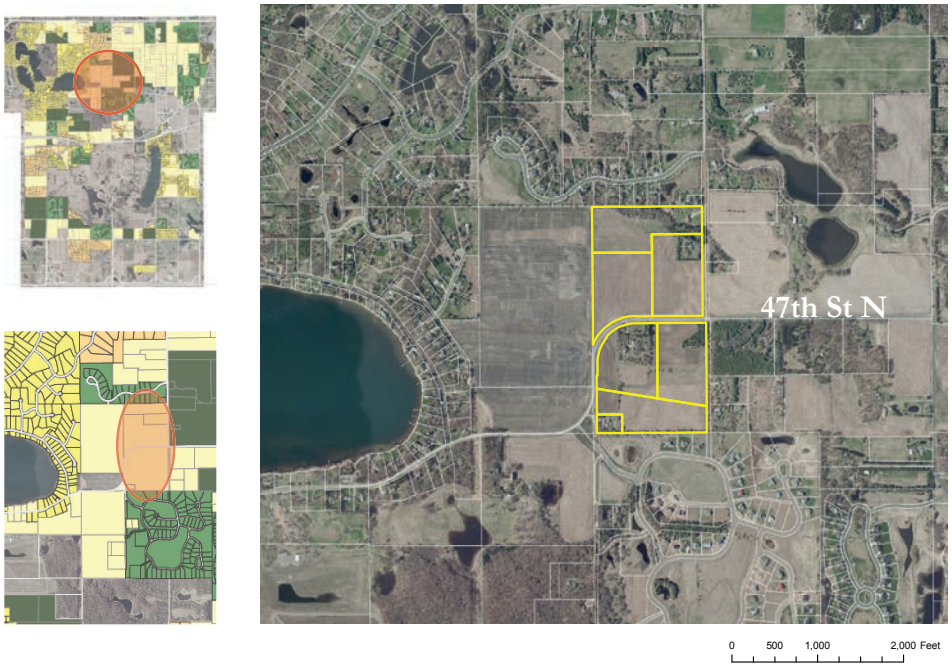


Rural Residential 10 Totals

Zoning	RR	Water System Type	City/Private
Estimate Population	11 persons	Linear Feet of Pipe	2,032 feet
Secondary Access	Yes	Linear Feet of Pipe per Lot	2,032 feet
Number of Lots	8	Estimate Cost of Water System Total	$96,812
Mean Lot Size	20.01 acres		
Sum of All Lot Sizes	160.1 acres	Estimate Cost of Water System per Lot	City: $83,312 Private: $13,500
Linear Feet of Road	2,245 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	279 feet	Estimate DWF (gal/day)	1,627 g/d
Estimate Cost of Road Reconstruction Total	$233,103	Linear Feet of Pipe	* *2,245 feet*
		Linear Feet of Pipe per Lot	* *279 feet*
Estimate Cost of Road Reconstruction per Lot	$29,138	Estimate Cost of Sanitary System Total	* *$277,450*
		Estimate Cost of Sanitary System per Lot	* *$34,681*

* If the development uses private septic systems, a sanitary system cost was estimated.

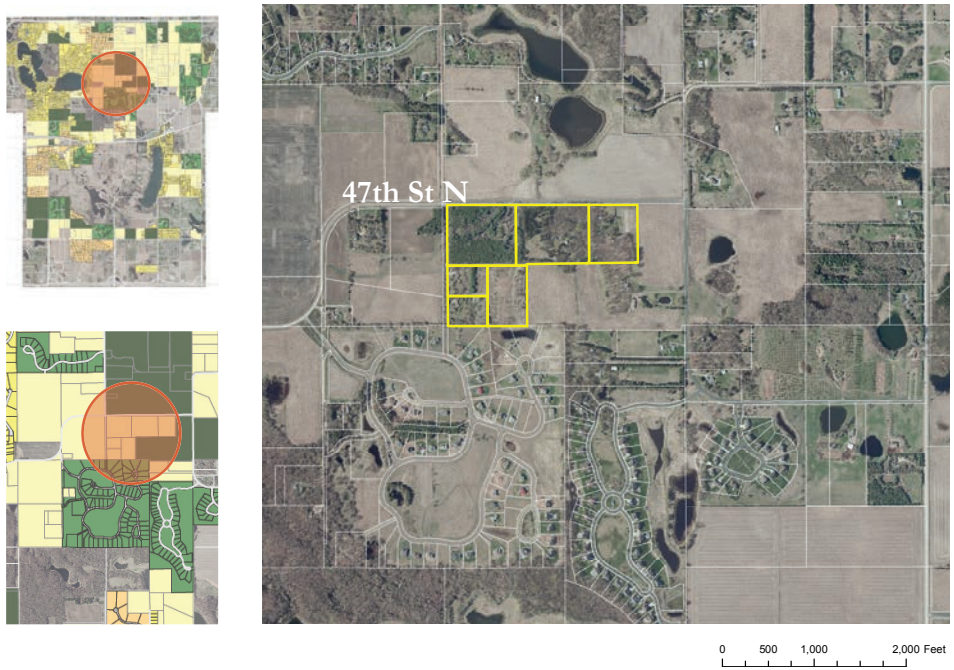
Rural Residential 11



Rural Residential 11 Totals

Zoning	RR	Water System Type	City
Estimate Population	14 persons	Linear Feet of Pipe	3,330 feet
Secondary Access	Yes	Linear Feet of Pipe per Lot	476 feet
Number of Lots	7	Estimate Cost of Water System Total	$136,530
Mean Lot Size	10.67 acres		
Sum of All Lot Sizes	74.7 acres	Estimate Cost of Water System per Lot	$19,504
Linear Feet of Road	2,030 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	290 feet	Estimate DWF (gal/day)	1,424 g/d
Estimate Cost of Road Reconstruction Total	$211,770	Linear Feet of Pipe	* *2030 feet*
		Linear Feet of Pipe per Lot	* *290 feet*
Estimate Cost of Road Reconstruction per Lot	$30,253	Estimate Cost of Sanitary System Total	* *$252,058*
		Estimate Cost of Sanitary System per Lot	* *$36,008*

Rural Residential 12

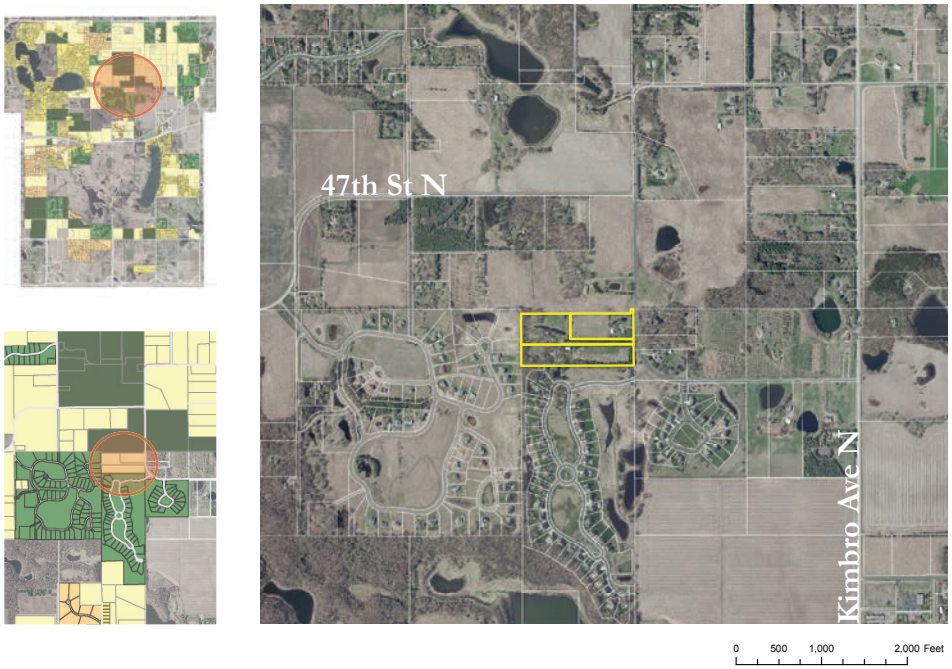


Rural Residential 12 Totals

Zoning	RR	Water System Type	Private
Estimate Population	18 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	6	Estimate Cost of Water System Total	$81,000
Mean Lot Size	7.28 acres		
Sum of All Lot Sizes	43.7 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	2,130 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	355 feet	Estimate DWF (gal/day)	1,220 g/d
Estimate Cost of Road Reconstruction Total	$222,202	Linear Feet of Pipe	* *2,130 feet*
		Linear Feet of Pipe per Lot	* *355 feet*
Estimate Cost of Road Reconstruction per Lot	$37,034	Estimate Cost of Sanitary System Total	* *$264,475*
		Estimate Cost of Sanitary System per Lot	* *$44,079*

* If the development uses private septic systems, a sanitary system cost was estimated.

Rural Residential 13

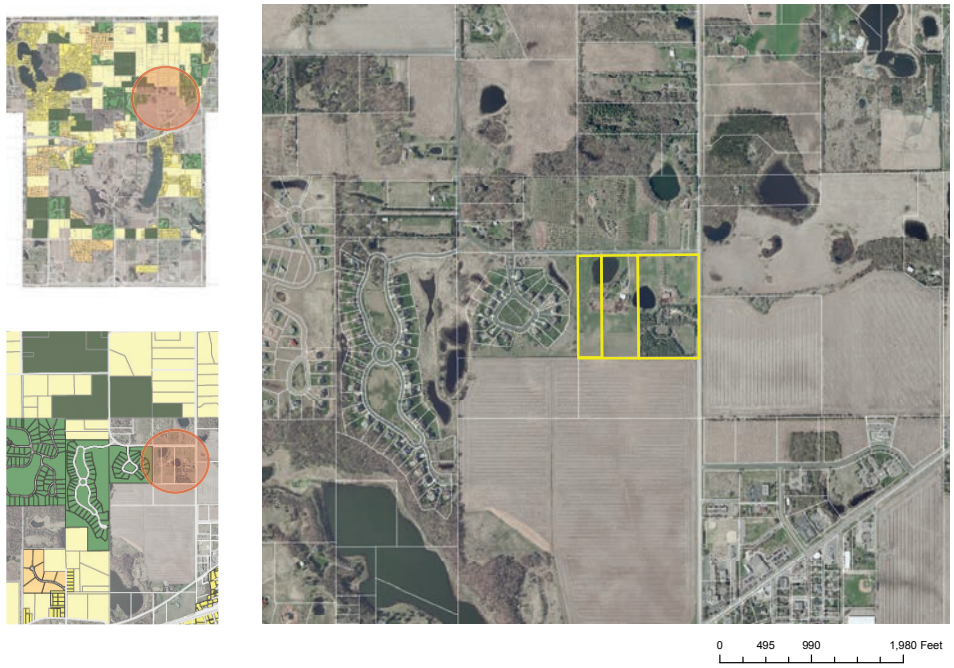


Rural Residential 13 Totals

Zoning	RR	Water System Type	City
Estimate Population	11 persons	Linear Feet of Pipe	1,330 feet
Secondary Access	Yes	Linear Feet of Pipe per Lot	443 feet
Number of Lots	3	Estimate Cost of Water System Total	$54,530
Mean Lot Size	6.11 acres		
Sum of All Lot Sizes	18.4 acres	Estimate Cost of Water System per Lot	$18,177
Linear Feet of Road	408 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	136 feet	Estimate DWF (gal/day)	610 g/d
Estimate Cost of Road Reconstruction Total	$42,563	Linear Feet of Pipe*	* *1,330 feet*
		Linear Feet of Pipe per Lot	* *443 feet*
Estimate Cost of Road Reconstruction per Lot	$14,188	Estimate Cost of Sanitary System Total	* *$165,142*
		Estimate Cost of Sanitary System per Lot	* *$55,047*

** Rural Residential 13: Linear Feet of Pipe follows the City Water pipeline instead of the road line.*

Rural Residential 14

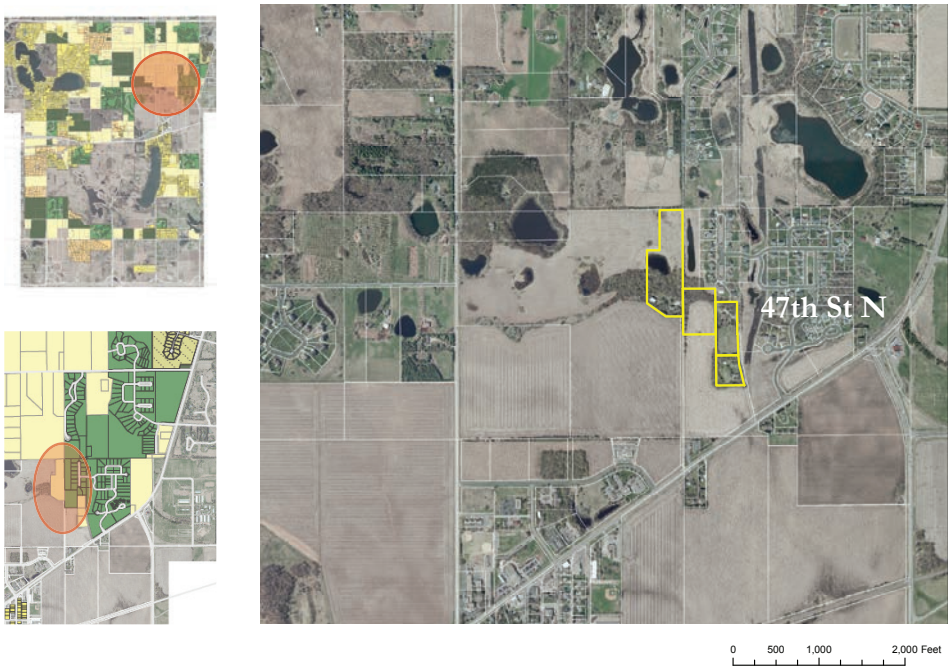


Rural Residential 14 Totals

Zoning	RR	Water System Type	City
Estimate Population	11 persons	Linear Feet of Pipe	2,514 feet
Secondary Access	Yes	Linear Feet of Pipe per Lot	838 feet
Number of Lots	3	Estimate Cost of Water System Total	$103,074
Mean Lot Size	11.13 acres		
Sum of All Lot Sizes	33.4 acres	Estimate Cost of Water System per Lot	$34,358
Linear Feet of Road	2,500 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	833 feet	Estimate DWF (gal/day)	610 g/d
Estimate Cost of Road Reconstruction Total	$260,800	Linear Feet of Pipe	* *2,500 feet*
		Linear Feet of Pipe per Lot	* *833 feet*
Estimate Cost of Road Reconstruction per Lot	$86,933	Estimate Cost of Sanitary System Total	* *$310,417*
		Estimate Cost of Sanitary System per Lot	* *$103,472*

* If the development uses private septic systems, a sanitary system cost was estimated.

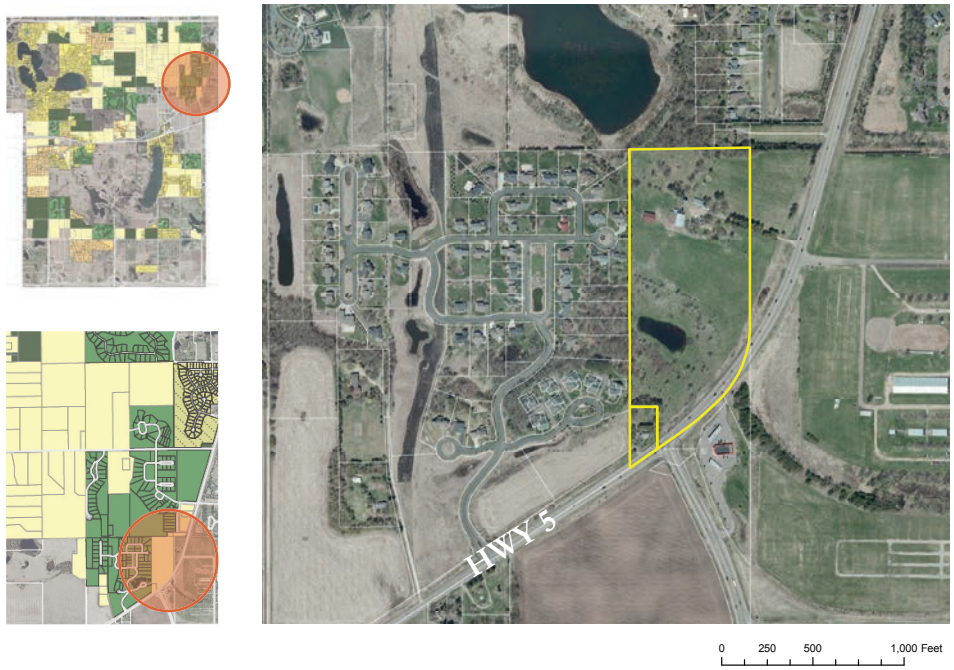
Rural Residential 15



Rural Residential 15 Totals

Zoning	RR	Water System Type	Private
Estimate Population	11 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	4	Estimate Cost of Water System Total	$54,000
Mean Lot Size	5.11 acres		
Sum of All Lot Sizes	20.4 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	1,000 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	250 feet	Estimate DWF (gal/day)	814 g/d
Estimate Cost of Road Reconstruction Total	$104,320	Linear Feet of Pipe	* *1,000 feet*
		Linear Feet of Pipe per Lot	* *250 feet*
Estimate Cost of Road Reconstruction per Lot	$26,080	Estimate Cost of Sanitary System Total	* *$114,854*
		Estimate Cost of Sanitary System per Lot	* *$57,427*

Rural Residential 16



Rural Residential 16 Totals

Zoning	RR	Water System Type	Private
Estimate Population	7 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	2	Estimate Cost of Water System Total	$27,000
Mean Lot Size	11.30 acres		
Sum of All Lot Sizes	22.6 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	925 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	463 feet	Estimate DWF (gal/day)	407 g/d
Estimate Cost of Road Reconstruction Total	$96,496	Linear Feet of Pipe	* *925 feet*
		Linear Feet of Pipe per Lot	* *463 feet*
Estimate Cost of Road Reconstruction per Lot	$48,248	Estimate Cost of Sanitary System Total	* *$114,854*
		Estimate Cost of Sanitary System per Lot	* *$57,427*

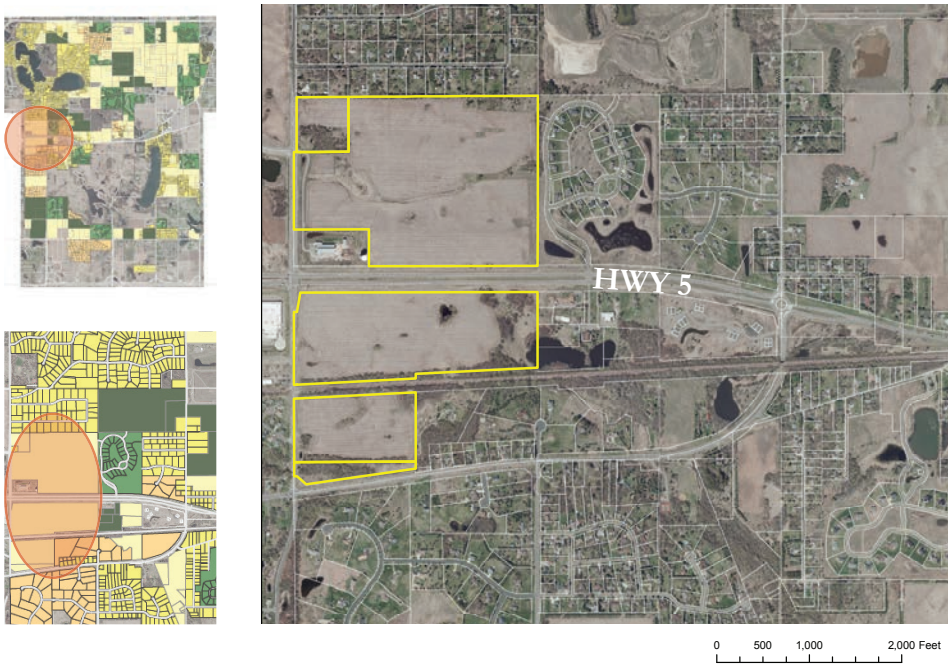
* If the development uses private septic systems, a sanitary system cost was estimated.

Rural Residential 17

Rural Residential 17 Totals

Zoning	RR	Water System Type	Private
Estimate Population	3 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	1	Estimate Cost of Water System Total	$13,500
Mean Lot Size	1.50 acres		
Sum of All Lot Sizes	1.5 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	215 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	215 feet	Estimate DWF (gal/day)	203 g/d
Estimate Cost of Road Reconstruction Total	$22,429	Linear Feet of Pipe	* *215 feet*
		Linear Feet of Pipe per Lot	* *215 feet*
Estimate Cost of Road Reconstruction per Lot	$22,429	Estimate Cost of Sanitary System Total	* *$26,696*
		Estimate Cost of Sanitary System per Lot	* *$26,696*

Rural Residential 18

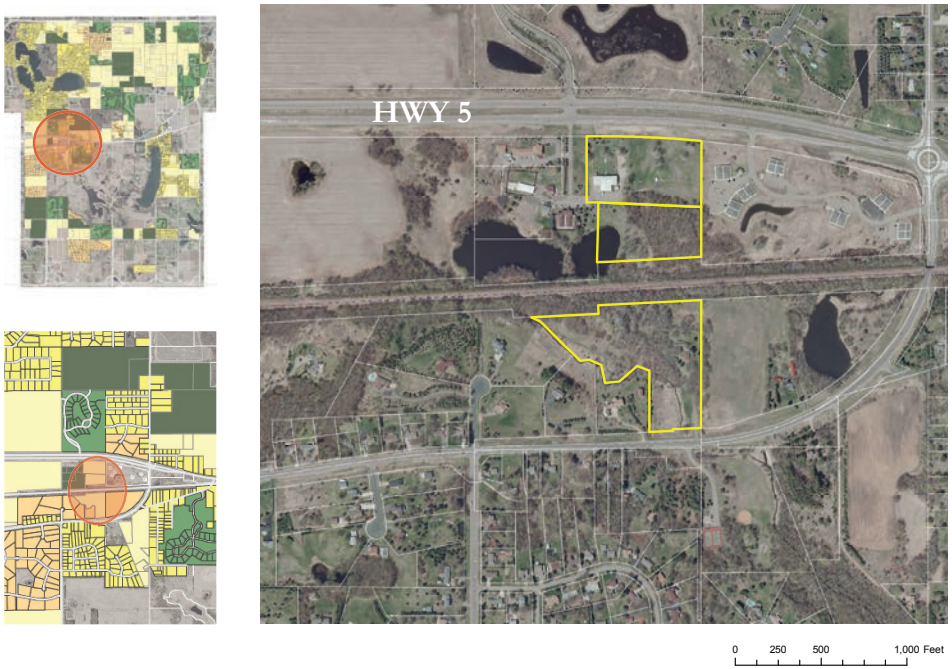


Rural Residential 18 Totals

Zoning	RR	Water System Type	City
Estimate Population	0 persons	Linear Feet of Pipe	5,868 feet
Secondary Access	Yes	Linear Feet of Pipe per Lot	1,174 feet
Number of Lots	5	Estimate Cost of Water System Total	$240,588
Mean Lot Size	37.00 acres		
Sum of All Lot Sizes	185.1 acres	Estimate Cost of Water System per Lot	$48,118
Linear Feet of Road	7,290 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	1,458 feet	Estimate DWF (gal/day)	1,017 g/d
Estimate Cost of Road Reconstruction Total	$760,493	Linear Feet of Pipe	* *7,290 feet*
		Linear Feet of Pipe per Lot	* *1,458 feet*
Estimate Cost of Road Reconstruction per Lot	$152,099	Estimate Cost of Sanitary System Total	* *$905,175*
		Estimate Cost of Sanitary System per Lot	* *$181,035*

* If the development uses private septic systems, a sanitary system cost was estimated.

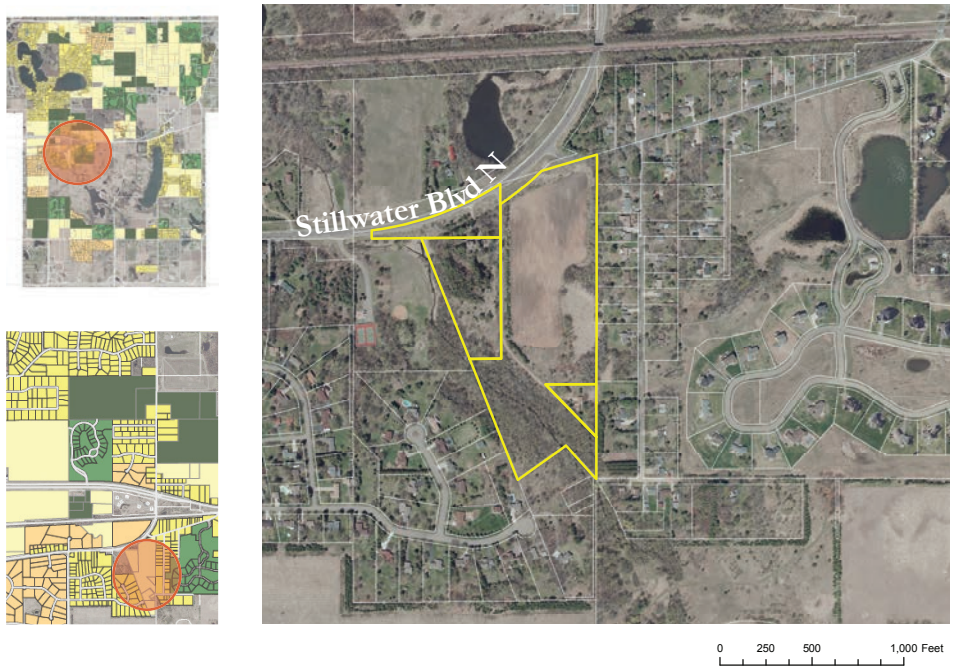
Rural Residential 19



Rural Residential 19 Totals

Zoning	RR	Water System Type	Private
Estimate Population	4 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	3	Estimate Cost of Water System Total	$40,500
Mean Lot Size	6.60 acres		
Sum of All Lot Sizes	19.8 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	1,021 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	340 feet	Estimate DWF (gal/day)	610 g/d
Estimate Cost of Road Reconstruction Total	$106,511	Linear Feet of Pipe	* *1,021 feet*
		Linear Feet of Pipe per Lot	* *340 feet*
Estimate Cost of Road Reconstruction per Lot	$35,504	Estimate Cost of Sanitary System Total	* *$126,774*
		Estimate Cost of Sanitary System per Lot	* *$42,258*

Rural Residential 20

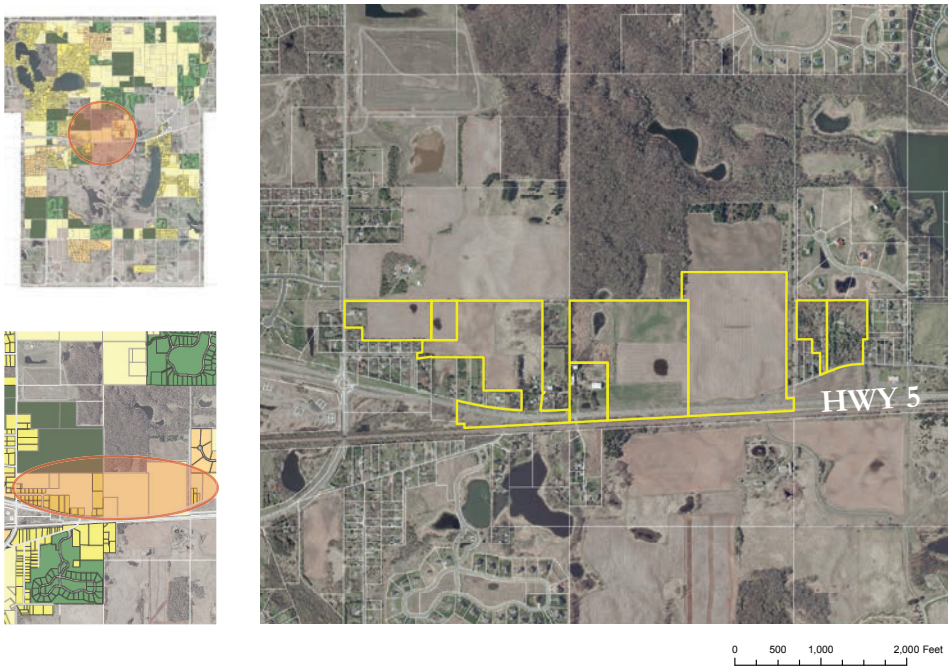


Rural Residential 20 Totals

Zoning	RR	Water System Type	City
Estimate Population	7 persons	Linear Feet of Pipe	1,150 feet
Secondary Access	Yes	Linear Feet of Pipe per Lot	288 feet
Number of Lots	4	Estimate Cost of Water System Total	$47,150
Mean Lot Size	6.60 acres		
Sum of All Lot Sizes	26.3 acres	Estimate Cost of Water System per Lot	$11,788
Linear Feet of Road	940 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	235 feet	Estimate DWF (gal/day)	814 g/d
Estimate Cost of Road Reconstruction Total	$98,061	Linear Feet of Pipe	* *940 feet*
		Linear Feet of Pipe per Lot	* *235 feet*
Estimate Cost of Road Reconstruction per Lot	$24,515	Estimate Cost of Sanitary System Total	* *$116,717*
		Estimate Cost of Sanitary System per Lot	* *$29,179*

* If the development uses private septic systems, a sanitary system cost was estimated.

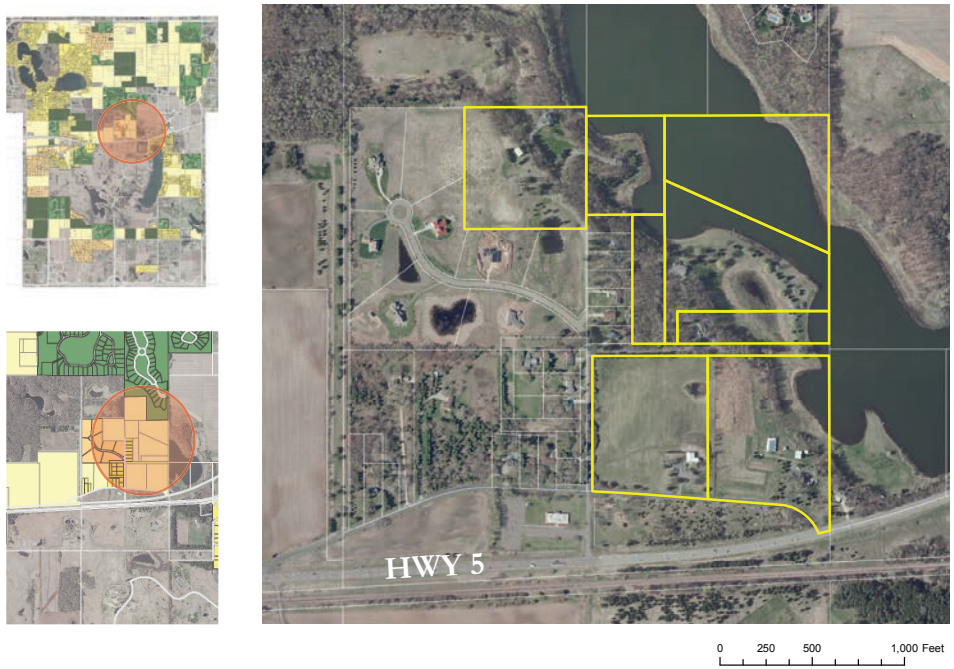
Rural Residential 21



Rural Residential 21 Totals

Zoning	RR	Water System Type	City/Private
Estimate Population	18 persons	Linear Feet of Pipe	3,378 feet
Secondary Access	Yes	Linear Feet of Pipe per Lot	1,689 feet
Number of Lots	8	Estimate Cost of Water System Total	$219,498
Mean Lot Size	18.00 acres		
Sum of All Lot Sizes	145.0 acres	Estimate Cost of Water System per Lot	City: $17,312 Private: $13,500
Linear Feet of Road	4,785 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	598 feet	Estimate DWF (gal/day)	1,627 g/d
Estimate Cost of Road Reconstruction Total	$499,171	Linear Feet of Pipe	* *4,785 feet*
		Linear Feet of Pipe per Lot	* *598 feet*
Estimate Cost of Road Reconstruction per Lot	$62,396	Estimate Cost of Sanitary System Total	* *$594,138*
		Estimate Cost of Sanitary System per Lot	* *$74,267*

Rural Residential 22

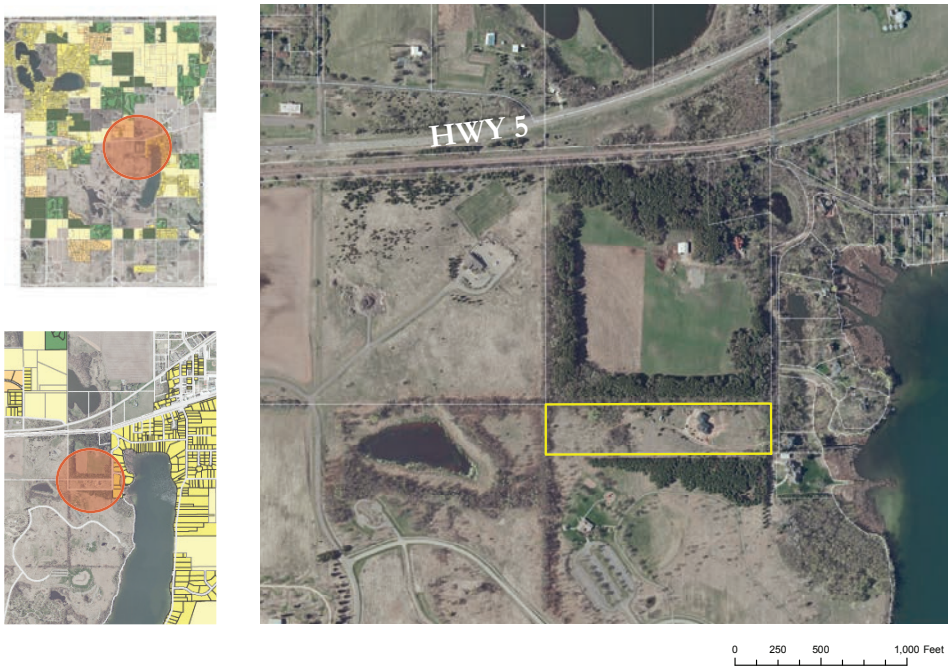


Rural Residential 22 Totals

Zoning	RR	Water System Type	Private
Estimate Population	21 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	8	Estimate Cost of Water System Total	$108,000
Mean Lot Size	8.3 acres		
Sum of All Lot Sizes	66.7 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	2,727 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	341 feet	Estimate DWF (gal/day)	1,627 g/d
Estimate Cost of Road Reconstruction Total	$284,428	Linear Feet of Pipe	* *2,727 feet*
		Linear Feet of Pipe per Lot	* *341 feet*
Estimate Cost of Road Reconstruction per Lot	$35,554	Estimate Cost of Sanitary System Total	* *$338,540*
		Estimate Cost of Sanitary System per Lot	* *$42,318*

* If the development uses private septic systems, a sanitary system cost was estimated.

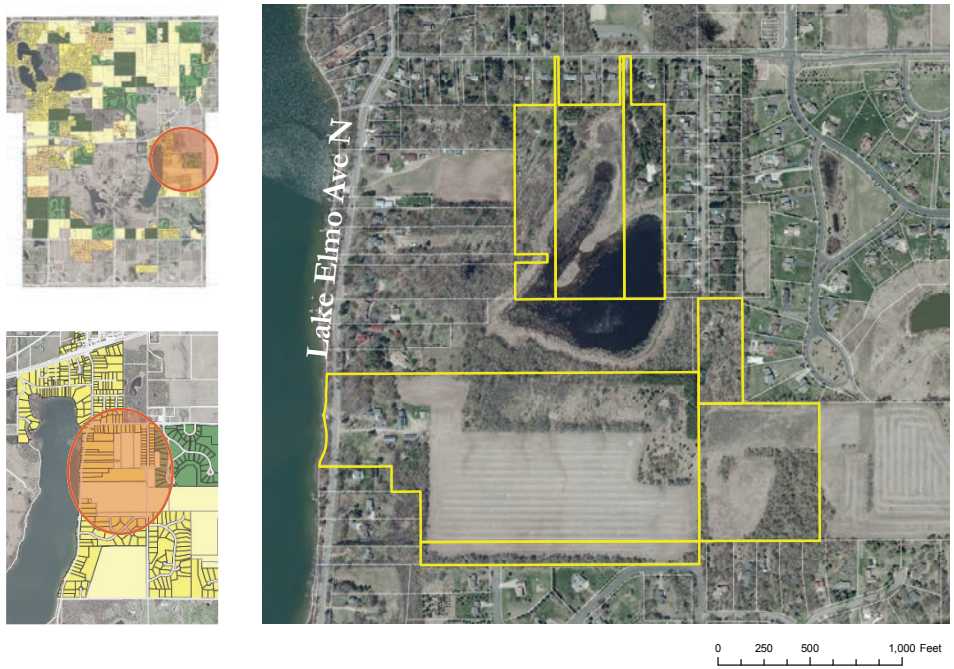
Rural Residential 23



Rural Residential 23 Totals

Zoning	RR	Water System Type	Private
Estimate Population	3 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	1	Estimate Cost of Water System Total	$13,500
Mean Lot Size	8.80 acres		
Sum of All Lot Sizes	8.8 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	300 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	300 feet	Estimate DWF (gal/day)	203 g/d
Estimate Cost of Road Reconstruction Total	$31,296	Linear Feet of Pipe	* *300 feet*
		Linear Feet of Pipe per Lot	* *300 feet*
Estimate Cost of Road Reconstruction per Lot	$31,296	Estimate Cost of Sanitary System Total	* *$37,250*
		Estimate Cost of Sanitary System per Lot	* *$37,250*

Rural Residential 24

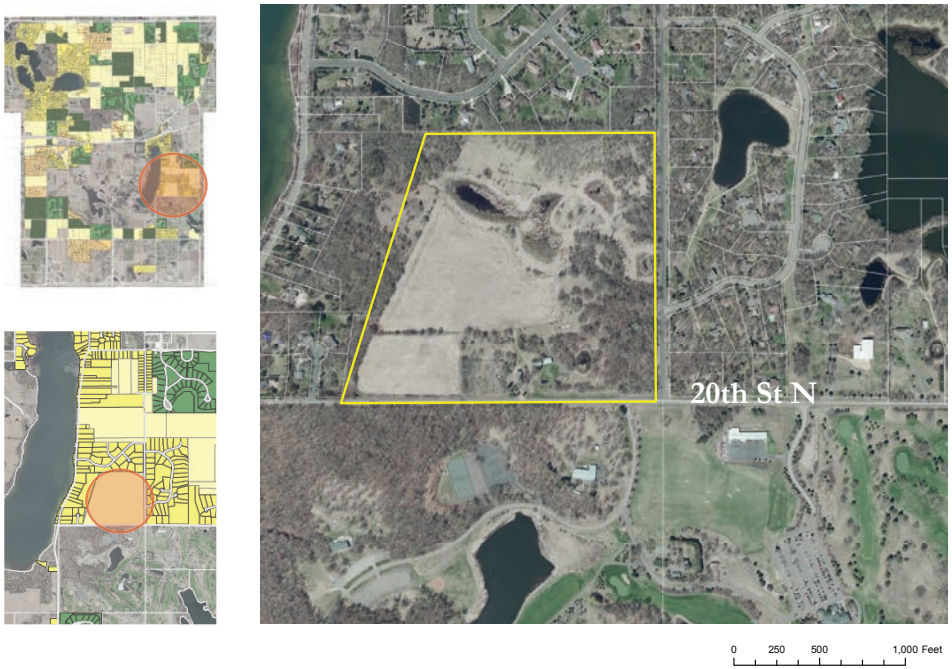


Rural Residential 24 Totals

Zoning	RR	Water System Type	Private
Estimate Population	14 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	7	Estimate Cost of Water System Total	$94,500
Mean Lot Size	11.00 acres		
Sum of All Lot Sizes	77.1 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	600 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	86 feet	Estimate DWF (gal/day)	1,424 g/d
Estimate Cost of Road Reconstruction Total	$62,592	Linear Feet of Pipe	* *600 feet*
		Linear Feet of Pipe per Lot	* *86 feet*
Estimate Cost of Road Reconstruction per Lot	$8,942	Estimate Cost of Sanitary System Total	* *$74,500*
		Estimate Cost of Sanitary System per Lot	* *$10,643*

* If the development uses private septic systems, a sanitary system cost was estimated.

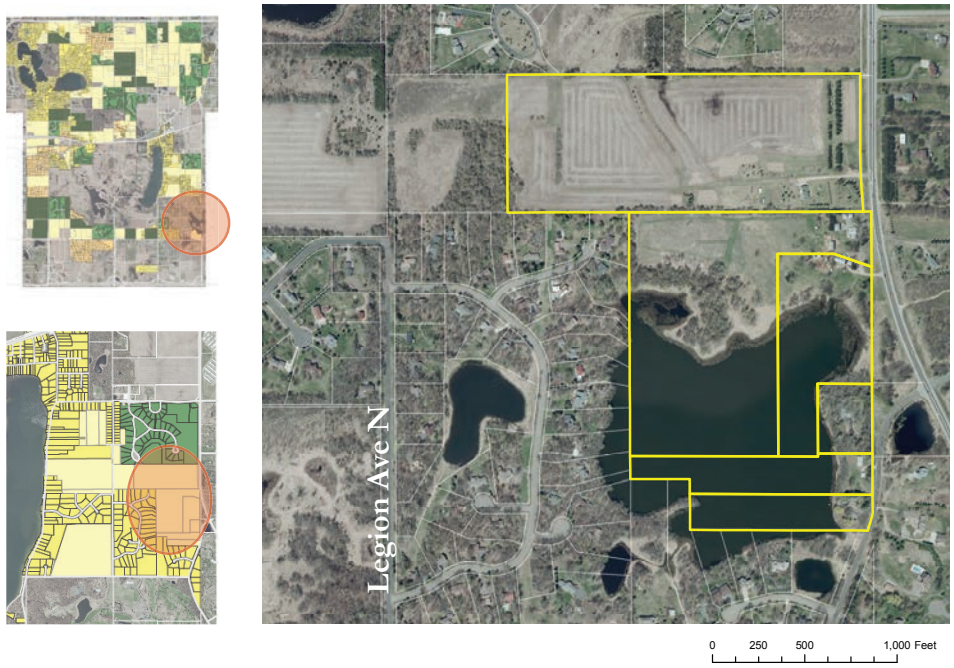
Rural Residential 25



Rural Residential 25 Totals

Zoning	RR	Water System Type	Private
Estimate Population	3 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	1	Estimate Cost of Water System Total	$13,500
Mean Lot Size	57.20 acres		
Sum of All Lot Sizes	57.2 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	1,590 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	1,590 feet	Estimate DWF (gal/day)	203 g/d
Estimate Cost of Road Reconstruction Total	$165,859	Linear Feet of Pipe	* *1,590 feet*
		Linear Feet of Pipe per Lot	* *1,590 feet*
Estimate Cost of Road Reconstruction per Lot	$165,859	Estimate Cost of Sanitary System Total	* *$197,425*
		Estimate Cost of Sanitary System per Lot	* *$197,425*

Rural Residential 26

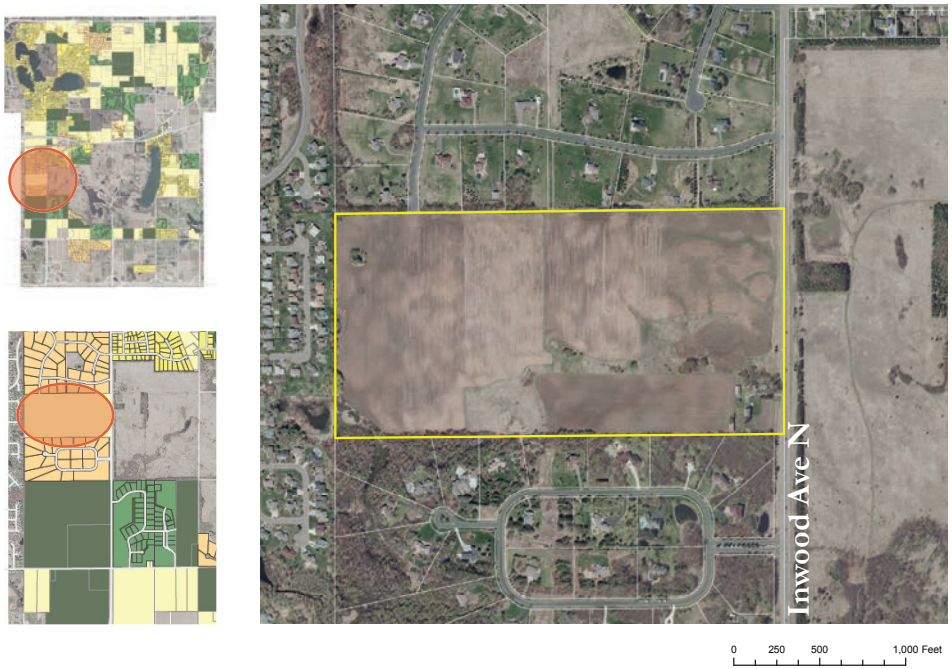


Rural Residential 26Totals

Zoning	RR	Water System Type	Private
Estimate Population	21 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	6	Estimate Cost of Water System Total	$81,000
Mean Lot Size	13.80 acres		
Sum of All Lot Sizes	82.7 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	1,050 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	175 feet	Estimate DWF (gal/day)	1,220 g/d
Estimate Cost of Road Reconstruction Total	$109,536	Linear Feet of Pipe	* *1,050 feet*
		Linear Feet of Pipe per Lot	* *175 feet*
Estimate Cost of Road Reconstruction per Lot	$18,256	Estimate Cost of Sanitary System Total	* *$130,375*
		Estimate Cost of Sanitary System per Lot	* *$21,729*

* If the development uses private septic systems, a sanitary system cost was estimated.

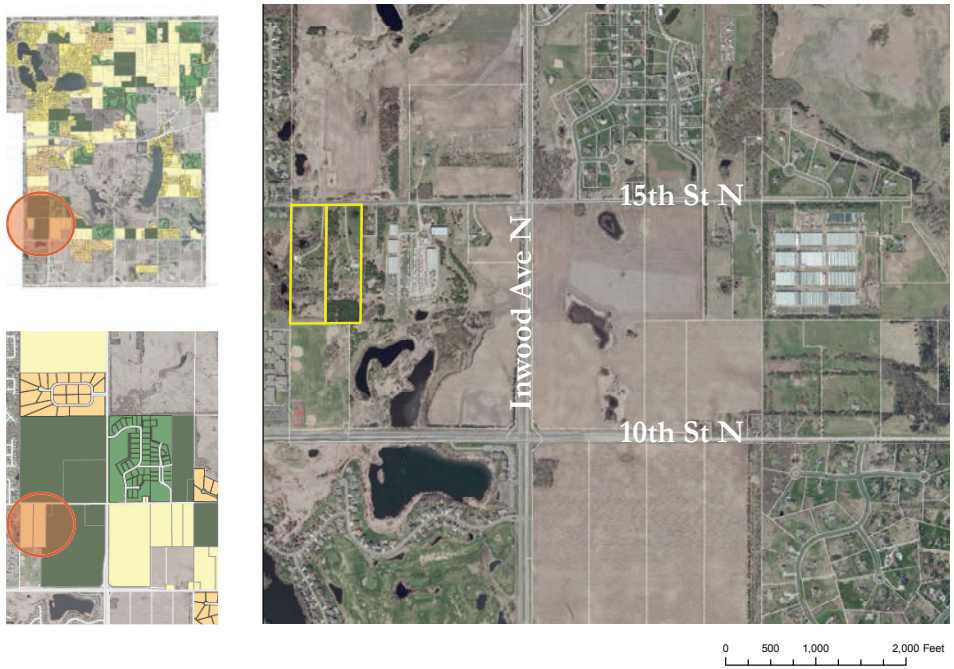
Rural Residential 27



Rural Residential 27 Totals

Zoning	RR	Water System Type	Private
Estimate Population	3 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N.A
Number of Lots	1	Estimate Cost of Water System Total	$13,500
Mean Lot Size	78.00 acres		
Sum of All Lot Sizes	78.0 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	1,330 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	1,330 feet	Estimate DWF (gal/day)	203 g/d
Estimate Cost of Road Reconstruction Total	$138,746	Linear Feet of Pipe	* *1,330 feet*
		Linear Feet of Pipe per Lot	* *1,330 feet*
Estimate Cost of Road Reconstruction per Lot	$138,746	Estimate Cost of Sanitary System Total	* *$165,142*
		Estimate Cost of Sanitary System per Lot	* *$165,142*

Rural Residential 28

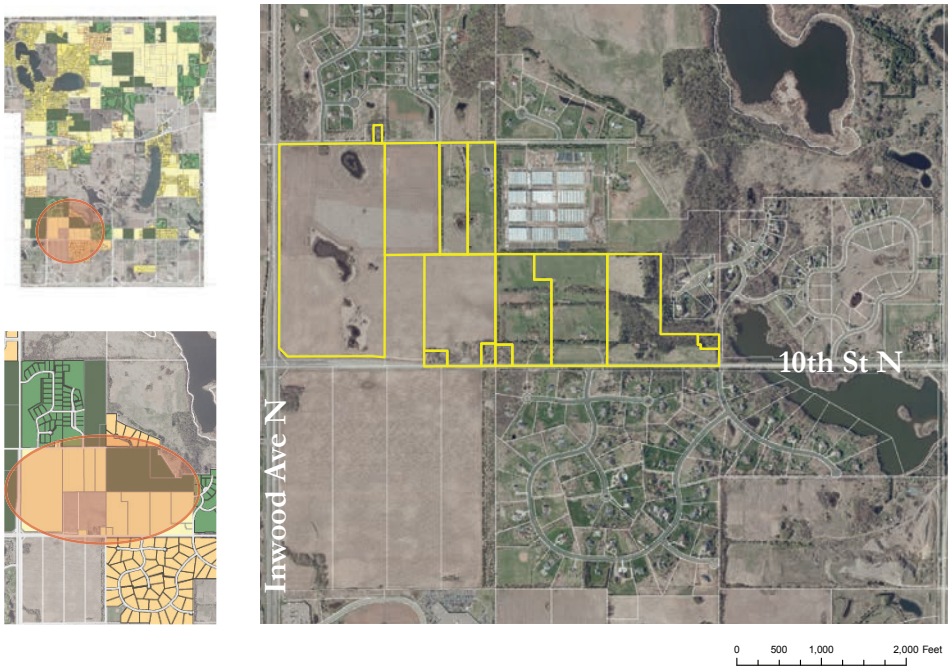


Rural Residential 28 Totals

Zoning	RR	Water System Type	Private
Estimate Population	7 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	2	Estimate Cost of Water System Total	$27,000
Mean Lot Size	11.80 acres		
Sum of All Lot Sizes	23.5 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	760 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	380 feet	Estimate DWF (gal/day)	407 g/d
Estimate Cost of Road Reconstruction Total	$79,283	Linear Feet of Pipe	* *760 feet*
		Linear Feet of Pipe per Lot	* *380 feet*
Estimate Cost of Road Reconstruction per Lot	$39,642	Estimate Cost of Sanitary System Total	* *$94,367*
		Estimate Cost of Sanitary System per Lot	* *$47,183*

* If the development uses private septic systems, a sanitary system cost was estimated.

Rural Residential 29



Rural Residential 29 Totals

Zoning	RR	Water System Type	Private
Estimate Population	35 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	13	Estimate Cost of Water System Total	$175,500
Mean Lot Size	16.5 acres		
Sum of All Lot Sizes	214.8 acres	Estimate Cost of Water System per Lot	$13,500

Linear Feet of Road	10,236 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	787 feet	Estimate DWF (gal/day)	2,644 g/d
Estimate Cost of Road Reconstruction Total	$1,067,820	Linear Feet of Pipe	* *10,236 feet*
		Linear Feet of Pipe per Lot	* *787 feet*
Estimate Cost of Road Reconstruction per Lot	$82,140	Estimate Cost of Sanitary System Total	* *$1,270,970*
		Estimate Cost of Sanitary System per Lot	* *$97,767*

Rural Residential 30

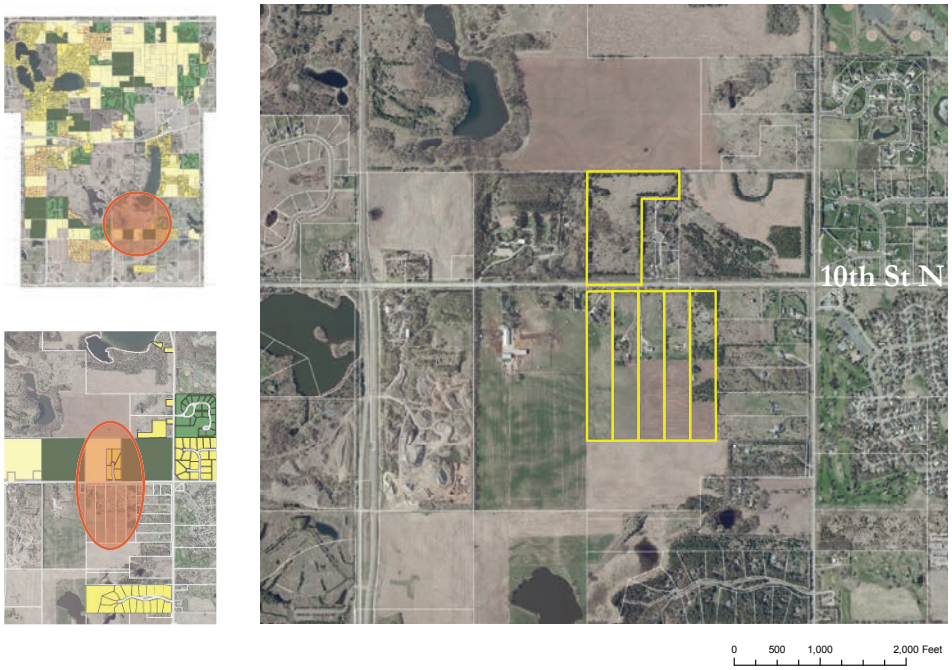
Rural Residential 30 Totals

Zoning	RR	Water System Type	Private
Estimate Population	7 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	3	Estimate Cost of Water System Total	$40,500
Mean Lot Size	11.7 acres		
Sum of All Lot Sizes	35 acres	Estimate Cost of Water System per Lot	$13,500

Linear Feet of Road	2,543 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	848 feet	Estimate DWF (gal/day)	610 g/d
Estimate Cost of Road Reconstruction Total	$265,286	Linear Feet of Pipe	* *2,543 feet*
		Linear Feet of Pipe per Lot	* *848 feet*
Estimate Cost of Road Reconstruction per Lot	$88,429	Estimate Cost of Sanitary System Total	* *$315,756*
		Estimate Cost of Sanitary System per Lot	* *$105,252*

* If the development uses private septic systems, a sanitary system cost was estimated.

Rural Residential 31



Rural Residential 31 Totals

Zoning	RR	Water System Type	Private
Estimate Population	18 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	6	Estimate Cost of Water System Total	$81,000
Mean Lot Size	13.7 acres		
Sum of All Lot Sizes	82.3 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	1,500 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	250 feet	Estimate DWF (gal/day)	1,220 g/d
Estimate Cost of Road Reconstruction Total	$156,480	Linear Feet of Pipe	* *1,500 feet*
		Linear Feet of Pipe per Lot	* *250 feet*
Estimate Cost of Road Reconstruction per Lot	$26,080	Estimate Cost of Sanitary System Total	* *$186,250*
		Estimate Cost of Sanitary System per Lot	* *$31,042*

Rural Residential 32

Rural Residential 32 Totals

Zoning	RR	Water System Type	Private
Estimate Population	7 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	2	Estimate Cost of Water System Total	$27,000
Mean Lot Size	19.00 acres		
Sum of All Lot Sizes	38.0 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	1,525 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	763 feet	Estimate DWF (gal/day)	407 g/d
Estimate Cost of Road Reconstruction Total	$159,088	Linear Feet of Pipe	* 1,525 feet
		Linear Feet of Pipe per Lot	* 763 feet
Estimate Cost of Road Reconstruction per Lot	$79,544	Estimate Cost of Sanitary System Total	* $189,354
		Estimate Cost of Sanitary System per Lot	* $94,677

* If the development uses private septic systems, a sanitary system cost was estimated.

Agricultural Zoning

Agricultural Zoning

Zoning	A
Average Number of Lots	5
Estimate Average Population per Development	10 persons
Total Mean Lot Size	21 acres

Agricultural Zoning Totals

Water

Estimated Total Mean Cost for Water Infrastructure	$67,500
Estimated Mean Cost for Water Infrastructure per Lot	$13,500

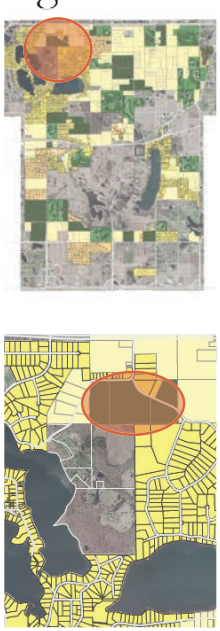
Roads

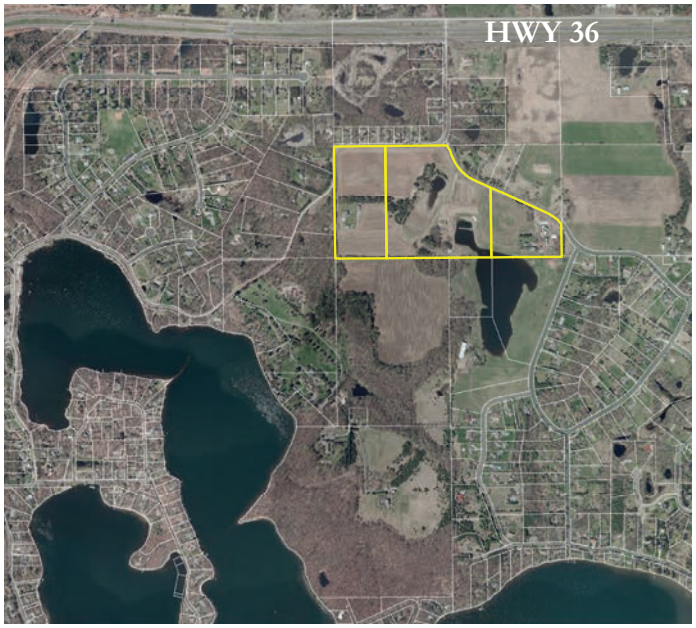
Average Linear Feet of Road	3,337 LF
Average Linear Feet of Road per Lot	836 LF
Estimated Total Mean Road Cost	$348,081
Estimated Mean Road Cost Per Lot	$87,263

Sanitary System

Estimated Total Mean Linear Feet of Sanitary Sewer Pipe	3,337 LF
Estimated Mean Linear Feet of Sanitary Sewer Pipe per Lot	836 LF
Estimated Total Mean Cost of Sanitary Sewer Pipe	$414,303
Estimated Mean Cost of Sanitary Sewer Pipe per Lot	$103,865

Agricultural 1

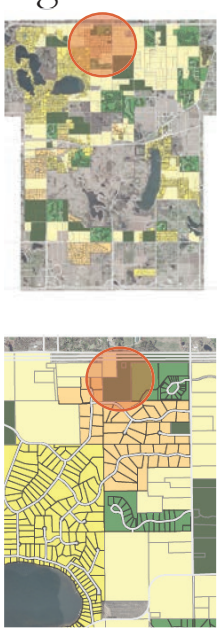


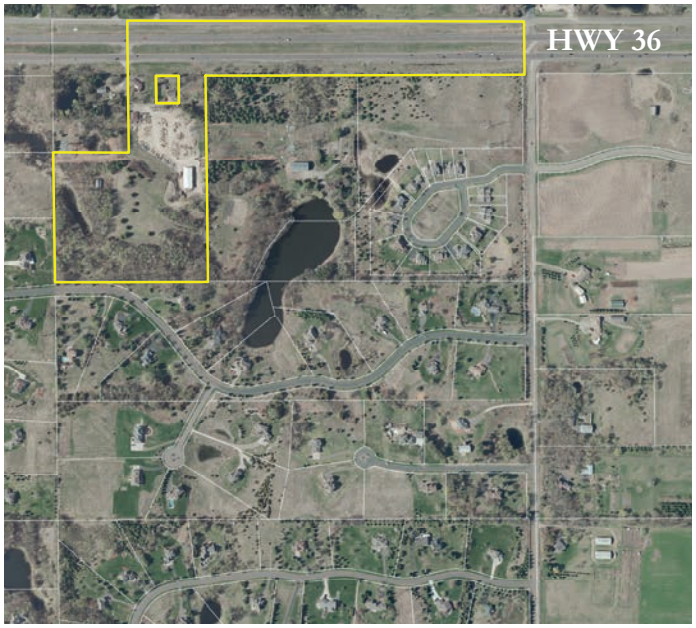


Agricultural 1 Totals

Zoning	A	Water System Type	Private
Estimate Population	7 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	3	Estimate Cost of Water System Total	$40,500
Mean Lot Size	20.80 acres		
Sum of All Lot Sizes	62.4 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	3,425 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	1,142 feet	Estimate DWF (gal/day)	610 g/d
Estimate Cost of Road Reconstruction Total	$357,296	Linear Feet of Pipe	* *3,425 feet*
		Linear Feet of Pipe per Lot	* *1,142 feet*
Estimate Cost of Road Reconstruction per Lot	$119,099	Estimate Cost of Sanitary System Total	* *$425,271*
		Estimate Cost of Sanitary System per Lot	* *$141,757*

Agricultural 2



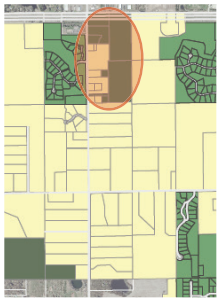


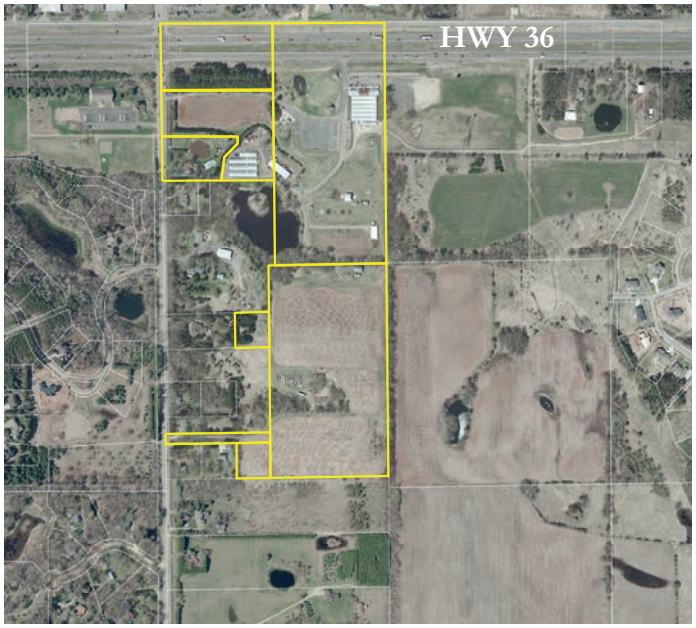
Agricultural 2 Totals

Zoning	A	Water System Type	Private
Estimate Population	7 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	2	Estimate Cost of Water System Total	$27,000
Mean Lot Size	16.50 acres		
Sum of All Lot Sizes	33.0 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	2,200 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	1,100 feet	Estimate DWF (gal/day)	407 g/d
Estimate Cost of Road Reconstruction Total	$229,504	Linear Feet of Pipe	* *2,200 feet*
		Linear Feet of Pipe per Lot	* *1,100 feet*
Estimate Cost of Road Reconstruction per Lot	$114,752	Estimate Cost of Sanitary System Total	* *$273,167*
		Estimate Cost of Sanitary System per Lot	* *$136,583*

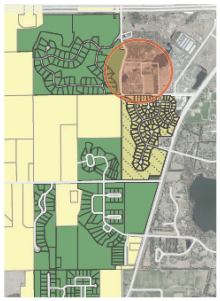
* If the development uses private septic systems, a sanitary system cost was estimated.

Agricultural 3





Agricultural 4



Agricultural 3 Totals

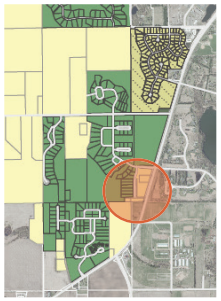
Zoning	A	Water System Type	Private
Estimate Population	11 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	8	Estimate Cost of Water System Total	$108,000
Mean Lot Size	7.3 acres		
Sum of All Lot Sizes	58.4 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	2,105 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	263 feet	Estimate DWF (gal/day)	1,627 g/d
Estimate Cost of Road Reconstruction Total	$219,594	Linear Feet of Pipe	* *2,105 feet*
		Linear Feet of Pipe per Lot	* *263 feet*
Estimate Cost of Road Reconstruction per Lot	$27,449	Estimate Cost of Sanitary System Total	* *$261,371*
		Estimate Cost of Sanitary System per Lot	* *$32,671*

Agricultural 4 Totals

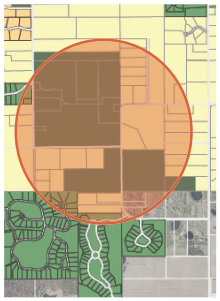
Zoning	A	Water System Type	Private
Estimate Population	11 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	3	Estimate Cost of Water System Total	$40,500
Mean Lot Size	8.5 acres		
Sum of All Lot Sizes	25.3 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	2,125 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	708 feet	Estimate DWF (gal/day)	610 g/d
Estimate Cost of Road Reconstruction Total	$221,680	Linear Feet of Pipe	* *2,125 feet*
		Linear Feet of Pipe per Lot	* *708 feet*
Estimate Cost of Road Reconstruction per Lot	$73,893	Estimate Cost of Sanitary System Total	* *$263,854*
		Estimate Cost of Sanitary System per Lot	* *$87,951*

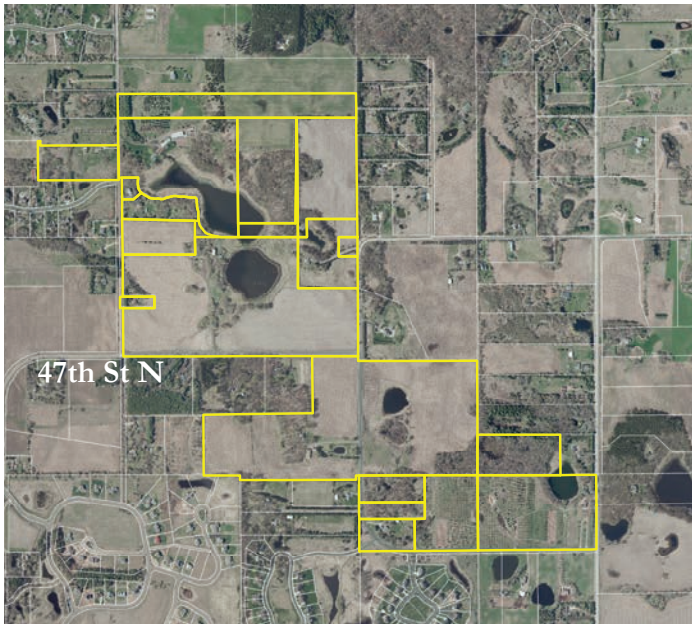
* If the development uses private septic systems, a sanitary system cost was estimated.

Agricultural 5



Agricultural 6





Agricultural 5 Totals

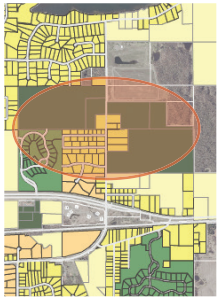
Zoning	RR	Water System Type	Private
Estimate Population	3 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	1	Estimate Cost of Water System Total	$13,500
Mean Lot Size	0.96 acres		
Sum of All Lot Sizes	0.96 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	570 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	570 feet	Estimate DWF (gal/day)	203 g/d
Estimate Cost of Road Reconstruction Total	$59,462	Linear Feet of Pipe	* *570 feet*
		Linear Feet of Pipe per Lot	* *570 feet*
Estimate Cost of Road Reconstruction per Lot	$59,462	Estimate Cost of Sanitary System Total	* *$70,775*
		Estimate Cost of Sanitary System per Lot	* *$70,775*

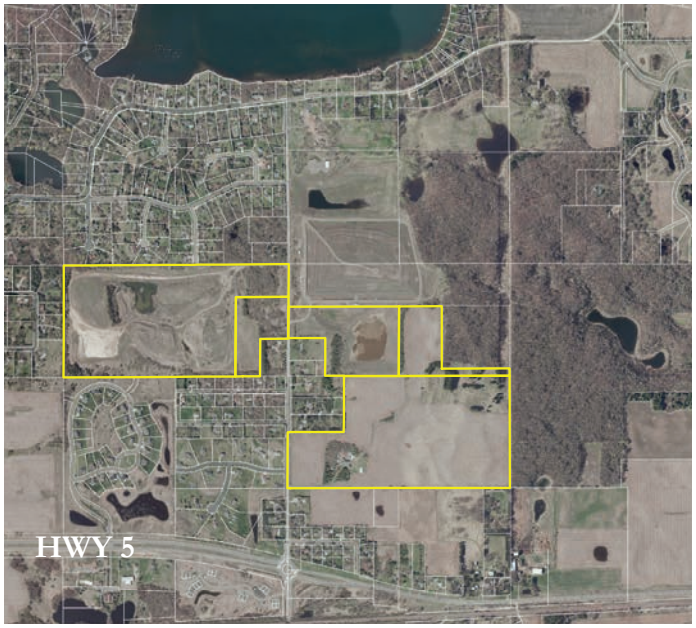
Agricultural 6 Totals

Zoning	RR	Water System Type	Private
Estimate Population	39 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	20	Estimate Cost of Water System Total	$270,000
Mean Lot Size	15.7 acres		
Sum of All Lot Sizes	313.7 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	10,990 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	550 feet	Estimate DWF (gal/day)	4,068 g/d
Estimate Cost of Road Reconstruction Total	$1,146,477	Linear Feet of Pipe	* *10,990 feet*
		Linear Feet of Pipe per Lot	* *550 feet*
Estimate Cost of Road Reconstruction per Lot	$57,324	Estimate Cost of Sanitary System Total	* *$1,364,592*
		Estimate Cost of Sanitary System per Lot	* *$68,230*

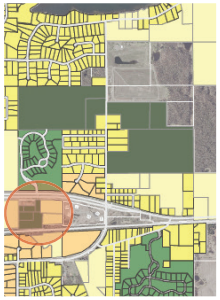
* If the development uses private septic systems, a sanitary system cost was estimated.

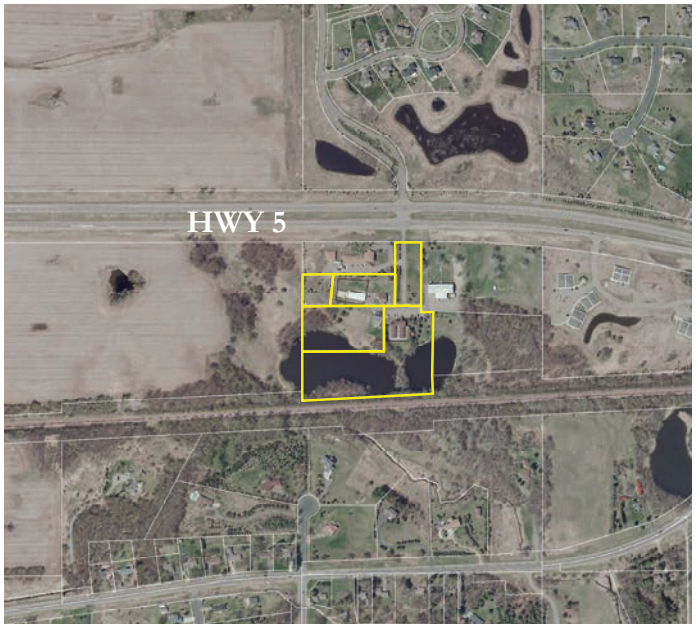
Agricultural 7





Agricultural 8





Agricultural 7 Totals

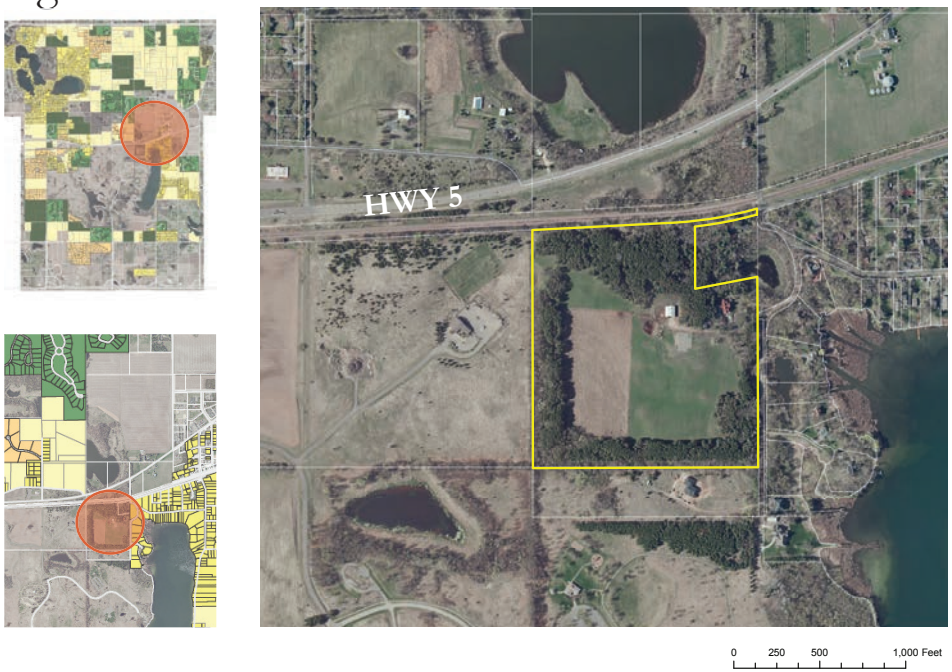
Zoning	A	Water System Type	Private
Estimate Population	3 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	5	Estimate Cost of Water System Total	$67,500
Mean Lot Size	35.5 acres		
Sum of All Lot Sizes	177.5 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	1,585 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	317 feet	Estimate DWF (gal/day)	1,017 g/d
Estimate Cost of Road Reconstruction Total	$165,347	Linear Feet of Pipe	* *1,585 feet*
		Linear Feet of Pipe per Lot	* *317 feet*
Estimate Cost of Road Reconstruction per Lot	$33,069	Estimate Cost of Sanitary System Total	* *$196,804*
		Estimate Cost of Sanitary System per Lot	* *$39,361*

Agricultural 8 Totals

Zoning	A	Water System Type	Private
Estimate Population	7 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	5	Estimate Cost of Water System Total	$67,500
Mean Lot Size	2.3 acres		
Sum of All Lot Sizes	11.4 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	150 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	30 feet	Estimate DWF (gal/day)	1,017 g/d
Estimate Cost of Road Reconstruction Total	$15,648	Linear Feet of Pipe	* *150 feet*
		Linear Feet of Pipe per Lot	* *30 feet*
Estimate Cost of Road Reconstruction per Lot	$3,130	Estimate Cost of Sanitary System Total	* *$18,625*
		Estimate Cost of Sanitary System per Lot	* *$3,725*

* If the development uses private septic systems, a sanitary system cost was estimated.

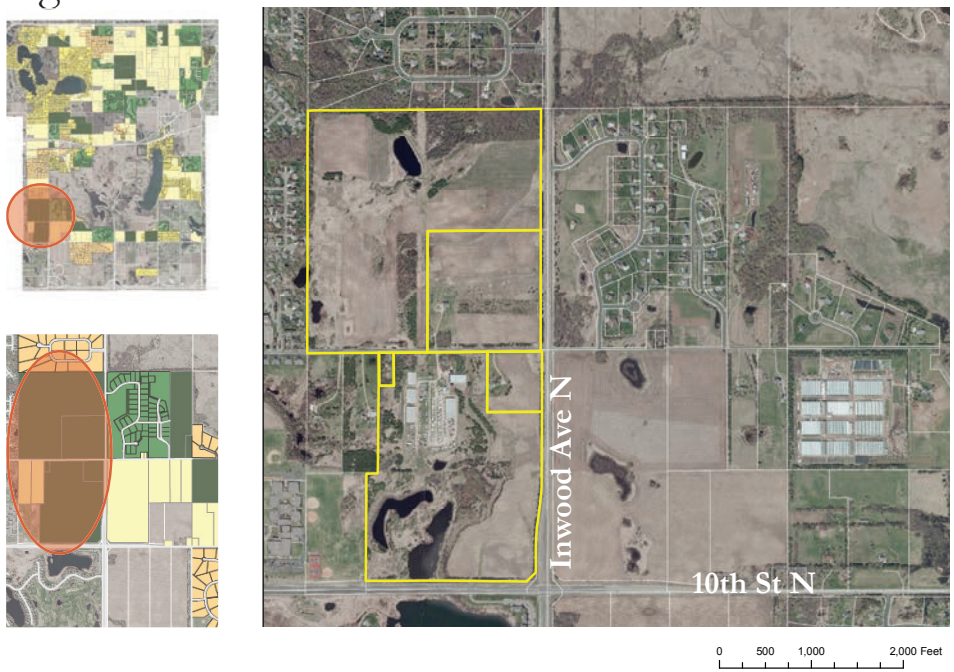
Agricultural 9



Agricultural 9 Totals

Zoning	RR	Water System Type	Private
Estimate Population	3 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	1	Estimate Cost of Water System Total	$13,500
Mean Lot Size	40.0 acres		
Sum of All Lot Sizes	40.0 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	1,360 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	1,360 feet	Estimate DWF (gal/day)	203 g/d
Estimate Cost of Road Reconstruction Total	$141,875	Linear Feet of Pipe	* *1,360 feet*
		Linear Feet of Pipe per Lot	* *1,360 feet*
Estimate Cost of Road Reconstruction per Lot	$141,875	Estimate Cost of Sanitary System Total	* *$168,867*
		Estimate Cost of Sanitary System per Lot	* *$168,867*

Agricultural 10

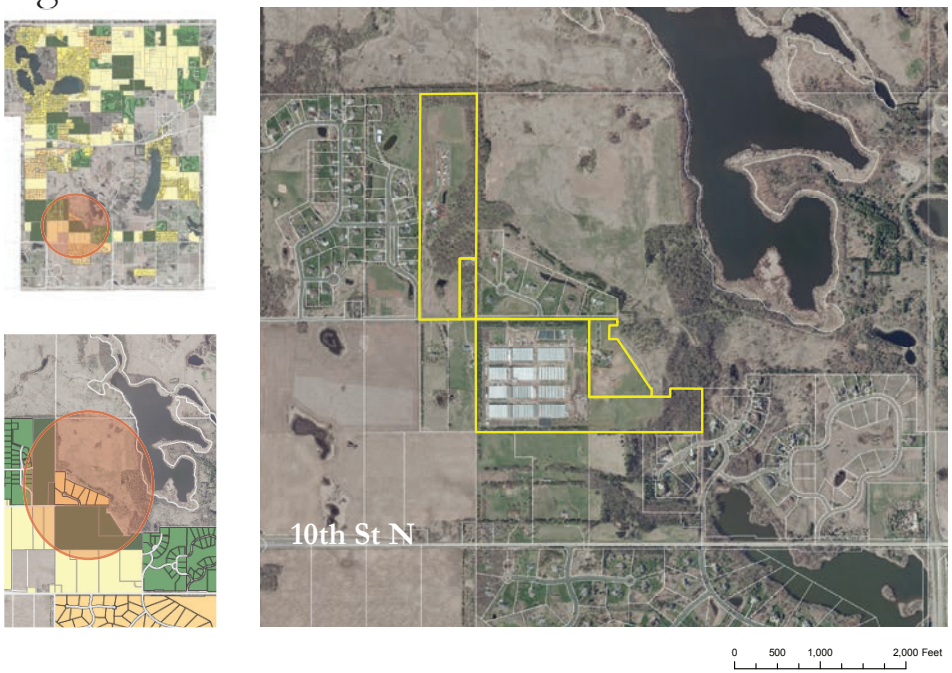


Agricultural 10 Totals

Zoning	RR	Water System Type	Private
Estimate Population	14 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	5	Estimate Cost of Water System Total	$67,500
Mean Lot Size	51.6 acres		
Sum of All Lot Sizes	258.0 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	7,150 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	1,430 feet	Estimate DWF (gal/day)	1,017 g/d
Estimate Cost of Road Reconstruction Total	$745,888	Linear Feet of Pipe	* *7,150 feet*
		Linear Feet of Pipe per Lot	* *1,430 feet*
Estimate Cost of Road Reconstruction per Lot	$149,178	Estimate Cost of Sanitary System Total	* *$887,792*
		Estimate Cost of Sanitary System per Lot	* *$177,558*

* If the development uses private septic systems, a sanitary system cost was estimated.

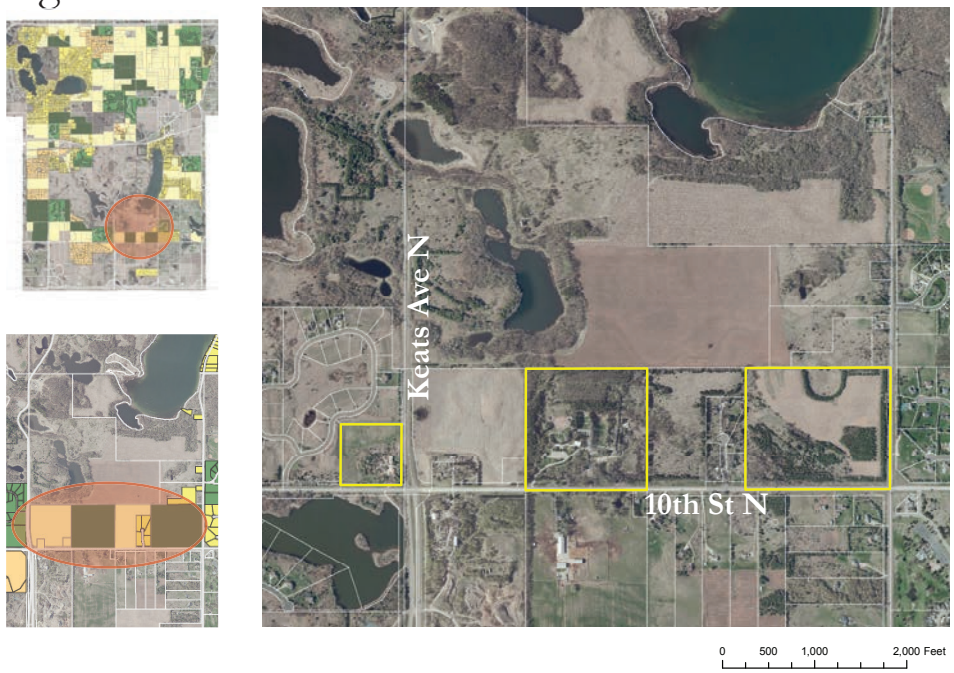
Agricultural 11



Agricultural 11 Totals

Zoning	A	Water System Type	Private
Estimate Population	11 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	4	Estimate Cost of Water System Total	$54,000
Mean Lot Size	25.8 acres		
Sum of All Lot Sizes	103.2 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	2,700 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	675 feet	Estimate DWF (gal/day)	814 g/d
Estimate Cost of Road Reconstruction Total	$281,664	Linear Feet of Pipe	* *2,700 feet*
		Linear Feet of Pipe per Lot	* *675 feet*
Estimate Cost of Road Reconstruction per Lot	$70,416	Estimate Cost of Sanitary System Total	* *$335,250*
		Estimate Cost of Sanitary System per Lot	* *$83,813*

Agricultural 12

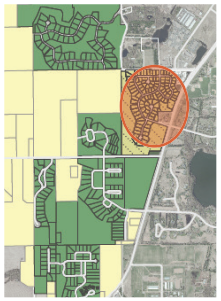


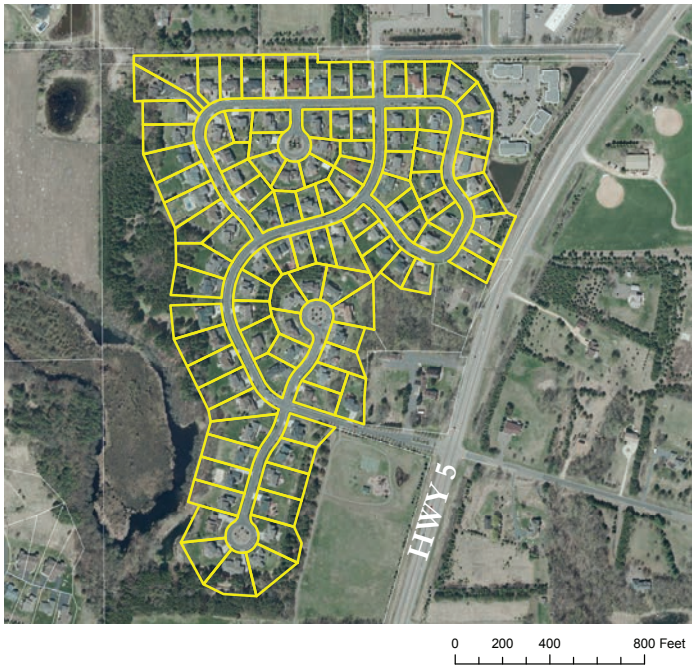
Agricultural 12 Totals

Zoning	A	Water System Type	Private
Estimate Population	7 persons	Linear Feet of Pipe	N/A
Secondary Access	Yes	Linear Feet of Pipe per Lot	N/A
Number of Lots	3	Estimate Cost of Water System Total	$40,500
Mean Lot Size	32.5 acres		
Sum of All Lot Sizes	97.4 acres	Estimate Cost of Water System per Lot	$13,500
Linear Feet of Road	5,680 feet	Sanitary System Type	Private
Linear Feet of Road per Lot	1,893 feet	Estimate DWF (gal/day)	610 g/d
Estimate Cost of Road Reconstruction Total	$592,538	Linear Feet of Pipe	* *5,680 feet*
		Linear Feet of Pipe per Lot	* *1,893 feet*
Estimate Cost of Road Reconstruction per Lot	$197,513	Estimate Cost of Sanitary System Total	* *$705,267*
		Estimate Cost of Sanitary System per Lot	* *$235,089*

* If the development uses private septic systems, a sanitary system cost was estimated.

Carriage Station





Carriage Station Totals

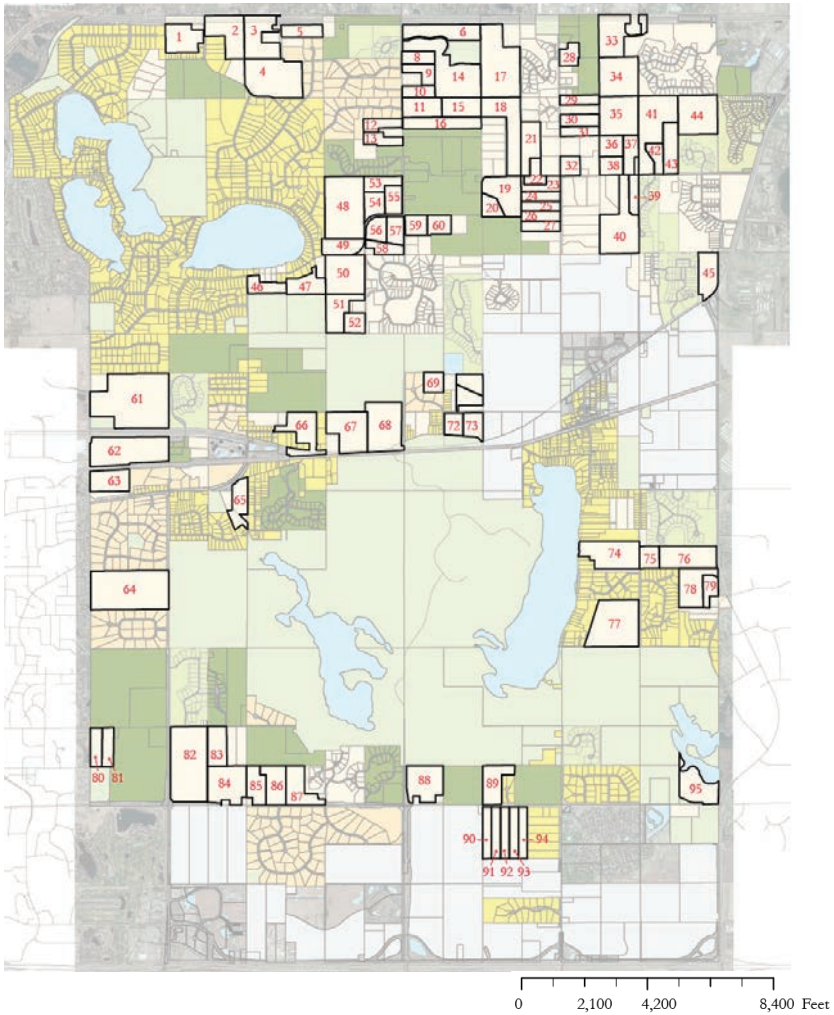
Zoning	R2-PUD	Water System Type	City
Estimate Population	382 persons	Linear Feet of Pipe	8,307 feet
Secondary Access	Yes	Linear Feet of Pipe per Lot	76 feet
Number of Lots	109	Estimate Cost of Water System Total	$340,587
Mean Lot Size	0.38 acres		
Sum of All Lot Sizes	40.9 acres	Estimate Cost of Water System per Lot	$3,125

Linear Feet of Road	6,256 feet	Sanitary System Type	Community
Linear Feet of Road per Lot	57 feet	Estimate DWF (gal/day)	2,2,172 g/d
Estimate Cost of Road Reconstruction Total	$358,424	Linear Feet of Pipe *	5,897 feet
		Linear Feet of Pipe per Lot *	54 feet
Estimate Cost of Road Reconstruction per Lot	$9,405	Estimate Cost of Sanitary System Total *	$732,211
		Estimate Cost of Sanitary System per Lot *	$6,718

* If the development uses private septic systems, a sanitary system cost was estimated.

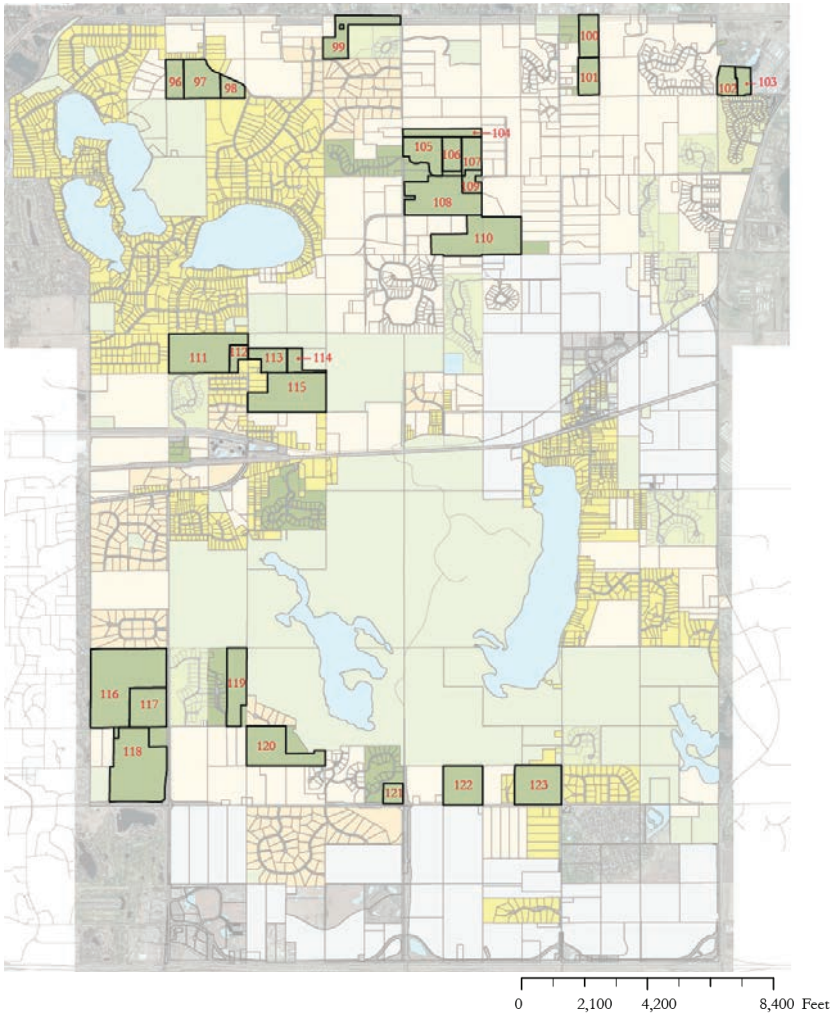
Rural Area Analysis: Scenario Study

Rural Residential Areas



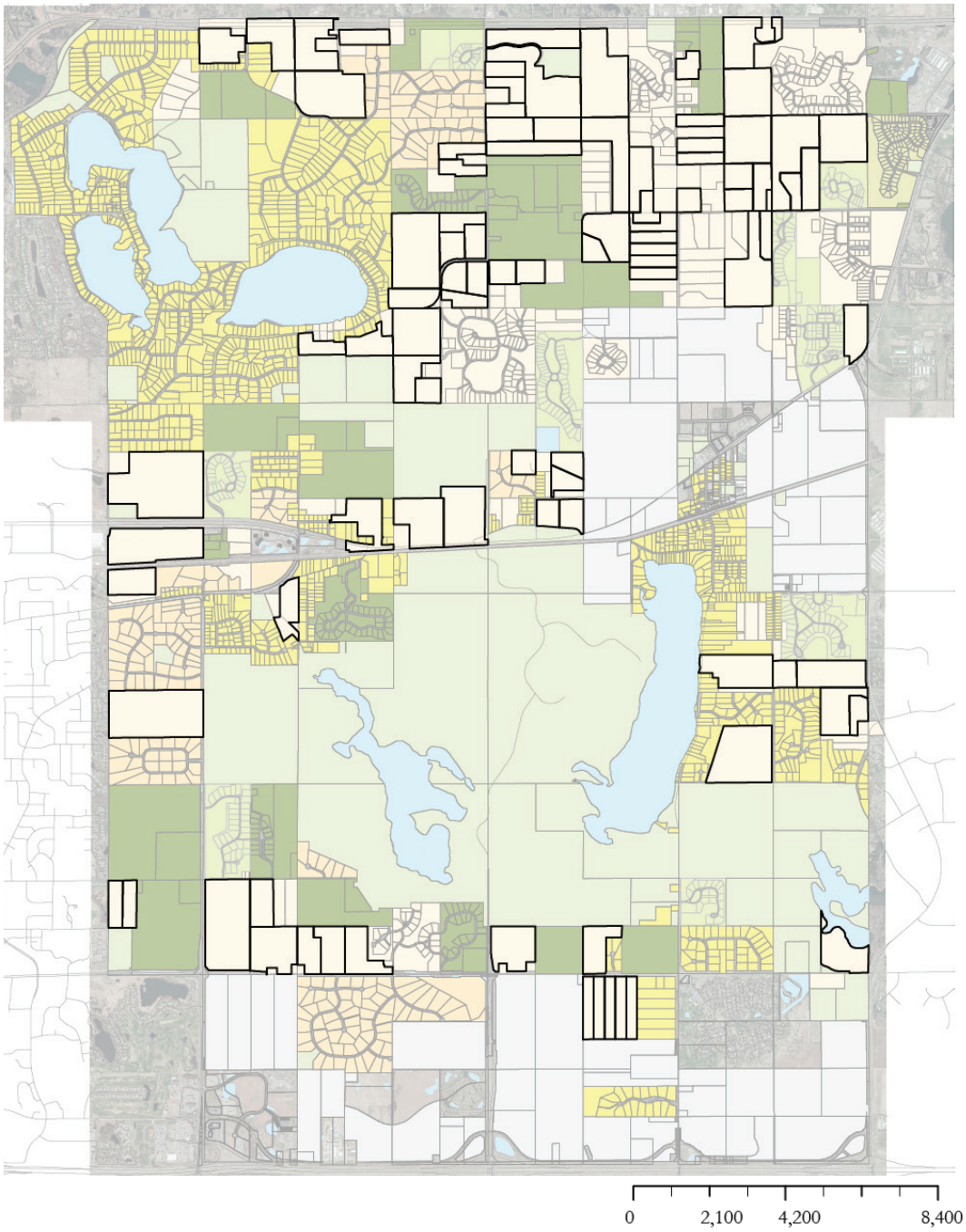
The scenarios created aim to generate numbers to predict populations, infrastructure totals, revenues, and expenditures, for hypothetical scenarios. The parcels included are all areas with Rural Residential or Agricultural zoning. The specific data for each parcel can be found in Appendix B at the end of this document.

Agricultural Areas



Four different scenarios were created: the first with all RR areas greater than 10 acres being subdivided to 2.5 acre lots. The second with all RR areas greater than 10 acres subdivided to 2.5 acre lots and all Agricultural areas greater than 40 acres subdivided into OP areas (18 units per 40 acres). The third with all RR areas and Ag areas greater than 10 acres subdivided to 2.5 acre lots, and lastly, all Ag areas greater than 20 acres subdivided into OP with 60% calculated open space.

Scenario 1:

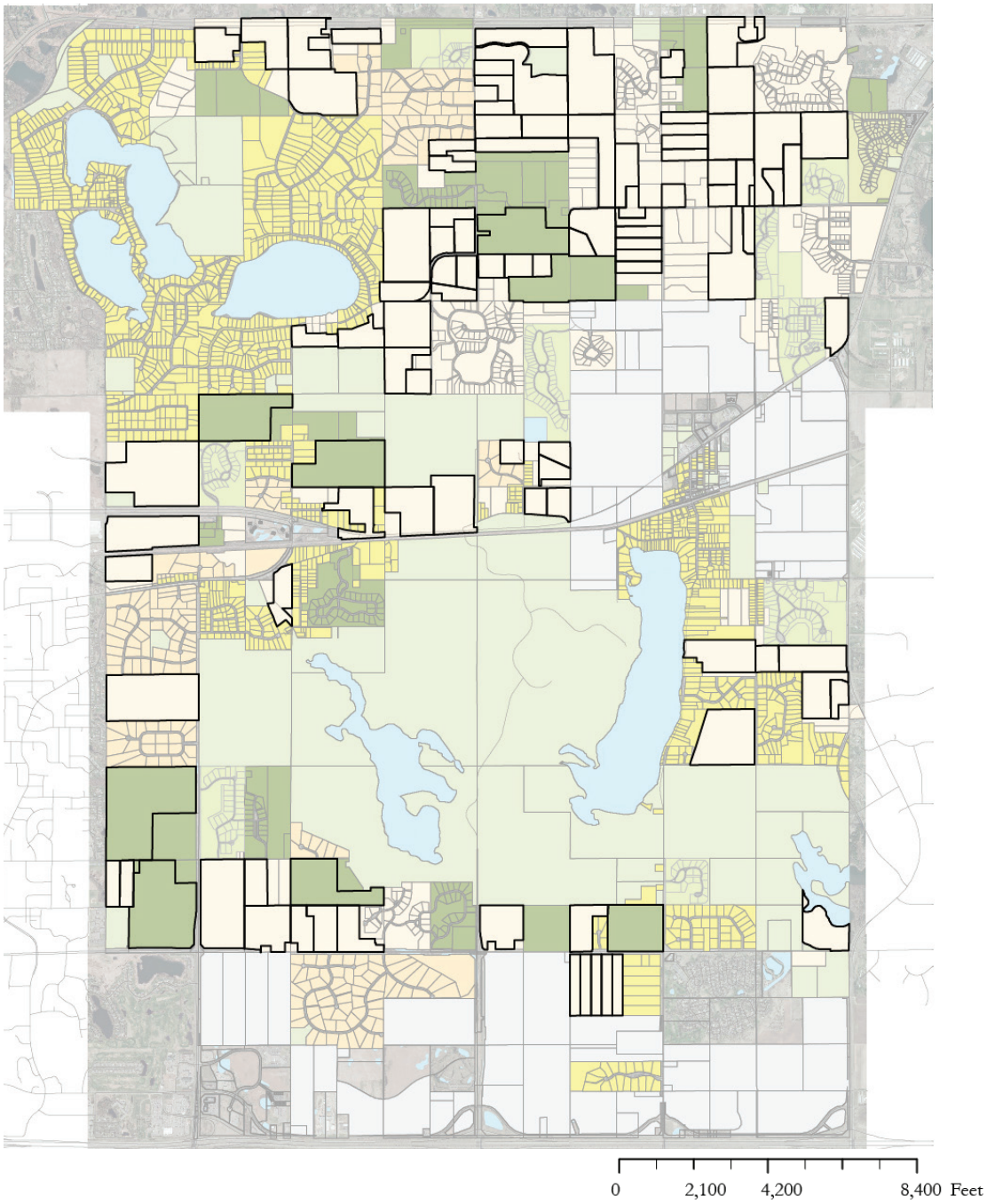


Rural Residential lots greater than 10 acres subdivided to 2.5 acre lots

Zoning	RR
Current Number of Lots	95
Number of Lots after Subdivision [1]	839
Total Area: Sum of Current Acres	2,195.5 acres
Current Estimated Population	332 persons
Estimated Population After Subdivision [2]	2,937 persons
Current Estimated Linear Feet of Road [3]	40,755 LF
Estimated Linear Feet of Road After Subdivision [4]	150,181 LF
Linear Feet of Additional Roads Needed [5]	109,426 LF
Estimated Linear Feet of Sanitary Sewer Needed for Subdivision [6]	150,181 LF
Estimated Cost of Sanitary Sewer Needed for Subdivision [7]	$18,647,474
Current Estimated Tax Capital Accrued [8]	$383,639
Tax Capital per Lot [9]	$4,038
Current Estimated Expenditure for Area [10]	$103,583
Current Balance After Expenditure for Area [11]	$280,056
Estimated Tax Capital After Subdivision [12]	$3,882,892
Estimated Expenditure After Subdivision [13]	$4,154,694
Estimated Deficit After Subdivision [14]	($271,802)

1. Calculated by dividing Total Acres by 2.5
2. Current population multiplied by 3.5
3. Current Lot # multiplied by RR road per lot average
4. Subdivided Lot # multiplied by RE road per lot average
5. LF Subdivided Roads - LF Current Roads
6. Sewer under roadway: same as total roads after subdivision
7. LF of sewer needed multiplied by LF sewer cost
8. Sum of all current tax capital per lot
9. Current tax capital divided by current lot #
10. Current tax capital multiplied by 0.27 (per Cost of Community services study for Lake Elmo)
11. Current tax capital - expenditure
12. Average RE tax per lot multiplied by # of lots after subdivision
13. Estimated tax capital after subdivision (12) multiplied by 1.07 (per Cost of Community services study for Lake Elmo)
14. Estimated tax capital after subdivision - expenditure after subdivision

Scenario 2:

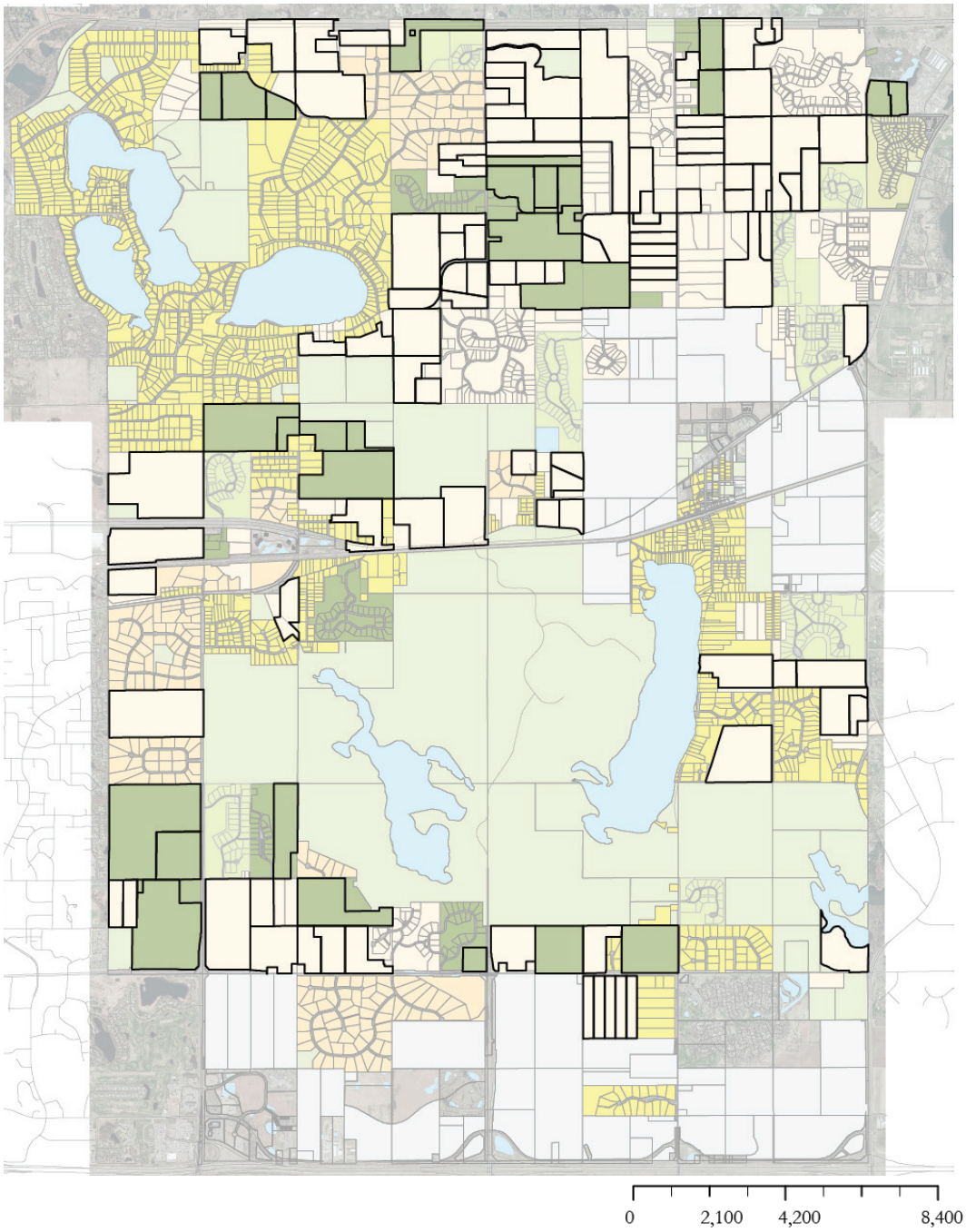


Rural Residential lots greater than 10 acres subdivided to 2.5 acre lots and Agricultural lots greater than 40 acres subdivided to OP (60% open space)

Zoning	RR and A
Current Number of Lots	103
Number of Lots after Subdivision	1,093
Total Area: Sum of Current Acres	2,722 acres
Current Estimated Population	360 persons
Estimated Population After Subdivision	3,825 persons
Current Estimated Linear Feet of Road	44,187 LF
Estimated Linear Feet of Road After Subdivision	195,647 LF
Linear Feet of Additional Roads Needed	151,460 LF
Estimated Linear Feet of Sanitary Sewer Needed for Subdivision	189,805 LF
Estimated Cost of Sanitary Sewer Needed for Subdivision	$23,615,164
Current Estimated Tax Capital Accrued	$448,520
Tax Capital per Lot	$4,721
Current Estimated Expenditure for Area	$121,100
Current Balance After Expenditure for Area	$327,420
Estimated Tax Capital After Subdivision	$5,338,566
Estimated Expenditure After Subdivision	$5,712,266
Estimated Deficit After Subdivision	($373,700)

1. Total RR acres divided by 2.5 + Ag lots calculated to have 60% open space divided by ave. OP lot size.
2. Current population multiplied by 3.5
3. Current lots RR # x by RR road per lot average + current Ag lots x Ag road per lot average
4. Subdivided Lot # x by RE road per lot average
5. LF Subdivided Roads - LF Current Roads
6. Sewer under roadway: same as total roads after subdivision
7. LF of sewer needed multiplied by LF sewer cost
8. Sum of all current tax capital per lot
9. Current tax capital divided by current lot #
10. Current tax capital multiplied by 0.27 (per Cost of Community services study for Lake Elmo)
11. Current tax capital - expenditure
12. Average RE tax per lot multiplied by # of lots after subdivision
13. Estimated tax capital after subdivision (12) multiplied by 1.07 (per Cost of Community services study for Lake Elmo)
14. Estimated tax capital after subdivision - expenditure after subdivision

Scenario 3:

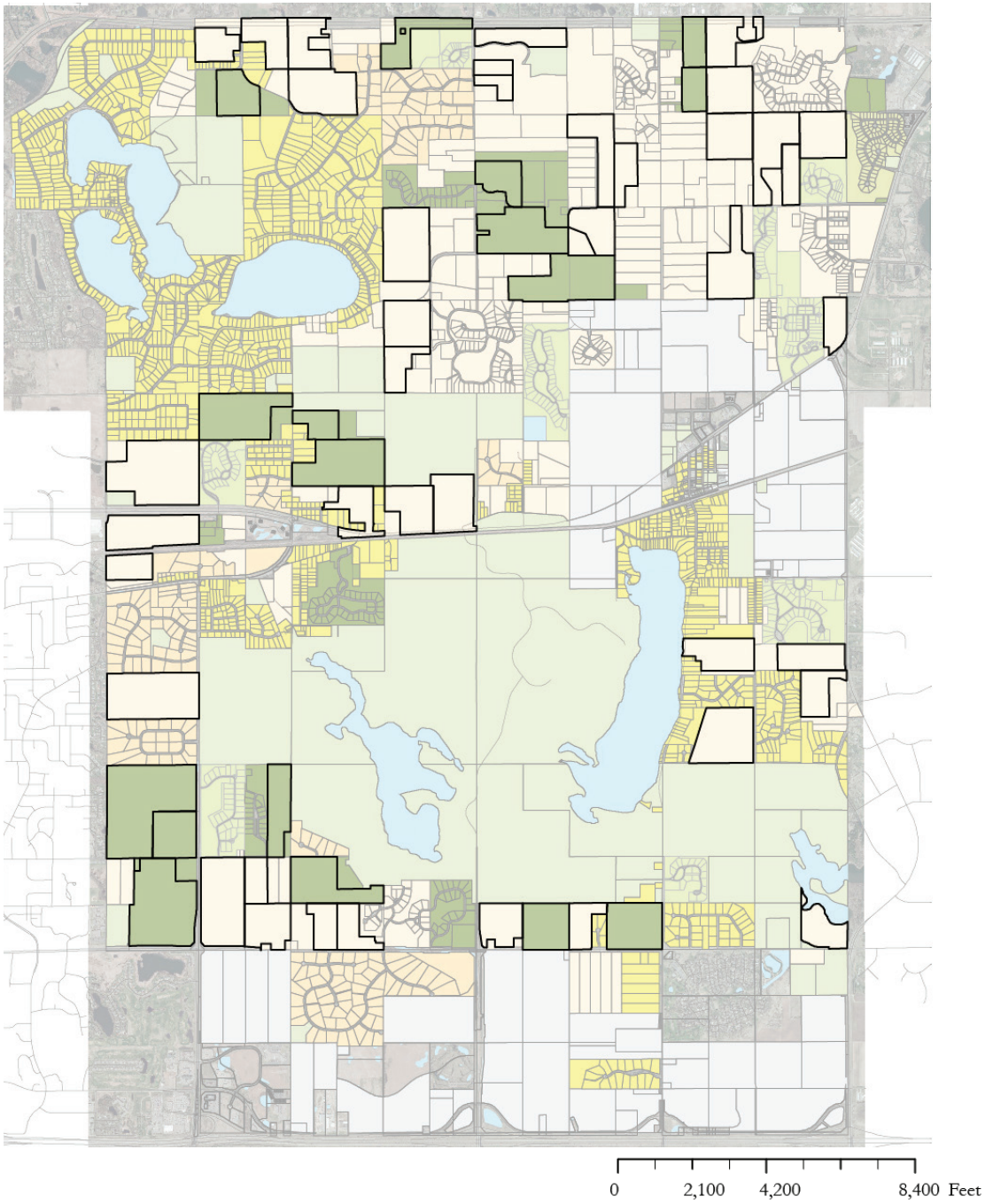


Rural Residential lots greater than 10 acres subdivided to 2.5 acre lots and Agricultural lots greater than 10 acres subdivided to 2.5 acre lots

Zoning	RR and A
Current Number of Lots	123
Number of Lots after Subdivision	1228
Total Area: Sum of Current Acres	3198 acres
Current Estimated Population	430 persons
Estimated Population After Subdivision	4,298 persons
Current Estimated Linear Feet of Road	52,767 LF
Estimated Linear Feet of Road After Subdivision	219,812 LF
Linear Feet of Additional Roads Needed	167,045 LF
Estimated Linear Feet of Sanitary Sewer Needed for Subdivision	219,812 LF
Estimated Cost of Sanitary Sewer Needed for Subdivision	$27,293,323
Current Estimated Tax Capital Accrued	$516,028
Tax Capital per Lot	$5,432
Current Estimated Expenditure for Area	$139,328
Current Balance After Expenditure for Area	$376,700
Estimated Tax Capital After Subdivision	$5,683,184
Estimated Expenditure After Subdivision	$6,081,007
Estimated Deficit After Subdivision	($397,823)

1. Total RR and Ag acres divided by 2.5
2. Current population multiplied by 3.5
3. Current lots RR # x by RR road per lot average + current Ag lots x Ag road per lot average
4. Subdivided Lot # x RE road per lot average
5. LF Subdivided Roads - LF Current Roads
6. Sewer under roadway: same as total roads after subdivision
7. LF of sewer needed multiplied by LF sewer cost
8. Sum of all current tax capital per lot
9. Current tax capital divided by current lot #
10. Current tax capital multiplied by 0.27 (per Cost of Community services study for Lake Elmo)
11. Current tax capital - expenditure
12. Average RE tax per lot multiplied by # of lots after subdivision
13. Estimated tax capital after subdivision (12) multiplied by 1.07 (per Cost of Community services study for Lake Elmo)
14. Estimated tax capital after subdivision - expenditure after subdivision

Scenario 4:



Rural Residential lots greater than 20 acres subdivided to OP and Agricultural lots greater than 20 acres subdivided to OP (60% open space)

Zoning	RR and A
Current Number of Lots	57
Number of Lots after Subdivision	1,629
Total Area: Sum of Current Acres	2,376 acres
Current Estimated Population	200 persons
Estimated Population After Subdivision	5,702 persons
Current Estimated Linear Feet of Road	244,453 LF
Estimated Linear Feet of Road After Subdivision	291,591 LF
Linear Feet of Additional Roads Needed	267,138 LF
Estimated Linear Feet of Sanitary Sewer Needed for Subdivision	291,591 LF
Estimated Cost of Sanitary Sewer Needed for Subdivision	$31,859,711
Current Estimated Tax Capital Accrued	$194,096
Tax Capital per Lot	$2,043
Current Estimated Expenditure for Area	$52,406
Current Balance After Expenditure for Area	$141,690
Estimated Tax Capital After Subdivision	$9,335,799
Estimated Expenditure After Subdivision	$9,989,305
Estimated Deficit After Subdivision	($653,506)

1. Sum of RR and Ag lots calculated to have 60% open space divided by ave. OP lot size.
2. Current population multiplied by 3.5
3. Current lots RR # x by RR road per lot average + current Ag lots x Ag road per lot average
4. Subdivided Lot # x by OP road per lot average
5. LF Subdivided Roads - LF Current Roads
6. Sewer under roadway: same as total roads after subdivision
7. LF of sewer needed multiplied by LF sewer cost
8. Sum of all current tax capital per lot
9. Current tax capital divided by current lot #
10. Current tax capital multiplied by 0.27 (per Cost of Community services study for Lake Elmo)
11. Current tax capital - expenditure
12. Average RE tax per lot multiplied by # of lots after subdivision
13. Estimated tax capital after subdivision (12) multiplied by 1.07 (per Cost of Community services study for Lake Elmo)
14. Estimated tax capital after subdivision - expenditure after subdivision

Conclusions:

New residential development built adjacent to existing urbanized areas is more cost-effective for local governments than new residential development in rural areas, or in areas without supporting infrastructure.

It is in the City's best interest to fully utilize the City sanitary sewer system and cluster development around it. If subdivision is to occur in areas with rural zoning, it is fiscally advantageous to use open space preservation zoning and cluster development. The scenario study shows that with OP subdivisions, more lots can be created using a smaller footprint, and open space and the rural feel of Lake Elmo can be preserved.

The scenario study revealed that by changing Rural Residential and Agricultural areas to 2.5 acre lots or Open Space Preservation areas, the cost of public services increases. The deficit that residential lands create should be augmented by commercial/industrial land and working and open space land uses to ensure that the City's budget is balanced.

It is important to consider the agricultural sector when deciding to allow subdivision in rural areas. Development influences agricultural land prices and creates additional pressure for these lands to develop. Lake Elmo takes pride in its rural identity and the added pressure of development would compromise Lake Elmo's agricultural sector, sense of place, and rural identity.

The research provided by this document illustrates the environmental impacts of subdivision as well as the increased cost of community services. It is recommended to consider the look and feel of Lake Elmo and the impact that policy changes would have on the rural quality of the City.

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Appendix A: Rural Area Inventory

Land Use Typ	Development	# of Lots	Mean Lot Size (Acres)	Total Size (Acres)	Linear Feet of	Lnr Ft. per Lot	Secondary Access?	Est. Total Road Cost	Road Cost per Lot	Water System Type
OP										
	Bluestem at Fields of St. Croix	14.00	0.08	1.12	868	62	No	142165	10155	City
	Discover Crossing	28.00	0.86	24.13	3345	119	No*	548112	19575	City
	Farms of Lake Elmo	32.00	0.82	26.22	6926	216	No	1134894	35466	City
	Fields of St. Croix I	46.00	0.74	36.53	7510	163	Yes	1230589	26752	Private
	Fields of St. Croix 2nd Addition	54.00	0.35	1.24	7476	138	No	1224935	22684	City
	Hamlet on Sunfish Lake	41.00	0.73	29.76	6630	162	No	1086392	26497	Private
	Heritage Farm	46.00	0.85	38.93	5991	130	No	981751	21342	City
	Meyer's Pineridge	21.00	0.90	21.79	3449	164	No	565088	26909	Private
	Parkview Estates	32.00	1.00	32.00	4598	144	Yes	753428	23545	Private
	Prairie Hamlet	16.00	0.45	7.16	1426	89	No	233714	14607	Private
	St. Croix's Sanctuary	62.00	0.83	51.87	7785	126	No*	1275650	20575	City
	Sunfish Ponds	16.00	0.81	12.95	1660	104	No	272008	17000	Private
	Tamarack Farm Estates	19.00	0.69	13.25	2044	108	No	334848	17624	Private
	Tana Ridge	20.00	0.77	15.34	3435	172	No	562859	28143	City
	Tapestry at Charlottes Grove	67.00	0.99	67.64	12090	180	No	1981067	29568	City
	The Homestead	19.00	0.86	16.44	6684	352	No	1095299	57647	Private
	Whistling Valley	43.00	1.02	43.81	7500	174	Yes	1228950	28580	City/Private
	Wildflower Shores	25.00	0.63	15.80	5216	209	No	854694	34188	City
	OP Average	**33.39**	**0.74**	**25.33**	**5257**	**156**		**861469**	**25603**	
RE										
	Arabian Hills	19.00	3.11	59.12	3049	160	yes	499544	26292	Private
	Beau Crest	16.00	1.84	29.49	1904	119	No	312022	19501	City
	Cardinal View	7.00	3.04	21.29	1400	200	No	229404	32772	Private
	Eagle Point Creek Estates	7.00	4.33	30.34	396	57	No	64889	9270	City
	Judith Mary Manor	12.00	3.08	37.01	2147	179	Yes	351807	29317	Private
	Lake Elmo Heights	40.00	2.56	102.39	6420	161	Yes	1051981	26300	City
	Lake Elmo Vista	10.00	3.25	32.53	1692	169	No	277251	27725	Private
	Midland Meadows	13.00	7.87	102.35	4504	346	Yes	738091	56776	Private
	Park Meadows	8.00	3.28	26.25	1290	161	No	211379	26422	City
	Rolling Hills	12.00	2.81	33.77	2943	245	Yes	482207	40184	Private
	Stonegate	64.00	2.80	179.19	10070	157	Yes	1650070	25782	Private
	Torre Pines	21.00	2.93	70.38	4150	198	No	656945	32382	Private
	RE Average	**19.08**	**3.41**	**60.34**	**3330**	**179**		**543799**	**29394**	

Appendix A: Rural Area Inventory

Linear Feet pipe-water	Linear Ft-water- per lot	Cost Total-water	Cost per lot-water	Septic System Type	Est. Population	Approx DWF (gal/day)	Linear Ft of Pipe	Lnr Ft Pipe Per Lot	Total Cost of Sanitary	Cost per lot=sanitary
793	57	32513	2322	Community	49.0	2848	616	44	76487	5463
3798	136	155718	5561	Community	98.0	5695	3659	131	454267	16224
6518	204	267238	8351	Community	112.0	6509	5425	170	673617	21051
		621000	13500	Community	161.0	9357	4417	96	548419	11922
5913	110	242433	4490	Community	189.0	10984	4112	76	510573	9455
		553500	13500	Community	143.5	8340	1903	46	236329	5764
6188	135	253708	5515	Private	161.0	9357	5991	130	743883	16171
		283500	13500	Private	73.5	4272	3449	164	428201	20391
		432000	13500	Private	112.0	6509	4598	144	570918	17841
		216000	13500	Community	56.0	3255	370	23	45942	2871
8665	140	355265	5730	Community	217.0	12611	7887	127	979243	15794
	0	216000	13500	Private	56.0	3255	1660	104	206117	12882
	0	256500	13500	Community	66.5	3865	2044	108	253735	13354
3635	182	149035	7452	Community	70.0	4068	1903	95	236329	11816
11452	171	469532	7008	Community	234.5	13628	7946	119	986688	14727
	0	256500	13500	Private	66.5	3865	6684	352	829975	43683
	0	580500	13500	Community	150.5	8747	6523	152	809939	18836
4731	189	193971	7759	Community	87.5	5085	2788	112	346177	13847
		307495	**9760**		**116.9**	**6792**	**3999**	**122**	**496491**	**15116**
		256500	13500	Private	66.5	3865	3049	160	378535	19923
1933	121	79253	4953	Private	56.0	3255	1904	119	236438	14777
		94500	13500	Private	24.5	1424	1400	200	173833	24833
600	86	24600	3514	Private	24.5	1424	396	57	49170	7024
		162000	13500	Private	42.0	2441	2147	179	266586	22215
6420	161	263220	6581	Private	140.0	8136	6420	161	797150	19929
		135000	13500	Private	35.0	2034	1692	169	210090	21009
		175500	13500	Private	45.5	2644	4504	346	559296	43023
2320	290	95120	11890	Private	28.0	1627	1290	161	160175	20022
		162000	13500	Private	42.0	2441	2943	245	365398	30450
		864000	13500	Private	224.0	13018	10070	157	1250358	19537
		283500	13500	Community	73.5	4272	4150	198	515292	24538
		216266	**11245**		**66.8**	**3882**	**3330**	**179**	**413527**	**22273**

Appendix A: Rural Area Inventory

Land Use Typ	Development	# of Lots	Mean Lot Size (Acres)	Total Size (Acres)	Linear Feet of	Lnr Ft. per Lot	Secondary Access?	Est. Total Road Cost	Road Cost per Lot	Water System Type
OP										
RS										
	Bergman Addition	11.00	0.42	4.60	1025	93	Yes	106928	9721	Private
	Berschen's Shores	24.00	0.67	16.00	2860	119	Yes	298355	12431	Private
	Bordners Garner Farmettes	48.00	1.42	67.89	5220	109	Yes	855349	17820	Private
	Darwin Acres	14.00	0.87	12.17	3432	245	No	358026	25573	Private
	David Nelson Estates	5.00	1.68	8.41	588	118	No	96350	19270	Private
	DeMontreville Highlands	140.00	1.18	83.87	8345	60	Yes	870550	6218	Private
	Down's Lake	2.00	1.51	3.02	767	384	Yes	80013	40007	Private
	Eden Park	55.00	1.20	66.12	4600	84	Yes/No	753756	13705	Private
	Fox Fire Estates	58.00	2.11	122.31	9199	159	Yes	959640	16546	Private
	Friedrich Heights	13.00	0.49	6.33	1171	90	No	122159	9397	Private
	Kenridge	25.00	0.69	17.38	3000	120	Yes	491580	19663	City
	Lake Elmo Park	73.00	0.57	45.03	3203	44	Yes	334137	4577	City
	Lane's Demontreville Country Club	87.00	0.56	48.63	6050	70	Yes/No	991353	11395	Private
	Oace Acres	121.00	0.98	118.58	13569	112	Yes	1415487	11698	Private
	Packard Park	21.00	1.57	33.09	3264	155	Yes	534855	25469	Private
	Springborn's Green Acres	31.00	1.82	56.54	5760	186	Yes	600883	19383	Private
	Tablyn Park	63.00	0.84	52.74	5920	94	Yes	617574	9803	City
	Tartan Meadows	38.00	1.60	60.84	4800	126	Yes	786528	20698	Private
	Teal Pass Estates	15.00	1.94	29.15	2304	154	Yes	377533	25169	Private
	The Forest	18.00	1.96	35.20	1675	93	No	274466	15248	Private
	Water's Bay	5.00	2.39	11.95	440	88	No	45901	9180	Private
	All other RS	241.00	1.50	358.50	33870	141	Varies	3533318	14661	Varies
	RS Average	**50.36**	**1.27**	**57.20**	**5503**	**129**		**659306**	**16256**	
RR										
	RR 1	18.00	12.46	224.34	3881	216	Yes	404878	22493	Private
	RR 2	9.00	24.42	219.82	2477	275	Yes	258369	28708	City
	RR 3	9.00	2.52	22.64	1700	189	Yes	177344	19705	Private
	RR 4	3.00	26.57	79.73	1630	543	Yes	170042	56681	City
	RR 5	7.00	14.30	100.16	1620	231	Yes	168998	24143	City/Private
	RR 6	32.00	8.29	265.12	11373	355	Yes	1186454	37077	Private
	RR 7	26.00	12.44	323.51	8357	321	Yes	871761	33529	Private
	RR 8	4.00	30.00	120.00	1326	331	Yes	138287	34572	Private
	RR 9	8.00	5.66	45.31	1719	215	Yes	179297	22412	City
	RR 10	8.00	20.01	160.10	2235	279	Yes	233103	29138	City/Private
	RR 11	7.00	10.67	74.72	2030	290	Yes	211770	30253	City

Appendix A: Rural Area Inventory

Linear Feet pipe-water	Linear Ft-water- per lot	Cost Total-water	Cost per lot-water	Septic System Type	Est. Population	Approx DWF (gal/day)	Linear Ft of Pipe	Lnr Ft Pipe Per Lot	Total Cost of Sanitary	Cost per lot=sanitary
		148500	13500	Private	38.5	2238	1025	93	127271	11570
		324000	13500	Private	84.0	4882	2860	119	355117	14797
		648000	13500	Private	168.0	9764	5220	109	648150	13503
		189000	13500	Private	49.0	2848	3432	245	426140	30439
		67500	13500	Private	17.5	1017	588	118	73010	14602
		1890000	13500	Private	490.0	28477	8345	60	1036171	7401
		27000	13500	Private	7.0	407	767	384	95236	47618
		742500	13500	Private	192.5	11188	4600	84	571167	10385
		783000	13500	Private	203.0	11798	9199	159	1142209	19693
		175500	13500	Private	45.5	2644	1171	90	145399	11185
3384	135	138744	5550	Private	87.5	5085	3000	120	372500	14900
3203	44	131323	1799	Private	255.5	14849	3203	44	397706	5448
		1174500	13500	Private	304.5	17697	6050	70	751208	8635
		1633500	13500	Private	423.5	24613	13569	112	1684780	13924
		283500	13500	Private	73.5	4272	3264	155	405292	19300
		418500	13500	Private	108.5	6306	5760	186	715200	23071
5678	90	232798	3695	Private	220.5	12815	5920	94	735067	11668
		513000	13500	Private	133.0	7730	4800	126	596000	15684
		202500	13500	Private	52.5	3051	2304	154	286080	19072
		243000	13500	Private	63.0	3661	1675	93	207979	11554
		67500	13500	Private	17.5	1017	440	88	54633	10927
		3253500	13500	Varies	843.5	49022	33870	141	4205525	17450
		603971	**12161**		**176.3**	**10244**	**5503**	**129**	**683265**	**16037**
		243000	13500	Private	63.0	3661	3881	216	481906	26773
6970	774	285770	31752	Private	31.5	1831	2477	275	307524	34169
		121500	13500	Private	31.5	1831	1700	189	211083	23454
1396	465	57236	19079	Private	10.5	610	1630	543	202392	67464
1625	325	93625	11447 / 13500	Private	24.5	1424	1620	231	201150	28736
		432000	13500	Private	112.0	6509	11373	355	1412175	44130
		351000	13500	Private	91.0	5289	8357	321	1037611	39908
		54000	13500	Private	14.0	814	1326	331	164595	41149
2261	283	92701	11588	Private	17.5	1627	1719	215	213408	26676
2032	2032 (1 lot)	96812	83312	Private	10.5	1627	2235	279	277450	34681
3330	476	136530	19504	Private	14.0	1424	2030	290	252058	36008

Appendix A: Rural Area Inventory

Land Use Typ	Development	# of Lots	Mean Lot Size (Acres)	Total Size (Acres)	Linear Feet of	Lnr Ft. per Lot	Secondary Access?	Est. Total Road Cost	Road Cost per Lot	Water System Type
OR										
	RR 12	6.00	7.28	43.68	2130	355	Yes	222202	37034	Private
	RR 13	3.00	6.11	18.35	408	136	Yes	42563	14188	City
	RR 14	3.00	11.13	33.40	2500	833	Yes	260800	86933	City
	RR 15	4.00	5.11	20.44	1000	250	Yes	104320	26080	Private
	RR 16	2.00	11.30	22.61	925	463	Yes	96496	48248	Private
	RR 17	1.00	1.50	1.50	215	215	Yes	22429	22429	Private
	RR 18	5.00	37.00	185.14	7290	1458	Yes	760493	152099	City
	RR 19	3.00	6.60	19.80	1021	340	Yes	106511	35504	Private
	RR 20	4.00	6.60	26.30	940	235	Yes	98061	24515	City
	RR 21	8.00	18.00	145.00	4785	598	Yes	499171	62396	City/Private
	RR 22	8.00	8.30	66.70	2727	341	Yes	284428	35554	Private
	RR 23	1.00	8.80	8.80	300	300	Yes	31296	31296	Private
	RR 24	7.00	11.00	77.12	600	86	Yes	62592	8942	Private
	RR 25	1.00	57.20	57.20	1590	1590	Yes	165869	165869	Private
	RR 26	6.00	13.80	82.70	1050	175	Yes	109536	18256	Private
	RR 27	1.00	78.00	78.00	1330	1330	Yes	138746	138746	Private
	RR 28	2.00	11.80	23.50	760	380	Yes	79283	39642	Private
	RR 29	13.00	16.50	214.80	10236	787	Yes	1067820	82140	Private
	RR 30	3.00	11.70	35.00	2543	848	Yes	265286	88429	Private
	RR 31	6.00	13.70	82.30	1500	250	Yes	156480	26080	Private
	RR 32	2.00	19.00	38.00	1525	763	Yes	159088	79544	Private
	RR Average	**6.88**	**16.49**	**91.12**	**2616**	**468**		**272930**	**48832**	
Ag										
	Agricultural 1	3.00	20.80	62.40	3425	1142	Yes	357296	119099	Private
	Agricultural 2	2.00	16.50	33.00	2200	1100	Yes	229504	114752	Private
	Agricultural 3	8.00	7.30	58.40	2105	263	Yes	219594	27449	Private
	Agricultural 4	3.00	8.50	25.30	2125	708	Yes	221680	73893	Private
	Agricultural 5	1.00	0.96	0.96	570	570	Yes	59462	59462	Private
	Agricultural 6	20.00	15.70	313.70	10990	550	Yes	1146477	57324	Private
	Agricultural 7	5.00	35.50	177.53	1585	317	Yes	165347	33069	Private
	Agricultural 8	5.00	2.30	11.40	150	30	Yes	15648	3130	Private
	Agricultural 9	1.00	40.00	40.00	1360	1360	Yes	141875	141875	Private
	Agricultural 10	5.00	51.60	258.00	7150	1430	Yes	745888	149178	Private
	Agricultural 11	4.00	25.80	103.20	2700	675	Yes	281664	70416	Private
	Agricultural 12	3.00	32.50	97.40	5680	1893	Yes	592538	197513	Private
	Ag Average	**5.00**	**21.46**	**98.44**	**3337**	**836**		**348081**	**87263**	

Appendix A: Rural Area Inventory

Linear Feet pipe-water	Linear Ft-water- per lot	Cost Total-water	Cost per lot-water	Septic System Type	Est. Population	Approx DWF (gal/day)	Linear Ft of Pipe	Lnr Ft Pipe Per Lot	Total Cost of Sanitary	Cost per lot=sanitary
		81000	13500	Private	17.5	1220	2130	355	264475	44079
1330	443	54530	18177	Private	10.5	610	1330	443	165142	55047
2514	838	103074	34358	Private	10.5	610	2500	833	310417	103472
		54000	13500	Private	10.5	814	1000	250	124167	31042
		27000	13500	Private	7.0	407	925	463	114854	57427
		13500	13500	Private	3.5	203	215	215	26696	26696
5868	1174	240588	48118	Private	0.0	1017	7290	1458	905175	181035
		40500	13500	Private	3.5	610	1021	340	126774	42258
1150	288	47150	11788	Private	7.0	814	940	235	116717	29179
3378	1689 (2 lots)	219498	17312 / 13500	Private	17.5	1627	4785	598	594138	74267
		108000	13500	Private	21.0	1627	2727	341	338540	42318
		13500	13500	Private	3.5	203	300	300	37250	37250
		94500	13500	Private	14.0	1424	600	86	74500	10643
		13500	13500	Private	3.5	203	1590	1590	197425	197425
		81000	13500	Private	21.0	1220	1050	175	130375	21729
		13500	13500	Private	3.5	203	1330	1330	165142	165142
		27000	13500	Private	7.0	407	760	380	94367	47183
		175500	13500	Private	35.0	2644	10236	787	1270970	97767
		40500	13500	Private	7.0	610	2543	848	315756	105252
		81000	13500	Private	17.5	1220	1500	250	186250	31042
		27000	13500	Private	7.0	407	1525	763	189354	94677
		110000	**13500**		**20.2**	**1398**	**2645**	**478**	**328432**	**59315**
		40500	13500	Private	7.0	610	3425	1142	425271	141757
		27000	13500	Private	7.0	407	2200	1100	273167	136583
		108000	13500	Private	10.5	1627	2105	263	261371	32671
		40500	13500	Private	10.5	610	2125	708	263854	87951
		13500	13500	Private	3.5	203	570	570	70775	70775
		270000	13500	Private	38.5	4068	10990	550	1364592	68230
		67500	13500	Private	3.5	1017	1585	317	196804	39361
		67500	13500	Private	7.0	1017	150	30	18625	3725
		13500	13500	Private	3.5	203	1360	1360	168867	168867
		67500	13500	Private	14.0	1017	7150	1430	887792	177558
		54000	13500	Private	10.5	814	2700	675	335250	83813
		40500	13500	Private	7.0	610	5680	1893	705267	235089
		67500	**13500**		**10.2**	**1017**	**3337**	**836**	**414303**	**103865**

Appendix B: Scenario Data: RR & A Inventory

Parcel Number	Land Use Type	Scenario	Total Size (Acres)	Subdivided Lots (2.5 Acres) S1&S2	Subdivided Lots (A to OP 18 lots per 40 Acres) S3	Subdivided Lots (RR & A to OP, per 20 Acres) S4	Current Estimated Population	Scenario Estimated Population	Tax Capital Accrued	Tax Capital Per Acre	Current Estimated Expenditure	Est. Expenditure if Residentail
1	RR	1, 2, 3,4	25.1	10		16	3.5	35	3326	133	898	3559
2	RR	1, 2, 3,4	31.9	12		21	3.5	42	4335	136	1170	4638
3	RR	1, 2, 3,4	33.7	13		22	3.5	46	2865	85	774	3066
4	RR	1, 2, 3,4	54.3	21		39	3.5	74	5351	99	1445	5726
5	RR	1, 2, 3	13.5	5			3.5	18	5160	382	1393	5521
6	RR	1, 2, 3,4	28.5	11		25	3.5	39	3511	123	948	3757
8	RR	1, 2, 3	10.7	4			3.5	14	3170	296	856	3392
9	RR	1, 2, 3	11.6	4			3.5	14	3709	320	1001	3969
10	RR	1, 2, 3	10.0	4			3.5	14	4302	430	1162	4603
11	RR	1, 2, 3	19.9	7			3.5	25	5319	267	1436	5691
12	RR	1, 2, 3	11.0	4			3.5	14	3040	276	821	3253
13	RR	1, 2, 3	10.0	4			3.5	14	4085	409	1103	4371
14	RR	1, 2, 3	58.0	23			3.5	81	7248	125	1957	7755
15	RR	1, 2, 3	19.9	7			3.5	25	8290	417	2238	8870
16	RR	1, 2, 3,4	23.5	9		15	3.5	32	5794	247	1564	6200
17	RR	1, 2, 3,4	64.6	25		43	3.5	88	7313	113	1975	7825
18	RR	1, 2, 3,4	41.3	16		27	3.5	56	9108	221	2459	9746
19	RR	1, 2, 3,4	30.5	12		20	3.5	42	4356	143	1176	4661
20	RR	1, 2, 3	10.0	4			3.5	14	4657	466	1257	4983
21	RR	1, 2, 3,4	22.4	8		14	3.5	28	661	30	178	707
22	RR	1, 2, 3	10.0	4			3.5	14	3733	373	1008	3994
23	RR	1, 2, 3	10.9	4			3.5	14	3511	322	948	3757
24	RR	1, 2, 3	10.0	4			3.5	14	5386	539	1454	5763
25	RR	1, 2, 3	10.0	4			3.5	14	1250	125	338	1338
26	RR	1, 2, 3	10.0	4			3.5	14	3038	304	820	3251
27	RR	1, 2, 3	10.0	4			3.5	14	3828	383	1034	4096
28	RR	1, 2, 3	10.3	4			3.5	14	3445	334	930	3686
29	RR	1, 2, 3	10.0	4			3.5	14	4336	434	1171	4640
30	RR	1, 2, 3	12.0	4			3.5	14	3496	291	944	3741
31	RR	1, 2, 3	10.0	4			3.5	14	2976	298	804	3184
32	RR	1, 2, 3	10.0	4			3.5	14	4000	400	1080	4280
33	RR	1, 2, 3,4	33.4	13		22	3.5	46	647	19	175	692
34	RR	1, 2, 3,4	39.8	15		26	3.5	53	1139	29	308	1219
35	RR	1, 2, 3,4	40.0	16		26	3.5	56	6990	175	1887	7479
36	RR	1, 2, 3	12.8	5			3.5	18	4679	366	1263	5007
37	RR	1, 2, 3	13.7	5			3.5	18	1365	100	369	1461
38	RR	1, 2, 3	11.2	4			3.5	14	3528	315	953	3775
39	RR	1, 2, 3	10.0	4			3.5	14	4513	451	1219	4829
40	RR	1, 2, 3,4	49.7	19		33	3.5	67	11138	224	3007	11918
41	RR	1, 2, 3,4	50.0	20		33	3.5	70	8737	175	2359	9349
42	RR	1, 2, 3	10.0	4			3.5	14	3650	365	986	3906
43	RR	1, 2, 3,4	20.0	8		13	3.5	28	2431	122	656	2601
44	RR	1, 2, 3,4	40.0	16		26	3.5	56	1790	45	483	1915
45	RR	1, 2, 3,4	21.6	8		14	3.5	28	4223	196	1140	4519

Appendix B: Scenario Data: RR & A Inventory

Parcel Number	Land Use Type	Scenario	Total Size (Acres)	Subdivided Lots (2.5 Acres) S1&S2	Subdivided Lots (A to OP 18 lots per 40 Acres) S3	Subdivided Lots (RR & A to OP, per 20 Acres) S4	Current Estimated Population	Scenario Estimated Population	Tax Capital Accrued	Tax Capital Per Acre	Current Estimated Expenditure	Est. Expenditure if Residentail
46	RR	1, 2, 3	13.9	5			3.5	18	5193	374	1402	5557
47	RR	1, 2, 3	18.2	7			3.5	25	196	11	53	210
48	RR	1, 2, 3,4	64.4	25		42	3.5	88	2133	33	576	2282
49	RR	1, 2, 3	16.6	6			3.5	21	549	33	148	587
50	RR	1, 2, 3,4	39.6	15		26	3.5	53	2936	74	793	3142
51	RR	1, 2, 3,4	23.4	9		15	3.5	32	1175	50	317	1257
52	RR	1, 2, 3	11.1	4			3.5	14	3002	270	811	3212
53	RR	1, 2, 3	12.8	5			3.5	18	4325	338	1168	4628
54	RR	1, 2, 3	12.8	5			3.5	18	848	66	229	907
55	RR	1, 2, 3	12.8	5			3.5	18	3425	268	925	3665
56	RR	1, 2, 3	12.8	5			3.5	18	2903	227	784	3106
57	RR	1, 2, 3	12.1	4			3.5	14	802	66	217	858
58	RR	1, 2, 3	10.6	4			3.5	14	702	66	190	751
59	RR	1, 2, 3	11.3	4			3.5	14	3215	285	868	3440
60	RR	1, 2, 3	11.7	4			3.5	14	3201	274	864	3425
61	RR	1, 2, 3,4	54.6	21		36	3.5	74	10783	197	2911	11538
62	RR	1, 2, 3,4	54.8	21		39	3.5	74	10822	197	2922	11580
63	RR	1, 2, 3,4	21.7	8		14	3.5	28	4286	198	1157	4586
64	RR	1, 2, 3,4	78.4	31		52	3.5	109	6712	86	1812	7182
65	RR	1, 2, 3	18.6	7			3.5	25	2790	150	753	2985
66	RR	1, 2, 3,4	30.4	12		20	3.5	42	5130	169	1385	5489
67	RR	1, 2, 3,4	37.1	14		24	3.5	49	2046	55	552	2189
68	RR	1, 2, 3,4	44.2	17		29	3.5	60	2651	60	716	2837
69	RR	1, 2, 3	10.0	4			3.5	14	5401	540	1458	5779
72	RR	1, 2, 3	10.8	4			3.5	14	3827	354	1033	4095
73	RR	1, 2, 3	12.5	5			3.5	18	3961	317	1069	4238
74	RR	1, 2, 3,4	38.3	15		25	3.5	53	4075	106	1100	4360
75	RR	1, 2, 3	11.2	4			3.5	14	2696	241	728	2885
76	RR	1, 2, 3,4	32.8	13		21	3.5	46	4656	142	1257	4982
77	RR	1, 2, 3,4	57.2	22		38	3.5	77	2477	43	669	2650
78	RR	1, 2, 3,4	27.2	10		18	3.5	35	4765	175	1287	5099
79	RR	1, 2, 3	10.0	4			3.5	14	3293	329	889	3524
80	RR	1, 2, 3	11.8	4			3.5	14	4094	347	1105	4381
81	RR	1, 2, 3	11.8	4			3.5	14	4000	339	1080	4280
82	RR	1, 2, 3,4	71.5	28		47	3.5	98	9461	132	2554	10123
83	RR	1, 2, 3,4	20.0	8		13	3.5	28	3740	187	1010	4002
84	RR	1, 2, 3,4	36.4	14		24	3.5	49	6256	172	1689	6694
85	RR	1, 2, 3	17.4	6			3.5	21	4902	282	1324	5245
86	RR	1, 2, 3,4	21.4	8		14	3.5	28	6601	308	1782	7063
87	RR	1, 2, 3,4	24.0	9		16	3.5	32	6162	257	1664	6593
88	RR	1, 2, 3,4	32.0	12		21	3.5	42	4248	133	1147	4545

Appendix B: Scenario Data: RR & A Inventory

Parcel Number	Land Use Type	Scenario	Total Size (Acres)	Subdivided Lots (2.5 Acres) S1&S2	Subdivided Lots (A to OP 18 lots per 40 Acres) S3	Subdivided Lots (RR & A to OP, per 20 Acres) S4	Current Estimated Population	Scenario Estimated Population	Tax Capital Accrued	Tax Capital Per Acre	Current Estimated Expenditure	Est. Expenditure if Residentail
89	RR	1, 2, 3,4	22.5	9		14	3.5	32	3643	162	984	3898
90	RR	1, 2, 3	12.0	4			3.5	14	3395	283	917	3633
91	RR	1, 2, 3	12.0	4			3.5	14	4672	389	1261	4999
92	RR	1, 2, 3	12.0	4			3.5	14	4404	367	1189	4712
93	RR	1, 2, 3	12.0	4			3.5	14	3849	321	1039	4118
94	RR	1, 2, 3	12.0	4			3.5	14	4184	349	1130	4477
95	RR	1, 2, 3,4	37.0	14		24	3.5	49	5623	152	1518	6017
96	A	3	17.9	7			3.5	25	4366			
97	A	3, 4	32.8	13		21	3.5	46	5022			
98	A	3	11.7	4			3.5	14	2434			
99	A	3, 4	32.7	13		21	3.5	46	8971			
100	A	3, 4	21.5	8		14	3.5	28	3370			
101	A	3, 4	20.0	8		13	3.5	28	568			
102	A	3	14.0	5			3.5	18	4532			
103	A	3	10.3	4			3.5	14	4299			
104	A	3	16.2	6			3.5	21	452			
105	A	3, 4	29.5	11		19	3.5	39	2921			
106	A	3	17.2	6			3.5	21	320			
107	A	3	17.3	6			3.5	21	566			
108	A	2, 3, 4	65.2	26	28	43	3.5	91	2914			
109	A	3	10.1	4			3.5	14	1976			
110	A	2, 3, 4	73.5	29	31	49	3.5	102	5335			
111	A	2,3, 4	67.0	26	29	44	3.5	91	19336			
112	A	3	10.0	4			3.5	14	2785			
113	A	3, 4	20.1	8		13	3.5	28	0			
114	A	3	11.1	4			3.5	14	323			
115	A	2, 3, 4	69.4	27	30	46	3.5	95	3651			
116	A	2, 3, 4	116.6	46	51	77	3.5	161	5636			
117	A	3, 4	37.3	14		24	3.5	49	4136			
118	A	2, 3, 4	93.8	37	41	62	3.5	130	14007			
119	A	3, 4	36.8	14		24	3.5	49	3662			
120	A	2, 3, 4	53.3	21	23	35	3.5	74	12084			
121	A	3	10.0	4			3.5	14	3949			
122	A	3	39.8	15		26	3.5	53	12856			
123	A	2, 3, 4	47.6	19	21	31	3.5	67	1918			