2.1 BACKGROUND

Champlin is a third-ring Twin Cities metropolitan area suburb with an estimated 2016 population of 23,343. The City is located entirely within the Metropolitan Urban Services Area (MUSA), which means the City is served with regional sanitary sewer service.

From 1990 to 2000, Champlin experienced significant increases in population, household and employment growth. The growth rate, however, has slowed in recent years due to the limited supply of developable residential land. While it is expected that Champlin will add around 800 housing units in the 2020 to 2040 planning period, the population will not rise in proportion due to an aging of the population and a subsequent decline in the average household size. Table 1.1 represents population, household and employment information for the City of Champlin. Data from 1980 through 2010 is taken from the Census, 2016 is from City data and 2030 through 2040 are estimates provided from Metropolitan Council staff as consulted by City staff.

Table 1.1 - City Champlin Community Forecasts

	1990	2000	2010	2016	2020	2030	2040
Population	16,849	22,193	23,089	23,343	24,400	25,600	25,400
Households	5,423	7,425	8,328	8,442	8,700	9,400	9,400
People per Household	3.11	2.99	2.91	2.76	2.77	2.72	2.70
Employment	1,110	2,734	4,012	4,116	4,400	4,600	4,800

2.2 LAND USE INTRODUCTION

The Land Use chapter provides direction and policies to maintain sound development and to achieve desired change in Champlin through the year 2040. The Land Use Plan influences the future physical character of the City to enhance existing positive aspects, produce future characteristics compatible with sound existing conditions, and enrich the overall quality of the community. Land use therefore is the key element of the Comprehensive Plan. The emphasis and attention to this aspect of community development cannot be overstated. In some instances, the lack of coherent land use policies has resulted in problems relative to Incompatibility of activities and uses.

While Champlin is nearly 95 percent developed, careful land use planning remains important. Since ways of living and doing business change over time, the City must be prepared to react to those trends. In keeping with the Community Vision Statement, the Land Use Plan should accomplish the following:

- Guide development and redevelopment to ensure community vitality, livability and sustainability
- Growth should be sensitive to the natural resources and the availability of parks and open spaces
- Balance residential, commercial and industrial land uses that maintain a connection to the existing development pattern
- Establish development standards consistent with community desires

The Land Use chapter includes four sections:

1. Existing Land Use: This section examines Champlin's current distribution of land use and residential densities.

2. Future Land Use: This section describes direction for future land use to accommodate growth and maintain balanced neighborhoods.

3. Special Resource Protection. This section addresses the City's natural and cultural resources, including historic preservation, renewable energy, Mississippi River Critical Area and the Elm Creek.

4. Land Use Policies and Implementation: This section explains how the City intends to accomplish its objectives.

2.3 EXISTING LAND USE

The current land use patterns in Champlin are described through a series of land use categories. These categories were established during prior planning efforts in the City of Champlin.

Low Density Residential: This is a residential land use intended to provide land for single- and two-family residences. This is the most prevalent pattern of land use in the community and is dominated by single family detached housing. Densities within the low-density category generally range from a low of 1.5 units per gross acre up to 3.3 units per gross acre with the overall development pattern generally averaging about 2.5 units per gross acre. Permitted densities are up to five units per gross acre. The commensurate zoning districts are Single Family Residential (R-1), Two-Family Residential (R-2) and Low-Density Multi-Family Residential (R-3). Single family and two-family dwellings are permitted in this land use category.

Medium Density Residential: This land use is intended to create areas for low-density multi-family residences; to preserve and enhance transitional residential areas between lower and higher densities and to enhance transitional areas between low density and other non-residential land uses. More medium density developments have occurred recently with the increased demand in townhome and condominium styles of living. Densities within these developments typically range between six to eight units per gross acre. Permitted densities are between five and twelve units per gross acre. The commensurate zoning district is Medium Density Residential (R-4). This land use supports duplexes, townhomes, condominiums and small apartment buildings.

High Density Residential: This residential land use is intended to create, preserve and enhance areas for multi-family use of higher densities for both permanent and transient families in close proximity to major transportation and transit corridors, public community centers, shopping centers and employment centers. This pattern is reflected by older apartment developments in the Mississippi Crossings Area but also in newer developments such as the Mill Pond Gables and Champlin Shores senior housing facilities on Elm Creek and the Champlin Drive Apartments on Champlin Drive. Average densities within the High-Density category are 15 units per gross acre. Permitted densities are twelve to eighteen units per gross acre. Densities greater than 18 units per acre have been accepted by the community under a

Planned Unit Development overlay zoning, typically used for senior-oriented housing. The commensurate zoning district is High Density Residential (R-5). This land use supports apartments and large townhome or condominiums.

Commercial: The commercial land use provides for businesses, professional services, and retailers to meet the needs of residents in Champlin. Prior to 2000, most commercial development consisted of single use buildings with a sole retail business or professional service. More recent development is multi-tenant retail that has diversified the quantity and quality of retail and professional services. A majority of the commercial development has occurred along the Trunk Highway 169 corridor, clearly to take advantage of the benefits of a highly trafficked major highway. Other commercial areas are more oriented to neighborhood service delivery and are found near collector road intersections. This land use is supported by various Commercial zoning districts. Floor area ratios (FAR's) for commercial land uses are estimated at 0.4.

Office: This land use is intended to create areas for office development to provide employment opportunities in locations providing unique amenities benefiting office settings. The Commercial Office District (C-1) is most appropriate for this land use. C-1 commercial-office business district is intended for the location and development of office buildings, hotels, hospitals, clinics and public buildings. These uses shall be considered principal uses and must occupy at least 40 percent of the building square footage of the zoning district area. Related uses which are subject to more restrictive controls and for uses providing goods and services which are primarily for the use of persons employed in the district shall be considered accessory uses and shall not be permitted unless 40 percent of district area square footage is occupied by a principal use. FAR's for Office land uses are estimated at 2.5.

Industrial: This land use is intended to create areas for warehousing with office uses to provide employment opportunities and business complexes in locations accessible to high-level infrastructure. Developments along the Trunk Highway 169 Corridor near 109th Avenue highlight this land use type. Industrial land use is represented by the Industrial zoning district (I-1). Most Industrial uses have a distribution component and, as such, FAR's are estimated at 0.2.

Mixed Use: This land use is intended to permit a mix of residential, commercial and office uses in one building. The mix of uses (by acreage) is expected to be 30 percent commercial, 20 percent office and 50 percent residential. Residential densities shall have minimum densities of 40 units per gross acre with maximum densities at 50 units per acre. Higher densities may be permitted under a Planned Unit Development.

The overall design of mixed-use development areas incorporate density and promote activity. Mixed use areas can become the city's gathering space and the design may incorporate public spaces. By providing walkable mixed-use areas, stress on the transportation system is reduced. Mixed use areas can also provide a "sense of place" by creating active and vibrant developments with opportunities for interaction through successful design and site layout.

Parks/Schools/Public Open Space: This category covers all public uses. It is intended to create areas for public recreation, public education, government services and open space. The Elm Creek Park Reserve makes up a large portion of this land use

category in Champlin as over 800 acres is within corporate limits. The Open Space (OS) zoning district closely matches this land use for permanent open space areas.

Open water: Any public waters of the state as defined by Minn. Stat. 103G.005, Subd.15 (the state's county-by-county inventory of lakes, rivers and other public waterways in the public domain).

Major Right-of-Way: Right-of-way provided for Trunk Highway 169.

The following table outlines existing land uses found in Champlin broken down by acres that are developed and vacant acres that are undeveloped or that could be further developed. The existing Land Use Map is attached as Exhibit 2-2.

Table 2.1 - Existing Land Use

LAND USE CATEGORY	DEVELOPED ACRES	VACANT ACRES	TOTAL / PERCENT OF TOTAL
Low Density Residential	2,985	95	3,080 / 56.6%
Medium Density Residential	208	8	216 / 4.0%
High Density Residential	53	4	57 / 1.0%
Commercial	138	26	164 / 3.0%
Office	5	10	15 / 0.3%
Industrial	92	0	92 / 1.7%
Mixed Use	0	0	0 / 0.0%
RESTRICTED LANDS	ACRES		
Parks, Schools, Open Space	1,308		1,308 / 24.0%
Major Road Right-of-way	90		90 / 1.7%
Open Water / Wetlands	420		420 / 7.7%
TOTAL LAND AREA	**5,442**		**5,442 / 100 %**

Detached single family neighborhoods comprise over half of Champlin's land area. Attached and multi-family residential areas, located at the periphery of single-family neighborhoods along major streets, make up another 4.7 percent.

Commercial, office and industrial uses comprise six percent of the City's land area, with the largest concentrations along the Trunk Highway 169 corridor. Neighborhood scale commercial nodes are well dispersed and are typically found near arterial road intersections.

The remaining acreage (nearly 35 percent), set aside for parks, schools and public open space, major road right-of-way and public water, can be thought of as "restricted" in terms of development potential. However, they are important in providing community services and amenities. The Land Use map is attached as Exhibit 2-2.

2.4 FUTURE LAND USE

The future land use plan identifies the location and intensity of future development within the City and establishes a framework in which future development will occur. In creating this plan, the City is looking to the future, trying to guide the change that will inevitably occur rather than allowing the community to be affected by change without a plan. The Land Use Plan Map can be amended through a publicly advertised process either on its own initiative or in response to landowner application. The Land Use Plan map guides the use of property, while the City's Zoning Map and Zoning Ordinance outline specific use provisions and bulk regulations. Where inconsistency between land use and zoning exist, it is the Land Use that supersedes.

The future land use categories are consistent with existing land use categories.

Low Density Residential: This is a residential land use intended to provide land for single- and two-family residences. This is the most prevalent pattern of land use in the community and is dominated by single family detached housing. Densities within the low-density category generally range from a low of 2.0 units per gross acre up to 3.5 units per gross acre with the overall development pattern generally averaging about 2.5 units per gross acre. Permitted densities are up to five units per gross acre. The commensurate zoning districts are Single Family Residential (R-1), Two-Family Residential (R-2) and Low-Density Multi-Family Residential (R-3). Single family and two-family dwellings are permitted in this land use category.

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acre. Permitted densities are twelve to eighteen units per gross acre. Densities greater than 18 units per acre have been accepted by the community under a Planned Unit Development overlay zoning, typically used for senior-oriented housing. The commensurate zoning district is High Density Residential (R-5). This land use supports apartments and large townhome or condominiums.

Commercial: The commercial land use provides for businesses, professional services, and retailers to meet the needs of residents in Champlin. Prior to 2000, most commercial development consisted of single use buildings with a sole retail business or professional service. More recent development is multi-tenant retail that has diversified the quantity and quality of retail and professional services. A majority of the commercial development has occurred along the Trunk Highway 169 corridor, clearly to take advantage of the benefits of a highly trafficked major highway. Other commercial areas are more oriented to neighborhood service delivery and are found near collector road intersections. This land use is supported by various Commercial zoning districts. Floor area ratios (FAR's) for commercial land uses are estimated at 0.4.

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Industrial: This land use is intended to create areas for warehousing with office uses to provide employment opportunities and business complexes in locations accessible to high-level infrastructure. Developments along the Trunk Highway 169 Corridor near 109th Avenue highlight this land use type. Industrial land use is represented by the Industrial zoning district (I-1). Most Industrial uses have a distribution component and, as such, FAR's are estimated at 0.2.

Mixed Use: This land use is intended to permit a mix of residential, commercial and office uses in one building. The mix of uses (by acreage) is expected to be 30 percent commercial, 20 percent office and 50 percent residential. Residential densities shall have minimum densities of 40 units per gross acre with maximum densities at 50 units per acre. Higher densities may supported under Planned Unit Developments (PUD's).

The overall design of mixed-use development areas incorporate density and promote activity. Mixed use areas can be the city's gathering space and the design may incorporate public spaces. By providing walkable mixed-use areas, stress on the transportation system is reduced. Mixed use areas can also provide a "sense of place" by creating active and vibrant developments with opportunities for interaction through successful design and site layout.

Parks/Schools/Public Open Space: This category covers all public uses. It is intended to create areas for public recreation, public education, government services and open

space. The Elm Creek Park Reserve makes up a large portion of this land use category in Champlin as over 800 acres is within corporate limits. The Open Space (OS) zoning district closely matches this land use for permanent open space areas.

Open water/wetlands: Any public waters of the state as defined by Minn. Stat. 103G.005, Subd.15 (the state's county-by-county inventory of lakes, rivers, wetlands and other public waterways in the public domain).

Major Right-of-Way: Right-of-way provided for Trunk Highway 169.

Per the Metropolitan Council's Thrive 2040 Regional Development Framework, Champlin is designated as a "Suburban" community (see Exhibit 2-1). "Suburban" communities experienced continued growth and expansion during the 1980s and early 1990s, and typically have automobile-oriented development patterns at significantly lower densities than in previous eras. Suburban communities are expected to plan for forecasted population and household growth at average densities of at least five units per acre for new development and redevelopment.

Since receipt of the Metropolitan Council System Statements (September 2015), the City experienced new residential growth of 381 housing units on 34.6 acres or 11.1 units/acre. Much of the new growth provided medium and high-density residential housing choices. By 2040, the City is expected to grow to 9,600 households or 700 more housing units.

Overall, the future land use plan does not differ significantly in terms of land use changes. The following narratives describe key changes in the land use plan since 2008 and elements that comprise the future land use plan and development potentials.

Emery Village

Emery Village, a 144-unit condominium development located in the northwest corner of the Trunk Highway 169/117th Avenue intersection, contained a seven-acre parcel guided for high-density residential development. In 2015, the land use was amended in support of medium density residential townhomes consistent with adjacent land use.

Elm Creek Commons

Elm Creek Commons is a 39-acre commercial/retail planned unit development located west of Trunk Highway 169 between Elm Creek Parkway and 117th Avenue North. Land use for a five-acre site in the development was amended from Commercial to High Density Residential supporting a 185-unit affordable senior housing apartment development.

Northwest Area

In the northwest area of the city, 80 acres of vacant un-platted residential land is available for residential development. The area, served with public utilities and other infrastructure, is guided Low Density Residential; though the adopted Northwest Area Plan indicated that the City may support up to 60 medium density housing units or approximately 10 acres of medium density land use.

The Northwest Area Plan has guided quality development in the Northwest Area and, thus, has served its purpose. In keeping consistent with surrounding land use and

development patterns of the last ten years, the Northwest Area Plan shall be removed from the Comprehensive Plan and thus eliminating 10 acres for future medium density land use in the northwest area.

Mississippi Crossings Redevelopment Area

In 2013, the City approved an addendum to the 2030 Comprehensive Plan for 70 acres in the area adjacent to the Mississippi River and Anoka-Champlin Bridge, known as Mississippi Crossings. The Mississippi Crossings Framework Plan replaced the 3.5-acre Gateway Plan and is highlighted by a mix of uses including 299 multi-family apartments, 107,750 square feet of retail/office and a restaurant/event center. The project also includes a centralized key open space (Village Green) and ancillary open spaces.

In 2017, five acres adjacent to the Mississippi River and just south of the Anoka-Champlin Bridge were amended from Mixed Use and Medium Density Residential to High Density Residential in support of an 85-unit senior cooperative development (Applewood Pointe in Mississippi Crossings). With the project, the City identified the need to review the remaining acreage in Mississippi Crossings south of Applewood Pointe and north of Mississippi Pointe Park. This 16-acre area is envisioned for a mix of uses including high density residential (50 percent), retail/office (20 percent), restaurant (10 percent) and park (20 percent). The precise location of these future uses is not yet determined. The future land use map shall identify 16 acres in Mississippi Crossings as Mixed Use.

Seven Acre Parcel – Northwest Corner of 117th Avenue/Highway 169 Intersection

This parcel is part of the Emery Village planned development. The site is currently guided entirely for Office Use. The northerly four acres is appropriate for High Density Residential Land Use, subject to an approved site development.

Future Residential Land Use Development Summary

The City projects it will reach full development in 2040 and will have approximately 9,400 housing units. This requires an additional 700 housing units over the next 20 years. It is expected that nearly one-third of the housing units that comprise the projected growth will occur on undeveloped low density residential sites mostly located in the Northwest Planning Area, while the remaining growth will occur via scattered in-fill sites located throughout the community, a three-acre high density site (second phase of Mill Pond Gables) and redevelopment areas, specifically Mississippi Crossings (see Table 2.4). The Future Land Use Map is attached as Exhibit 2-3. It includes three modifications from the existing land use plan: 1) the Northwest Planning Area will no longer be afforded ten acres of medium density land use and thus, the area will maintain a low density residential designation; and 2) 16 acres in the Mississippi Crossings area will be guided Mixed Use in support of the City's redevelopment efforts and 3) four acres of the property located in the Northwest corner of the 117th Avenue/Highway 169 intersection will be guided from Office to High Density Residential.

The city anticipates that the medium density residential, high density residential and mixed-use areas will all development in the 2020 through 2030 time frame. The anticipated timing of scattered infill development of single-family areas is not known, but will occur prior to 2040. The City expects to be fully developed in 2040.

Table 2.3 – Future Land Use Summary

LAND USE CATEGORY	2020 (Existing)	PERCENT OF TOTAL	2021-2030	PERCENT OF TOTAL	2031 - 2040	PERCENT OF TOTAL
Low Density Residential	3,080	56.6%	3,070	56.6%	3,070	56.6%
Medium Density Residential	216	3.7%	210	3.7%	210	3.7%
High Density Residential	57	1.0%	61	1.0%	61	1.0%
Commercial	164	3.0%	164	3.0%	164	3.0%
Office	15	0.3%	11	0.3%	11	0.3%
Industrial	92	1.7%	92	1.7%	92	1.7%
Mixed Use	0	0.3%	16	0.3%	16	0.3%
RESTRICTED LANDS						
Parks, Schools, Open Space	1,308	24.0%	1,308	24.0%	1,308	24.0%
Major Road Right-of-way	90	1.7%	90	1.7%	90	1.7%
Open Water / Wetlands	420	7.7%	420	7.7%	420	7.7%
TOTAL LAND AREA	**5,442**	**100%**	**5,442**	**100%**	**5,442**	**100%**

Table 2.4 – Future Residential Land Use Development Capacity

LAND USE TYPE	MINIMUM DEVELOPMENT INTENSITY	2021 - 2030 ACRES/ UNITS	2031 - 2040 ACRES/ UNITS	TOTAL ACRES/ UNITS
Low Density Residential (1)	2.0 units/acre	95 / 190	0 / 0	95 / 190
Medium Density Residential (2)	5 units/acre	8 / 20	0 / 0	8 / 40
High Density Residential (3)(4)	12 units/acre	8 / 96	0 / 0	8 / 96
Mixed Use (5)	40 units/acre	8 / 320	0 / 0	8 / 320
In-Fill of Existing Larger Lot Low Density Residential Sites		10 / 25	10 / 25	20 / 50
TOTAL				139 / 696
Average Density	**5.0 units/acre**			

(1) Includes 80 acres in the Northwest Planning Area and other scattered undeveloped parcels located in the southwest area (5 acres) and southeast area (10 acres)
(2) Includes four acres along Dayton Road near the Cartway Road intersection and four acres in Emery Village (NW corner of Highway 169 and 117th Avenue)
(3) Second phase of Mill Pond Gables on four acres (Hayden Lake Road/Champlin Drive)
(4) Northwest Corner of 117th Avenue/Highway 169 parcel
(5) Mississippi Crossings Area totaling 16 acres (50 percent residential)

Table 2.5 – Land Use Map Changes

SITE	Current Land use	Amended Land Use	Acreage	Residential Density
Northwest Planning Area	Medium Density Residential	Low Density Residential	10	2.0 units/acre
Mississippi Crossings	Low Density Residential, Medium Density Residential	Mixed Use	16	40 units/acre
NW Corner of 117th Avenue & Highway 169	Office	High Density Residential	4	12 units/acre
		Totals	30	

2.5 SPECIAL RESOURCES PROTECTION

As required by state statute, a municipality's comprehensive plan must also include strategies for protection of special resources, including solar access, historic preservation, aggregate, and Critical Area. These strategies are discussed below.

Solar Access

Minnesota Statutes require an element for the protection and development of access to direct sunlight for solar energy systems. The purpose of this legislation is to prevent solar collectors from being shaded by adjacent structures or vegetation and to ensure that development decisions do not preclude the possible future development and use of solar energy systems. To ensure the availability of solar access, the City of Champlin will, whenever possible, protect access to direct sunlight for solar energy systems on principle structures. The City of Champlin will consider solar access in the review of site plans and planning decisions.

Aggregate Resources

The Met Council requires cities to identify the location of aggregate resources within the community based on the Minnesota Geological survey within the Comprehensive Plan. No aggregate resources were identified.

Historic Preservation

Champlin presently has no sites listed on the National Register of Historic Places according to the State Historic Preservation Office. However, there is an active Champlin Historical Society that promotes the importance of Champlin's history, while maintaining archives and historical artifacts.

Now that Champlin is nearing full development, it is important to ensure that historic resources are not destroyed, particularly identified American Indian burial mounds. The City should continue to support the efforts of the Champlin Historical Society to provide educational and recreational opportunities based on Champlin's cultural heritage.

Mississippi River Corridor Critical Area (MRCCA)

The Mississippi River corridor within Champlin was designated as a State Critical Area in 1979. In March 1981 the City adopted the plan for the Mississippi River Critical Area, in response to the *Minnesota Critical Areas Act* (Executive Order 79-19) and addressed the protection of the economic, environmental, recreational, and aesthetic values of the river corridor in the City. This Plan was updated in 2002 and was included in the Natural Resources chapter of the Comprehensive Plan.

New rules for the Mississippi River Corridor Critical Area were published on December 27, 2016. These rules replaced Executive Order 79-19 that guided development in the corridor from 1976 to 2016. The new rules will be implemented through local government MRCCA plans and ordinances. Implementation will be phased in over the next five years, first with updates to local government MRCCA plans and then with updates to their MRCCA ordinances. The City's MRCCA plan is a separate section of the Comprehensive Plan.

Elm Creek

Located in the northwest part of Champlin, Elm Creek runs from the western boundary to the Mississippi River. It drains a large watershed, including Champlin, Dayton, Maple Grove, Corcoran, Plymouth and Medina, before emptying into the Mill Pond and then into the Mississippi River. Elm Creek is associated with a large amount of open space providing vegetated open space adjacent to the water. In comparison with other watercourses, the land adjacent the Elm Creek is undeveloped. Thus, as development continues to move

west, it will be important to protect the Creek with building setbacks, natural open space dedications, housing clusters and National Urban Runoff Program (NURP) ponds.

2.6 LAND USE POLICIES

With the overall city development goals in mind, land use policies are established to prevent conflicting development patterns from reoccurring and to correct existing problems. Changes will not be rapid or dramatic. However, it is important that each change benefit the community. The following objectives and policies serve as a reference for planning and decision-making.

Goal 1: Reduced dependence upon fossil fuels, underground metals, and minerals.

Objectives:

1. Promote and encourage compact development that minimizes the need to drive. (ongoing)
2. Provide a mix of integrated community uses – housing, shops workplaces, schools, parks, civic facilities – within walking or bicycling distance. (ongoing)
3. Design human-scaled development that is pedestrian friendly. (ongoing)
4. Develop around public transit. (ongoing)
5. Facilitate home-based occupations and work that reduce the need to commute. (ongoing)

Goal 2: Reduction of activities that encroach upon nature.

Objectives:

1. Guide development to existing developed areas and away from natural resources. (ongoing)
2. Remediate and redevelop brownfield sites and other developed lands that suffer from environmental or other constraints. (as opportunities arise)
3. Promote design that respects the local and regional ecosystems and their natural functions. (ongoing)
4. Create financial and regulatory incentives for infill development; eliminate disincentives. (short-term)

Goal 3: Protect and promote options for the employment of solar energy.

Objectives:

1. Encourage the protection of existing solar collectors from shading by development and vegetation on adjoining parcels. (ongoing)
2. Discourage new development from prohibiting use of solar technologies through protective covenants. (ongoing)
3. Consider solar access in the formulation of plans for public and private landscaping. (ongoing)
4. Consider variances to zoning and subdivision standards to promote the use of solar energy. (ongoing)

Goal 4: Ensure compatibility and functional relationships among land uses.

Objectives:

1. Locate related and compatible land uses in compact, functional districts. (ongoing)

2. Provide transitional zones between distinctly differing and incompatible land use activities. (as opportunities arise/ongoing)
3. Reduce the impact of incompatible land uses, wherever possible, through redevelopment and/or relocation. (ongoing)

Goal 5: Preserve and upgrade land uses.

Objectives:

1. Analyze undeveloped and underutilized and/or blighted parcels on an individual basis to determine how they can best be utilized within the context of the area it is located and the community as a whole. (ongoing)
2. Upgrade or redevelop substandard and deteriorated commercial, industrial, and residential structures through private means and/or public assistance. (as opportunities arise)
3. Promote high quality development which makes efficient use of remaining lands. (ongoing)
4. Enforce maintenance standards. (ongoing)
5. Continue to promote the orderly infill of underutilized properties. (ongoing)
6. Continue to use the planned unit development (PUD) process to foster innovative development in the City's best interest. (ongoing)

2.7 IMPLEMENTATION

Zoning Map

State law requires that local zoning ordinances/maps be consistent with the Comprehensive Plan. In certain locations, the Zoning Map does not reflect the future land use designation. The City will work to establish consistency between the Zoning Map and Land Use Map. The Zoning Map is attached as Exhibit 2-4. The City will work to achieve consistency between the Land Use Plan and the Zoning Map in 2021.

Development Review

Upon considering developments plans, the City will review them for consistency with Comprehensive Plan visions, goals and policies. Development review is an ongoing process.

Redevelopment

Staff will monitor the physical condition and economic viability of land uses to determine if there is potential for redevelopment consistent with Land Use Plan objectives. If redevelopment potential exists, fiscal tools such as tax-increment financing and tax abatement will be considered as a way to stimulate and facilitate redevelopment.

Capital Improvement Program

The City shall continue using the Capital Improvement Program as a tool to prioritize expenditures that implement the timing and financing of public improvements consistent with the Comprehensive Plan.

Exhibit 2-1: Metropolitan Council Planning Areas Map

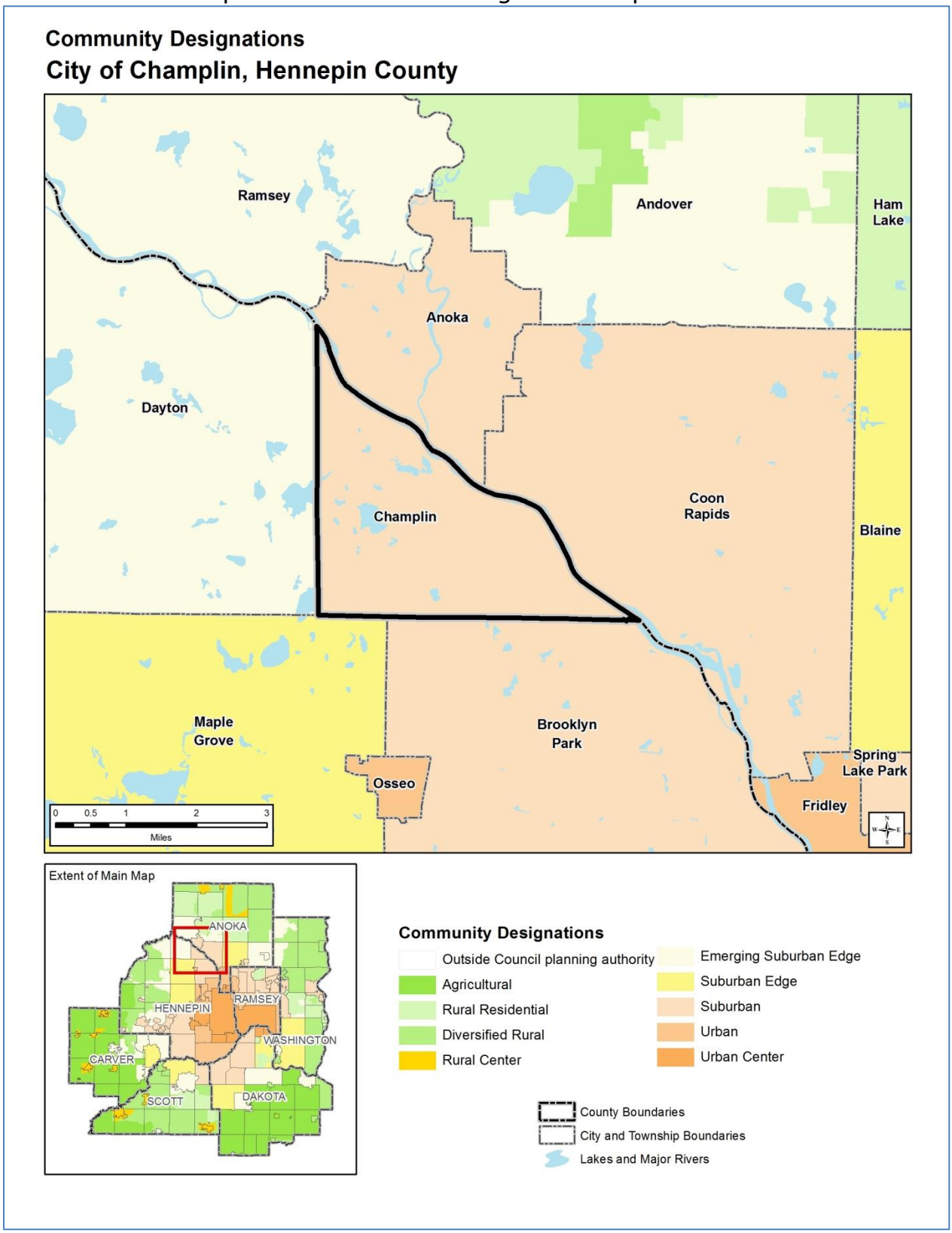


Exhibit 2-2: Existing Land Use Map

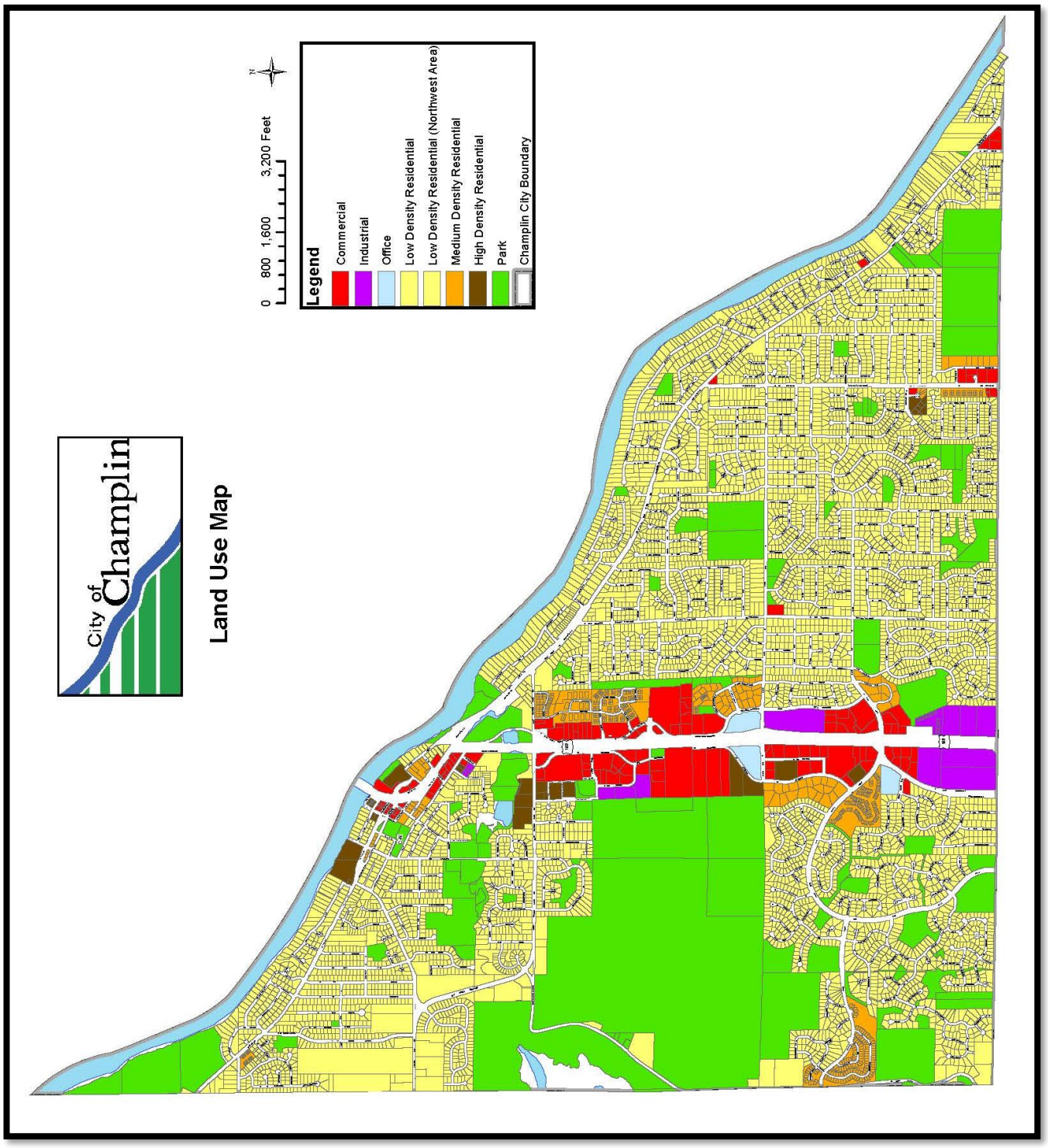


Exhibit 2-3: Future Land Use Map

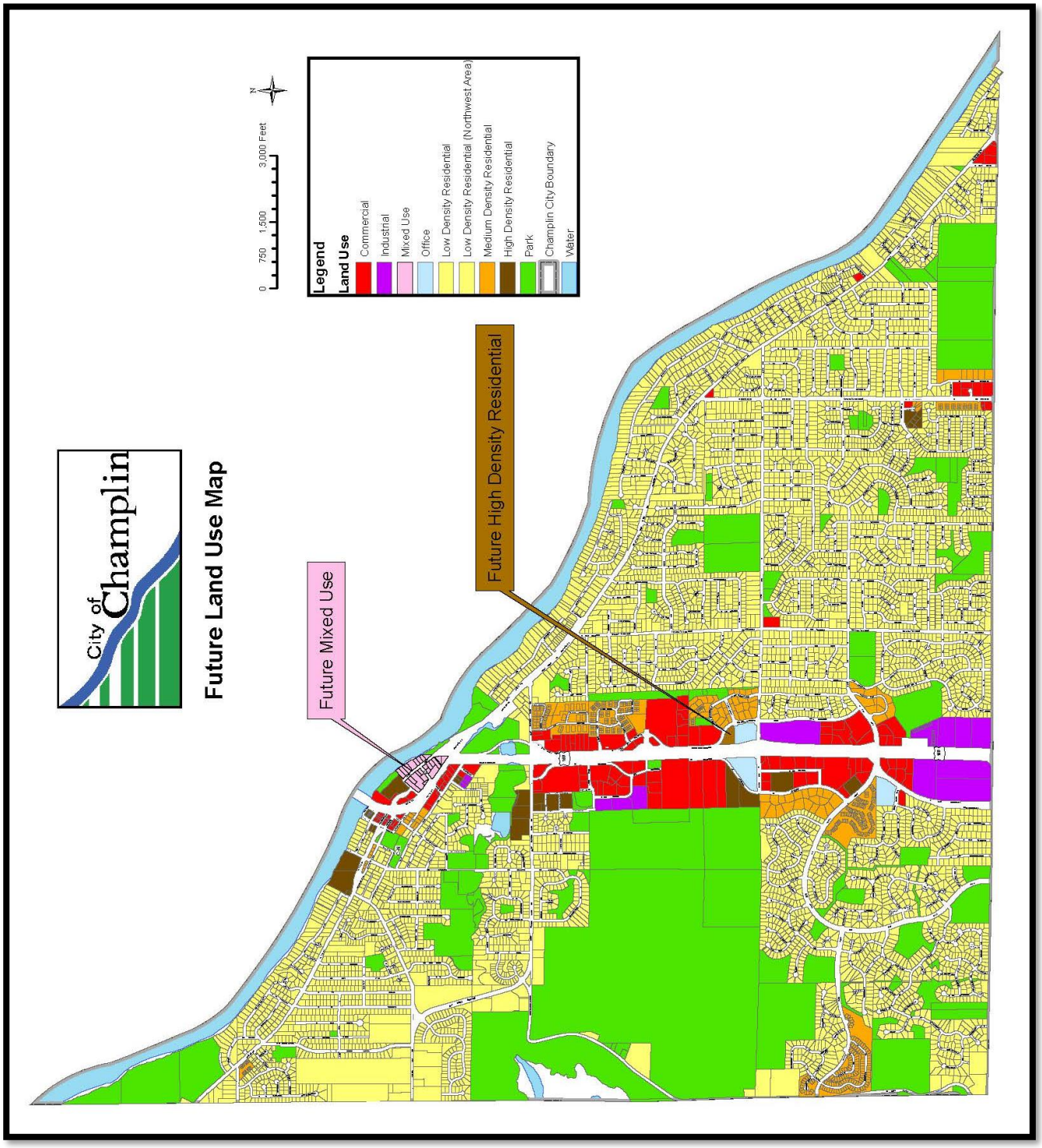
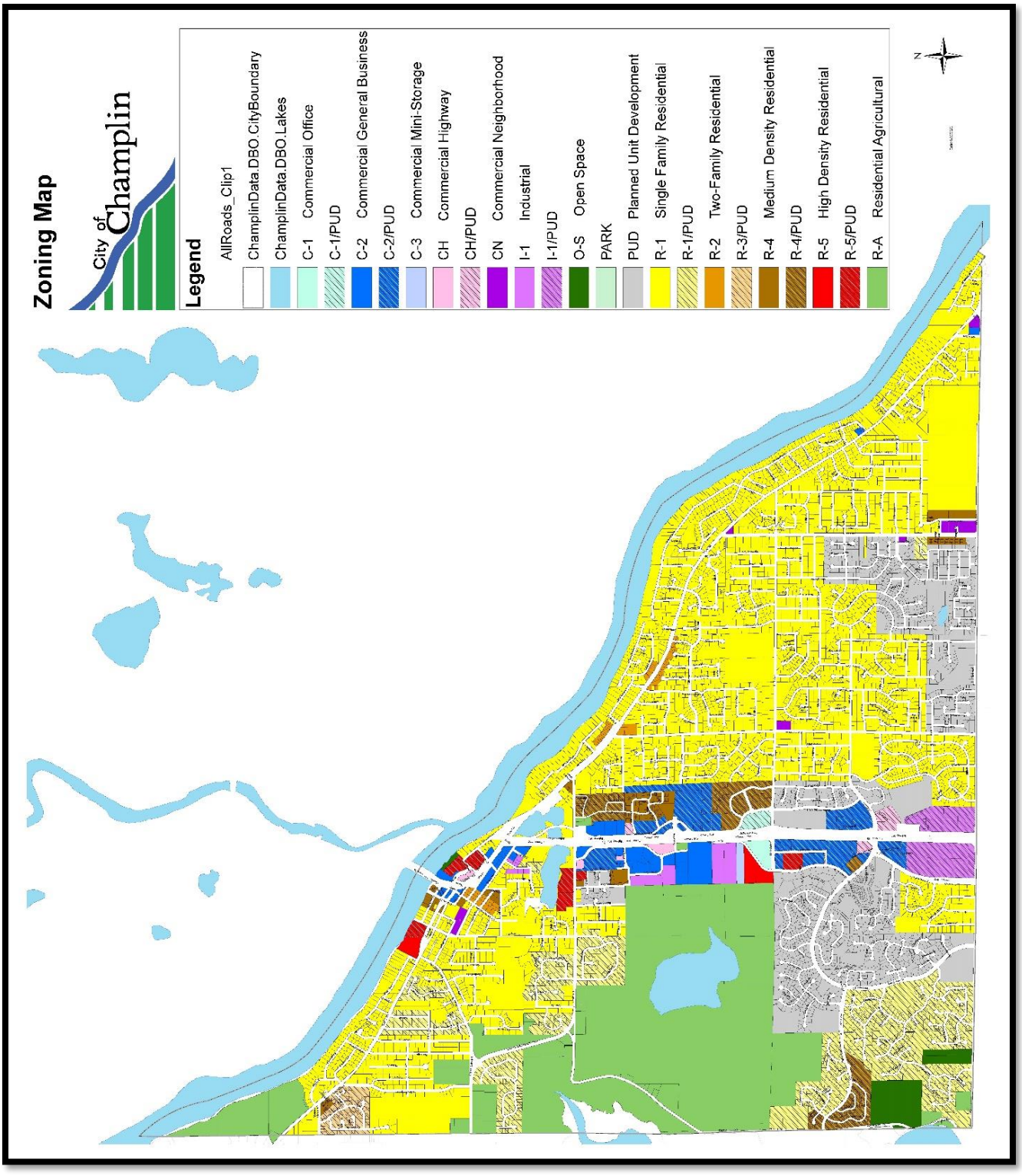


Exhibit 2-4. Zoning Map



CITY OF CHAMPLIN

COMPREHENSIVE PLAN ADDENDUM

Northwest Area

Development Guidelines

September 8th, 2025

Introduction

In 2025, Champlin placed a moratorium on five properties encompassing 19 acres total in the northwest portion of the city, generally located south of French Lake Road and north of the Reserve at Elm Creek neighborhood. The five properties encompassed are the following:

Address:	PID:
11085 French Lake Road	24-120-22-32-0004
10975 French Lake Road	24-120-22-32-0003
10951 French Lake Road	24-120-22-32-0007
10805 French Lake Road	24-120-22-32-0006
10785 French Lake Road	24-120-22-32-0005

The following development guidelines were created as a result of a detailed planning process undertaken by the City of Champlin during the moratorium. This process was initiated to evaluate development feasibility and guide appropriate long-term land use for the area. Through a combination of technical studies as well as input from the City Council, the City has established expectations for how this area should be developed. The guidelines outlined in this document reflect the vision and intend to provide direction and expectations for future development proposals.

These guidelines are part of a Comprehensive Plan amendment and will serve as the City's policy framework for reviewing any future development applications within the study area. They cover key planning elements such as land use and zoning, grading and utilities, transportation, pedestrian access, and neighborhood design and amenities. In addition to informing land use decisions, these guidelines will be used as part of the development review process to ensure consistency with the City's vision and to maintain high-quality design and functionality throughout the neighborhood.

Land Use & Zoning Regulations

Comprehensive Plan Overview

The five parcels within the Northwest Planning Study Area are currently zoned and guided in the comprehensive plan the same. No changes are proposed to the land use designations.

- Current Zoning: Residential-Agricultural (R-A)
- Guided: Low-Density Residential
    - Allows for a range of 0 to 5 units per acre

Land Use Development Requirements

The City Council's vision for this area is to maintain the Low-Density Residential designation and to create an extension of the adjacent Reserve at Elm Creek development that reflects the character and layout. To implement this vision and align with the Reserve at Elm Creek neighborhood, the following shall be incorporated into the future development:

- Lookout and walkout style single-family homes with an overall density of approximately two units per acre.
    - The following home types are prohibited:
        - Split entry
        - Slab on grade
        - Villas
        - Rambler
- Rezone from R-A to R-1 (Single-Family Residential) with a Planned Unit Development (PUD) overlay to provide design flexibility and ensure development consistency to the adjacent neighborhood.
- Similar PUD requirements as The Reserve at Elm Creek neighborhood shall apply, including the following:
    - A minimum front yard setback of 25 feet.
    - A minimum side yard setback of 7 feet.
    - A minimum lot area of 9,000 square feet.
- See the neighborhood design and amenities section for further guidelines.

Grading & Utility Requirements

Due to the site's topography, balancing earthwork across the site is a key to development. To address grading constraints, the city is supportive of the following:

- The city supports the expansion of the existing stormwater pond within The Reserve neighborhood and/or the construction of a new, oversized stormwater pond within the development area.
- Recognizing the availability of fill material and the long lead time often required to prepare these sites, the city is also supportive of allowing the import of fill outside of an active development application to these five properties. Proper guidelines must be followed, and a Conditional Use Permit (CUP) will be required for each individual parcel. Each application will be reviewed by the city and City Council.

These five parcels are located within the city's Northwest Area which trunk area charges for stormwater and sanitary sewer utilities apply. As such, there are trunk utility fees set forth in Chapter 22 of the city's fee schedule associated with development of these parcels. The developer will be responsible for all applicable trunk area fees as outlined in the Plan.

In support of long-term maintenance and access, all new stormwater management areas must be placed in dedicated outlots, with appropriate easements granted to the city. Additionally, wetland delineation will be required as part of the development process, and compliance with all federal and state regulations concerning sensitive or protected archaeological sites will be mandatory. Restrictive covenants or conservation easements may be required if such features are present.

Transportation & Roadway Requirements

To ensure adequate internal circulation and neighborhood connectivity, the city will require the extension of Cedar Ridge Lane N and Three Oaks Lane N through the development area. These roadway connections will support a continuous, through-street network. Traffic calming measures should be considered with development.

While a roadway connection into the City of Dayton via a stub along Champlin's westernmost parcel is not required, the city may consider this option, depending on the design and timing of future development. The city is also supportive of a full-access intersection at Arrowood Lane within Dayton, as recommended by the 2025 traffic study, and encourages coordination with Dayton and Hennepin County to pursue this connection.

Based on the 2025 traffic analysis and projected volumes, a secondary access to French Lake Road within Champlin is not required. The city is not supportive of a right in /right out limited access on the south side of French Lake Road at Burr Oak Lane.

The city supports the long-term traffic improvements at the intersection of French Lake Road and Brookside Trail, including the potential construction a roundabout. The 2025 traffic study identified two key recommendations relating to this intersection:

- The study evaluated projected traffic increases from the full development of the five study parcels and found that the existing all-way stop control would remain adequate to handle the additional vehicle trips.
- Traffic volumes are expected to continue rising due to regional growth, regardless of any new development in Champlin. As such, future traffic volumes beyond 2030 identified in the study may result in the need for an intersection improvement to handle the traffic on CSAH 121.

Pedestrian Trail & Sidewalk Requirements

The Fire Chief will review emergency access requirements at the time of development application. A minimum 12-foot wide trail connection to French Lake Road with collapsible bollards at the access point, will be required within the study area.

Within the neighborhood, a 5-foot-wide sidewalk shall be required on one side of all internal streets, continuing the established pattern of The Reserve neighborhood. These sidewalks must be aligned to connect to existing dead-end sidewalks to create a continuous and walkable environment.

Additionally, both the City of Champlin's Comprehensive Plan and Hennepin County planning documents identify off-street trails along the north and south sides of French Lake Road. In support of this long-term vision, the developer shall be required to either construct the applicable segment of the trail or provide escrow funds for future installation by the city.

Neighborhood Design and Amenities

To ensure a cohesive and high-quality development that complements the surrounding area, the city supports establishing minimum architectural and neighborhood design standards that reflect and continue the character of the adjacent Reserve at Elm Creek neighborhood. The future development should function as a seamless extension of The Reserve, utilizing similar design patterns, materials, and layout principles. The city will require architectural character standards, which shall be administered under a Planned Unit Development (PUD). The following shall be incorporated:

- The Reserve's design standards shall serve as the minimum design baseline. The city remains open to reviewing alternative architectural styles as part of a complete development application.
- A diversity of home models shall be required, and identical home models may not be placed adjacent to one another.
- The layout shall include curvilinear street layouts, and landscaped cul-de-sac islands maintained by a homeowners' association.
- The city standard street lighting (as used in the Reserve) shall be installed.
- A monument sign will not be required for the new development.
- While garage size may be determined by the builder, the Council supports allowing garages over 1,000 square feet through the PUD process, thereby eliminating the need for individual Conditional Use Permits (CUP).
- Concrete driveways shall be required for all lots.
- A Homeowners' Association (HOA) shall be required for all new homes within the development.
    - Where feasible, the Council encourages connection to the existing Reserve HOA to support unified maintenance and community standards.

Landscaping requirements will mirror those used in The Reserve and include the following:

- full sod installation on all lots,
- a minimum of one tree planted in each front yard, and
- a minimum of one deciduous boulevard tree per lot.

Additionally, screening along French Lake Road is required to provide both visual and noise buffering. This screening must match The Reserve's standard, including an irrigated, landscaped berm and decorative fencing with masonry end posts, maintained by the HOA. Irrigation systems will be required for all new lots and common areas. All City tree preservation code requirements shall be followed.

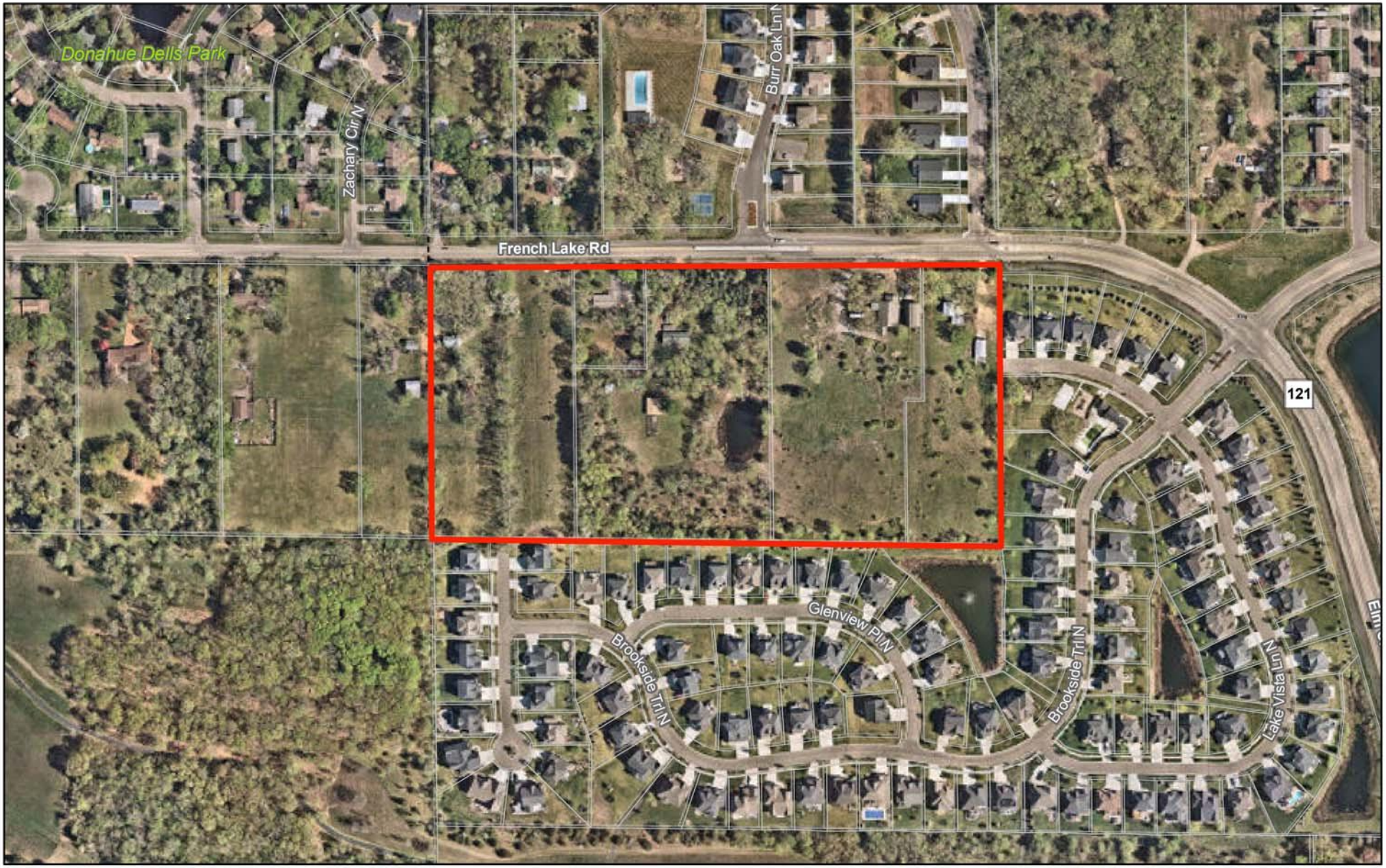
Conclusion

The development guidelines outlined in this document reflect the City of Champlin's vision for the coordinated and thoughtful redevelopment of the northwest area. They are intended to provide a clear framework for guiding future land use, infrastructure, and neighborhood design decisions. All other requirements are standard as written in City Code. By incorporating these standards into the Comprehensive Plan, the city ensures that future development aligns. These guidelines will be used by staff, developers, and decision-makers throughout the planning and review process to ensure that any proposed development meets the expectations established by the City Council.

Appendices

- Boundary Map
- 2025 Traffic Study
- 2025 Concept Plan - Possible Layout Option
- The Reserve at Elm Creek PUD Resolution

Boundary Map



Attachment A

Attachment B

French Lake Road Development Traffic Impact Study

Champlin, MN

CHAMP 183844 | April 18, 2025

SEH

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French Lake Road Development Traffic Impact Study

Prepared for the City of Champlin

1 Introduction

This traffic impact study report provides the findings related to the analysis of potential redevelopment of 10 existing rural residential parcels to low density residential along the south side of French Lake Road, also known as County State Aid Highway (CSAH) 121, adjacent to the existing Reserve neighborhood. The 10 parcels are split between the City of Champlin and the City of Dayton, with five parcels in each city.

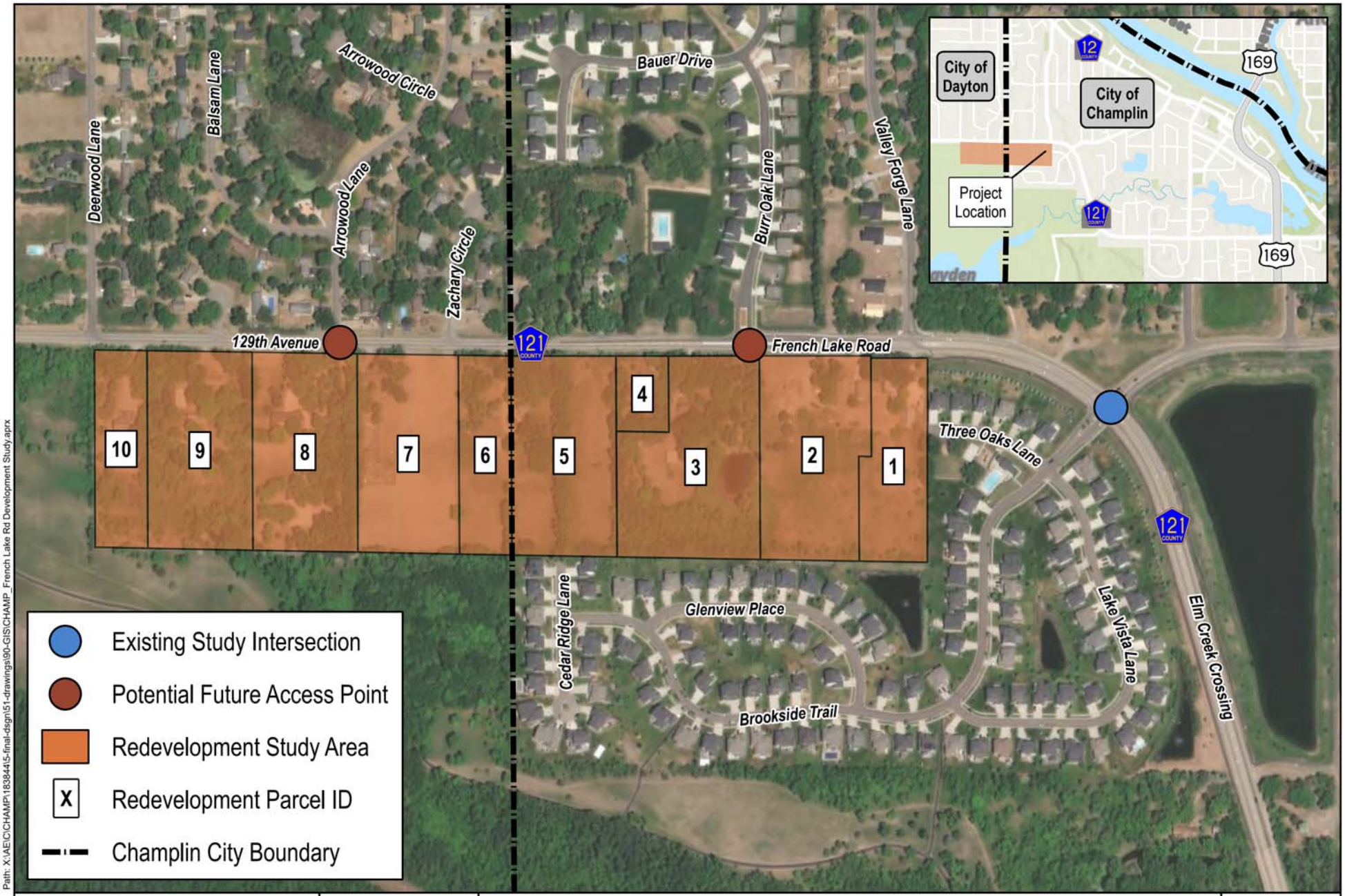
Recently, the City of Champlin placed a six-month moratorium on the five properties along the south side of French Lake Road adjacent to the existing Reserve neighborhood. While there are currently no proposed redevelopment plans for the parcels, there has been interest in the past. The moratorium is intended to study the challenges the area currently faces, including traffic and access concerns. As part of this study, meetings were held with Hennepin County and City of Dayton staff to discuss traffic, access, and roadway connections as the area redevelops.

The Reserve Neighborhood currently has only one access, through the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing. This intersection was a minor street stop-controlled intersection until Spring 2024, when it was converted to all-way stop by Hennepin County to address safety and operational issues. Also in 2024, an Intersection Control Evaluation (ICE) study was completed for the intersection, which recommended a future single-lane roundabout at the intersection. The single-lane roundabout is tentatively planned for construction in 2027 as this is when the $500,000 cost participation funding from Hennepin County would expire.

The primary focus of this traffic impact study is to determine the impact of the potential redevelopment of the 10 parcels on the both the surrounding network as well as the impact to traffic volumes within the existing Reserve neighborhood. The study will focus on the existing access at the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing but will also look at other potential access locations to the neighborhood.

Traffic operations analyses were completed for the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing for the existing 2023 conditions, 2030 No Build conditions, and five 2030 Build scenarios as part of this project. The intersection was analyzed for all future scenarios under both all-way stop and the planned single-lane roundabout control. 2030 Build conditions were analyzed to determine the direct impacts of any potential redevelopment while still ensuring any recommended improvements could last as background traffic grows.

Figure 1 shows the project area, study intersection, potential future access locations, and 10 potential redevelopment parcels included in the study.



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SEH

N

Project: CHAMP 183844
Print Date: 4/22/2025

Map by: jdanibas
Projection: Hennepin County Coords.
Source: ESRI

PROJECT LOCATION

French Lake Road Development Traffic Study
Champlin, MN

Figure 1

2 Existing Conditions

CSAH 121, which is known as French Lake Road west of Brookside Trail and Elm Creek Crossing east of Brookside Trail in the City of Champlin and 129th Avenue and Fernbrook Lane in Dayton, extends from US Highway 169 to the east and CSAH 81 to the west/south. In the study area, CSAH 121 is an east-west major collector roadway, which provides access between the primarily residential developments of Champlin and Dayton and US Highway 169. In the study area, CSAH 121 is a two-lane undivided roadway with turn lanes at the major intersections and access points in Champlin. In Dayton, CSAH 121 is generally a two-lane, undivided roadway without turn lanes. The posted speed limit on CSAH 121 in the study area is 45 mph.

Brookside Trail, which currently serves as the only access to the existing Reserve neighborhood, is a two-lane, undivided local roadway. The existing Reserve neighborhood currently has 111 single family homes, all of which use Brookside Trail, and the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing intersection, to enter and exit the neighborhood. There is currently no posted speed limit on Brookside Trail, so a statutory speed limit of 30 mph was assumed.

French Lake Road is a city street north of CSAH 121, which extends from CSAH 121 to CSAH 12 (Dayton Road) and is functionally classified as major collector. French Lake Road currently serves primarily residential land uses as well as provides an alternative route to connect to US Highway 169 via Dayton Road within the City of Champlin. In the study area, French Lake Road is a two-lane, undivided roadway with a posted speed limit of 30 mph.

The existing Reserve neighborhood currently has two roadways, Three Oaks Lane and Cedar Ridge Lane, which were planned to connect to any potential development of the current rural residential parcels that are the focus of this study. As a result, both roadways are likely to see increased traffic volumes with any potential redevelopment in the area. Both roadways are currently two-lane, undivided roadways with residential driveway accesses.

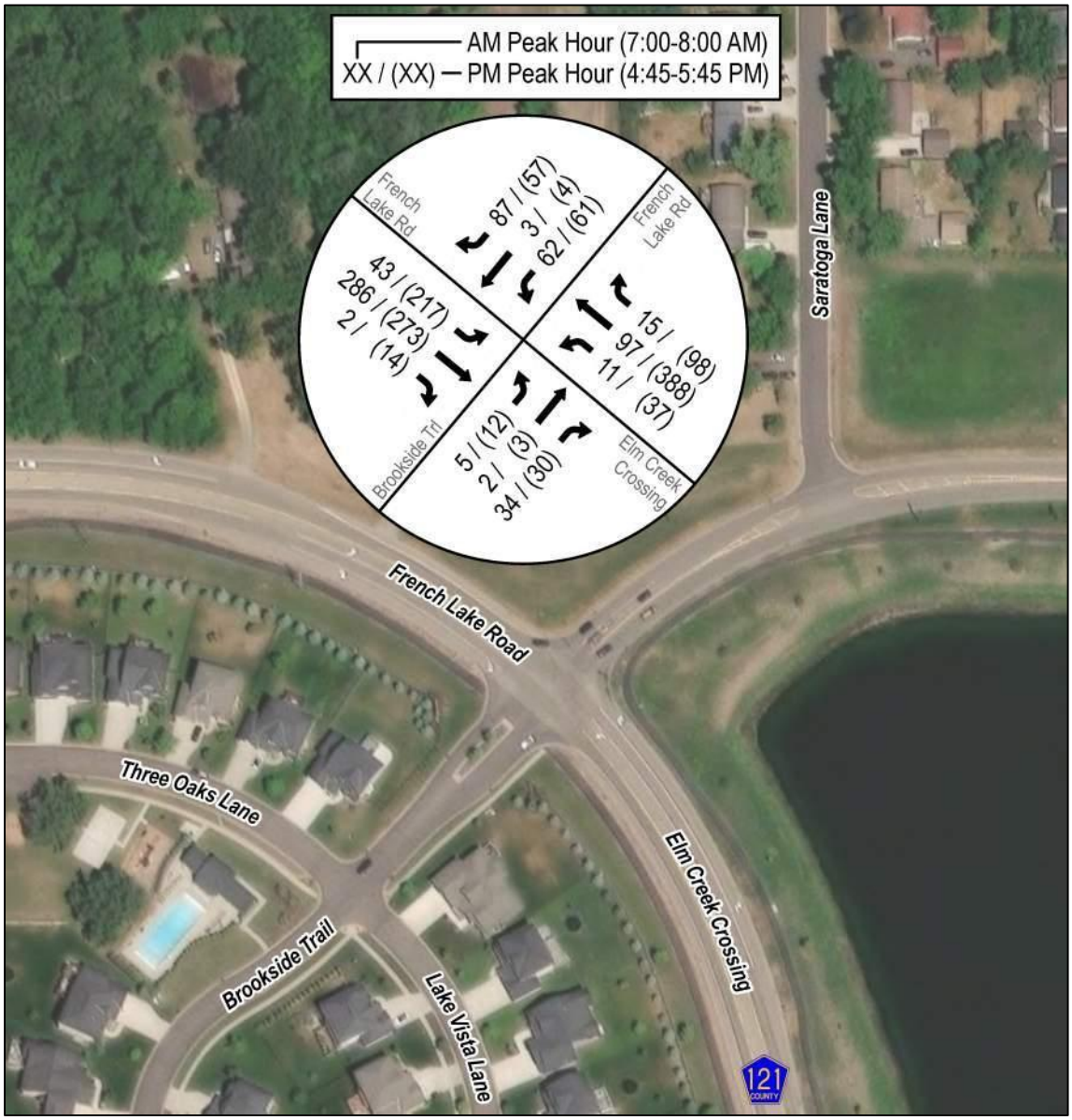
As previously mentioned, the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing was converted from minor street stop-control to all-way stop control by Hennepin County in Spring 2024 to address safety and operational issues at the intersection. Additionally, CSAH 121 was restriped to eliminate the existing dedicated right turn lanes and have only two lanes on each approach. Below is the existing lane geometry at the intersection, including the changes from Spring 2024.

- Eastbound – CSAH 121 (French Lake Road) – a dedicated left turn lane and a shared through/right turn lane.
- Westbound – CSAH 121 (Elm Creek Crossing) – a dedicated left turn lane and a shared through/right turn lane.
- Northbound – Brookside Trail – a shared left turn/through lane and a dedicated right turn lane.
- Southbound – French Lake Road – a dedicated left turn lane and a shared through/right turn lane.

2.1 Vehicle Volumes

A 24-hour turning movement count was collected at the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing in June 2023 as part of the ICE report for the intersection, which was utilized as part of this study. Based on the existing volumes, the AM peak hour is 7:00 to 8:00 AM and the PM peak hour is 4:45 to 5:45 PM. The intersection currently serves approximately 2.5% heavy trucks each day. **Figure 2** shows the 2023 existing traffic volumes for the AM and PM peak hour. The existing Reserve neighborhood has 112 single family homes and generates approximately 1,130 trips per day based on the daily traffic volumes on Brookside Trail.

Figure 2 – 2023 Existing Traffic Volumes



3 Discussions with Hennepin County and City of Dayton

As part of this study, City of Champlin and SEH staff met with both Hennepin County and City of Dayton staff to discuss traffic, access, roadway connections, and other topics related to potential redevelopment in the study area. These meetings were used to help determine the potential development and access scenarios which were analyzed as part of this project. Below is a summary of the key outcomes of each meeting.

3.1 Meeting with Hennepin County

Key takeaways from the February 25, 2025, meeting with the City of Champlin, SEH, and Hennepin County staff are outline below. Following the meeting, Hennepin County provided an email with further recommendations related to potential redevelopment and access along CSAH 121.These recommendations are also included in the key takeaways.

- CSAH 121 is not programmed or planned for reconstruction in the next 10 years.
- Based on existing and future context and land uses, CSAH 121 is expected to remain a two-lane roadway with turn lanes at key intersections.
- The County recommended managing existing and future access along CSAH 121 through consolidation, realignment, and promoting local roadway connectivity to promote safety and mobility for all users.
- Specific to the redevelopment study area, new access to CSAH 121, if necessary, should align with existing public street accesses:
  - Burr Oak Lane – The county would only allow right-in/right-out access here due to the access spacing along CSAH 121 between Burr Oak Lane and Valley Forge Lane. The plan is to maintain full access at Valley Forge Lane and keep Burr Oak Lane as right-in/right-out.
  - Arrowwood Lane – full access; potential location for future enhanced traffic control if needed.
- The County encourages local road and multi-modal connections across the city boundaries to provide users options to enter and exit their future neighborhood.
- The city should consider providing connections for pedestrians and bicyclists to and through the future neighborhood as the nearby Elm Creek Park Reserve is a destination for pedestrians and bicyclists in the area.

3.2 Meeting with City of Dayton

Below are the key takeaways from the meeting held on February 25, 2025, with City of Champlin, SEH, and City of Dayton staff.

- The City of Dayton supports a roadway connection between the two cities to provide a second access point in and out of the neighborhood on both the Champlin and Dayton side.
- The City of Dayton has concerns about the timeline for any potential development with the connection between Champlin and Dayton as there is currently no development interest outside of the two parcels on either side of the city boundary.

- Potential annexation of entire or partial City of Dayton parcels has been discussed with previous development concepts in this area. The Dayton City Council has no interest in considering any potential annexation.
- City of Dayton staff mentioned the potential for a “temporary” access to CSAH 121 that aligns with Zachary Circle in the event that development does not allow for a connection at Arrowwood Lane. This “temporary” access would remain in place until development progressed to allow for the connection at Arrowwood Lane.
  - The potential “temporary” access was discussed with Hennepin County staff, and they advised that the access would need to be constructed like a permanent access with turn lanes because the timeline to the Arrowwood Lane access is unknown. As a result, a “temporary” access would likely be costly and provide limited benefit.
  - A construction only or emergency vehicle only access at a location other than Burr Oak Lane or Arrowwood Lane could be considered.

4 Future Conditions

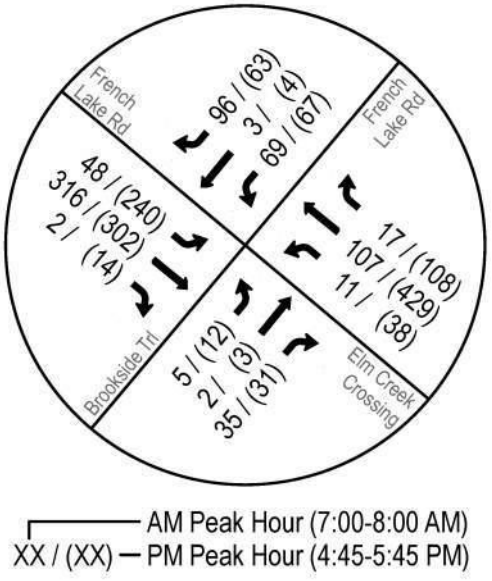
As part of the traffic impact analysis for the potential redevelopment parcels, traffic volumes for 2030 No Build and five 2030 Build scenarios were estimated. Traffic volumes were estimated for the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing as well as along key roadways within the existing and potential neighborhood area. 2030 Build conditions were analyzed to determine the direct impacts of any potential redevelopment while still ensuring any recommended improvements would remain effective as background traffic grows.

4.1 Background Traffic Growth

To forecast background traffic growth at the study intersection, the traffic forecasts from the 2024 ICE study at the intersection were used. The ICE study utilized historical Annual Average Daily Traffic (AADTs) and forecasts from the 2040 Champlin Comprehensive Plan to estimate traffic growth at the intersection. The ICE study used an annual growth rate of 1.5% per year on each intersection leg to estimate future traffic volumes, except those on and off Brookside Trail. A minimal annual background growth rate of 0.5% per year was applied to all trips on and off Brookside Trail because existing Reserve neighborhood traffic is not expected to grow significantly and to avoid double counting the potential redevelopment area.

Figure 3 shows the 2030 No Build traffic volumes for the AM and PM peak hour.

Figure 3 – 2030 No Build Traffic Volumes



4.2 Planned Intersection Improvements

The 2024 ICE study at the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing recommended a future single-lane roundabout at the intersection. The single-lane roundabout is tentatively planned for construction in 2027 as this is when the $500,000 cost participation funding from Hennepin County would expire.

With the plan for a future roundabout, all future traffic operations analysis scenarios were analyzed under both all-way stop and single-lane roundabout control to determine the impact of the development on both traffic control alternatives.

4.3 Potential Future Access

Based on the meetings with Hennepin County and the City of Dayton, two potential future accesses to the future neighborhood were considered. Within the City of Champlin, there is a potential to connect to CSAH 121 at Burr Oak Lane. That intersection is currently right-in/right-out only, which is expected to remain if a connection to the south is added.

Within the City of Dayton, there is a potential to connect to CSAH 121 at Arrowwood Lane. This location would be expected to remain full access long-term, with the potential for enhanced traffic control if needed in the future. This location would provide a second full access point for the neighborhood if a connection between the two cities is provided and would likely be the preferred access for people going to and from the west.

4.4 Redevelopment Scenarios

Based on the potential development timeline in the area and the takeaways from the meetings with Hennepin County and City of Dayton staff, five redevelopment scenarios were identified for analysis. The five Build scenarios are described below and include various levels of redevelopment, internal roadway connections, and external access locations.

Build Scenario 1 – Initial Redevelopment

Currently, the City of Champlin has only heard about interest in redeveloping the two parcels on either side of the Champlin/Dayton city boundary; Build Scenario 1 looks at the impact of the initial redevelopment of just those parcels. The development would connect to Cedar Ridge Lane and all residents would enter and exit the neighborhood via Brookside Trail and the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing.

Figure 4 shows the redevelopment area, general internal roadway connection, and a comparison of existing and build daily traffic volumes on major neighborhood streets for Build Scenario 1.

Build Scenario 2 – Limited Access Redevelopment

Based on discussions with Hennepin County, any new access to the neighborhood on the south side of CSAH 121 should align with either Arrowwood Lane or Burr Oak Lane. With the timeline for redevelopment of the area being unknown, and different owners for each of the parcels, there is a potential that individual parcels could redevelop slowly over time. Build Scenario 2 looks at the impact of a scenario where five parcels redevelop without the opportunity for additional access. Under this scenario, there would be new connections to both Cedar Ridge Lane and Three Oaks Lane. All traffic would still be required to enter and exit the neighborhood via Brookside Trail and the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing.

Figure 5 shows the redevelopment area, general internal roadway connection, and a comparison of existing and build daily traffic volumes on major neighborhood streets for Build Scenario 2.

Build Scenario 3 – Full Development with Dayton Connection

During the meeting with City of Dayton staff, they supported a connection between the two cities to provide a second access point in and out of the neighborhood. Build Scenario 3 includes full redevelopment of the 10 parcels, an internal connection between the two cities, and an external

neighborhood access at the intersection of 129th Avenue at Arrowwod Lane, which would be a full access intersection. Under this scenario, there would be new connections to Cedar Ridge Lane and Three Oaks Lane. Build Scenario 3 provides two options for traffic to enter and exit the neighborhood: 129th Avenue at Arrowwood Lane and French Lake Road at Brookside Trail/Elm Creek Crossing.

Figure 6 shows the redevelopment area, general internal roadway connection, and a comparison of existing and build daily traffic volumes on major neighborhood streets for Build Scenario 3.

Build Scenario 4 – Full Development without Dayton Connection

While the City of Dayton supports an access between the two cities, Dayton staff has had issues with previous redevelopment plans and how the connection between the cities would be made. In addition, the timeline for redevelopment in Dayton is unknown and City staff expressed concern about building a connection that may remain unused for an extended period. Based on those issues, there is a potential the connection between the cities does not occur. Therefore, Build Scenario 4 includes full redevelopment without a connection between the two cities. In Build Scenario 4, there would be two new external connections; a full access at Arrowwood Lane and a right-in/right-out access at Burr Oak Lane. Similar to previous build scenarios, there would be new connections to Cedar Ridge Lane and Three Oaks Lane. Under Build Scenario 4, all Dayton traffic would be required to enter and exit their neighborhood via the intersection of CSAH 121 at Arrowwood Lane. However, Champlin traffic would have two options to enter and exit the neighborhood: French Lake Road at Burr Oak Lane and French Lake Road at Brookside Trail/Elm Creek Crossing.

Figure 7 shows the redevelopment area, general internal roadway connection, and a comparison of existing and build daily traffic volumes on major neighborhood streets for Build Scenario 4.

Build Scenario 5 – Full Development without Dayton Connection (No Burr Oak Lane Access)

Build Scenario 5 is similar to Build Scenario 4, but with the access at Burr Oak Lane removed. The purpose of this scenario is to evaluate the impact of not providing a second access to the neighborhood under full redevelopment conditions. Like previous build scenarios, there would be new connections to Cedar Ridge Lane and Three Oaks Lane. Under Build Scenario 5, all Dayton traffic would still be required to enter and exit their neighborhood via the intersection of CSAH 121 at Arrowwood Lane. However, under Build Scenario 5, all Champlin traffic would have to enter and exit the neighborhood via the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing.

Figure 8 shows the redevelopment area, general internal roadway connection, and a comparison of existing and build daily traffic volumes on major neighborhood streets for Build Scenario 5.

4.4.1 Trip Generation and Distribution

Any redevelopment of the study area is expected to be a planned unit development, which allow for differing lot sizes that typical single family (R-1) zoning. For this area, any redevelopment would likely be either walkout style homes or villa style homes. While both are single family homes, there are differing lot sizes. Walkout style lots allow for up to two units per acre and villa style lots for up to four units per acre. **Table 1** shows the maximum allowable walkout and villa style lots on each of the ten study parcels. **For this traffic study, it was assumed that all five Build scenarios would include villa style lots, with four units per acre, as a "worst-case"**

(i.e., highest trip generation) traffic scenario because there are no currently proposed development layouts. It should be noted that this assumption does not account for the necessary roadways and stormwater ponds within the neighborhood, so it is highly likely that the total number of homes will be lower than what was used for this study. The same assumption of four units per acre was used for both the Champlin and Dayton lots.

Table 1 – Maximum Walkout and Villa Lots by Study Parcel

City	Parcel	Walkouts (2 per acre)[1]	Villas (4 per acre)[1]
Champlin	1	6	12
	2	9	19
	3	12	23
	4	2	3
	5	9	19
Dayton	6	5	9
	7	9	18
	8	9	19
	9	9	19
	10	5	9
Champlin Total		38	76
Dayton Total		37	74
Total		**75**	**150**

1 based on City of Champlin subdivision requirements

The Institute of Transportation Engineers' (ITE) Trip Generation Manual, 11th edition was used to estimate the total number of trips generated by the proposed residential development during the AM and PM peak hours as well as the daily trips. ITE Land Use Code 210 – Single Family Detached was used for the trip generation estimates, the rates for Land Use Code 210 are shown in **Table 2**. **Table 3** summarizes the AM peak hour, PM peak hour, and daily trip generation estimates for each of the five Build Scenarios analyzed as part of this project. For scenarios where there is no connection between Champlin and Dayton, trip generation estimates were separated by city.

Table 2 – Single Family Detached Trip Generation Rates and Distributions

Land Use	ITE Code	Units	AM Peak Hour			PM Peak Hour			Daily
			Rate	Enter	Exit	Rate	Enter	Exit	
Single Family Detached	210	Homes	0.70	25%	75%	0.94	63%	37%	9.43

Table 3 – Trip Generation Estimates (Villa Homes)

Scenario	Number of Homes	Daily	AM Peak Hour			PM Peak Hour		
			Enter	Exit	Total	Enter	Exit	Total
Build Scenario 1	28	264	5	15	20	16	10	26
Build Scenario 2	77	726	14	40	54	45	27	72
Build Scenario 3	150	1,415	26	79	105	89	52	141
Build Scenario 4 and 5	76 in Champlin	716	13	40	53	45	26	71
	74 in Dayton	698	13	39	52	44	26	70
	150 total	**1,415**	**26**	**79**	**105**	**89**	**52**	**141**

Trips from the redevelopment areas were distributed to the external roadway network and the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing based on the travel patterns from the June 2023 traffic count data. While the distribution is slightly different for the AM peak hour, PM peak hour, and daily trips, the general daily trip distribution is shown below.

- 71% to/from the east on CSAH 121 (Elm Creek Crossing)
- 12% to/from the northeast on French Lake Road
- 17% to/from the west on CSAH 121 (French Lake Road/129th Avenue)

Trips were distributed to the internal roadway network based on likely routes from each parcel based on their proximity and route to each neighborhood access point. For scenarios with additional access points, some existing neighborhood trips, such as those in the Cedar Ridge Lane area, were also routed to the new access points based on likely routing changes.

Figure 9 shows the 2030 Build traffic volumes for the AM and PM peak hour in each of the five build scenarios.

4.4.2 Neighborhood Roadway Volumes

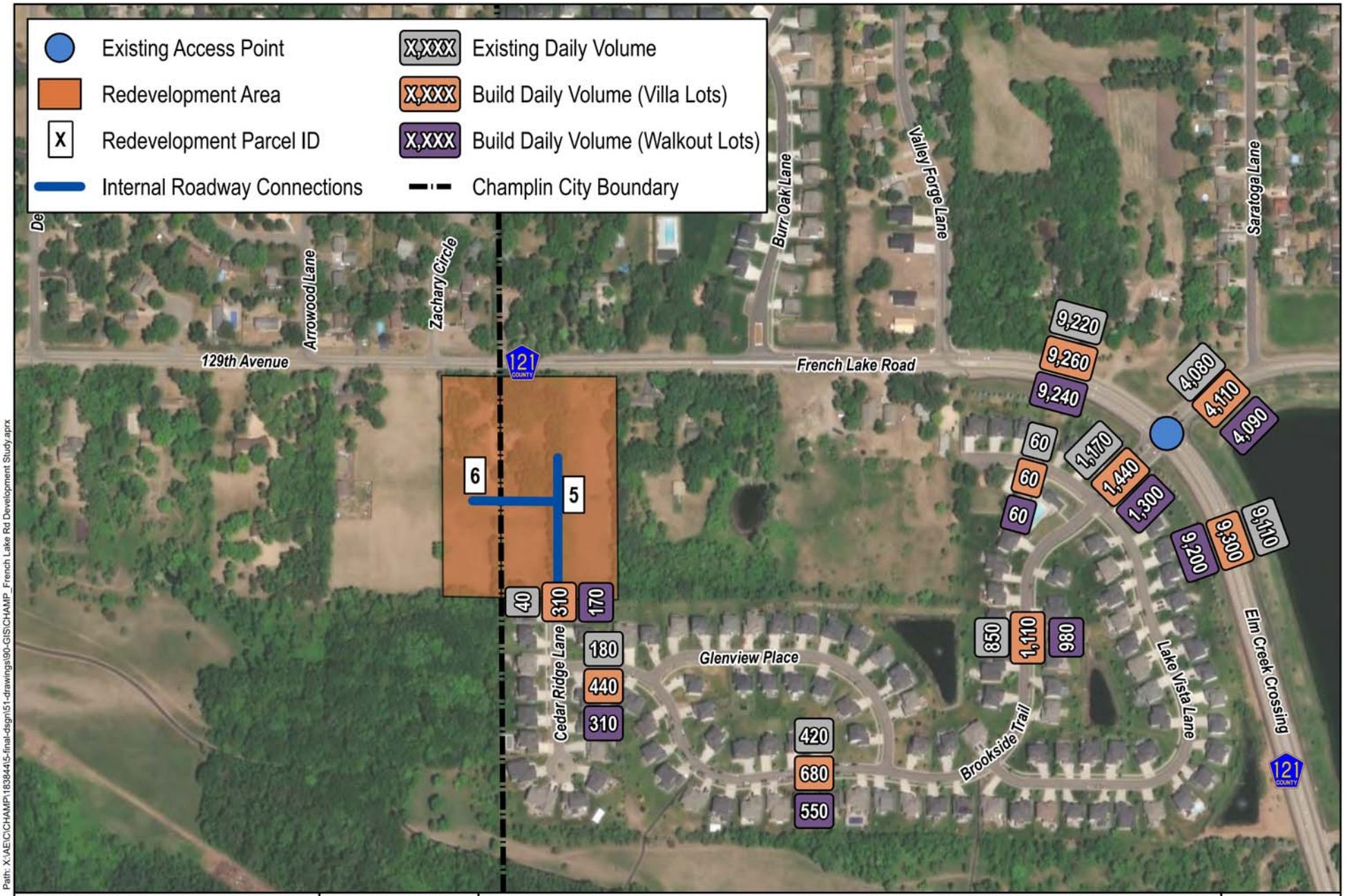
As part of this study, the existing and build daily volumes were estimated on various roadways within the neighborhood to ensure that each roadway would have adequate capacity. Daily roadway volumes were estimated for each build scenario with both walkout (2 per acre) and villas (4 per acre) lots. A typical 2-lane residential street, such as those in the Reserve neighborhood, has a capacity of approximately 1,500 vehicles per day. Based on the daily volume estimates for the neighborhood roadways, the only section of roadway that would exceed 1,500 vehicles per day is Brookside Trail between French Lake Road and Three Oaks Lane/Lake Vista Lane. This short segment of roadway does not have any residential driveways, has a short median, and has turns lane for vehicles exiting the neighborhood, which means that this segment of roadway was designed to carry higher traffic volumes than the typical 1,500 vehicles per day.

Table 4 summarizes the daily traffic volumes on the neighborhood access roadways under 2023 existing, 2030 No Build, and all five 2030 Build scenarios with both walkout and villa lots. **Figures 4 through 8** also show a comparison of the existing and build daily traffic volumes, with both

walkout and villa lots, on major neighborhood streets for each of the five build scenarios. In general, Brookside Trail and Three Oaks Lane will see the largest increase in traffic volumes with any redevelopment, as both roadways provide a connection to the Brookside Trail neighborhood access. However, once the new east-west connection through the development area is completed (Build Scenarios 3, 4, and 5), there is expected to be minimal change in existing Brookside Trail volumes as Three Oaks Lane would provide an easier connection to get to the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing.

Table 4 – Daily Traffic Volumes on Neighborhood Accesses

Scenario	Brookside Trail (vehicles per day)		Burr Oak Lane (vehicles per day)		Arrowwood Lane (vehicles per day)	
	Walkouts	Villas	Walkouts	Villas	Walkouts	Villas
2023 Existing	1,130		n/a		n/a	
2030 No Build	1,170		n/a		n/a	
2030 Build Scenario 1	1,310	1,440	n/a		n/a	
2030 Build Scenario 2	1,530	1,900	n/a		n/a	
2030 Build Scenario 3	1,410	1,740	n/a		470	850
2030 Build Scenario 4	1,370	1,620	160	270	350	700
2030 Build Scenario 5	1,530	1,890	n/a		350	700



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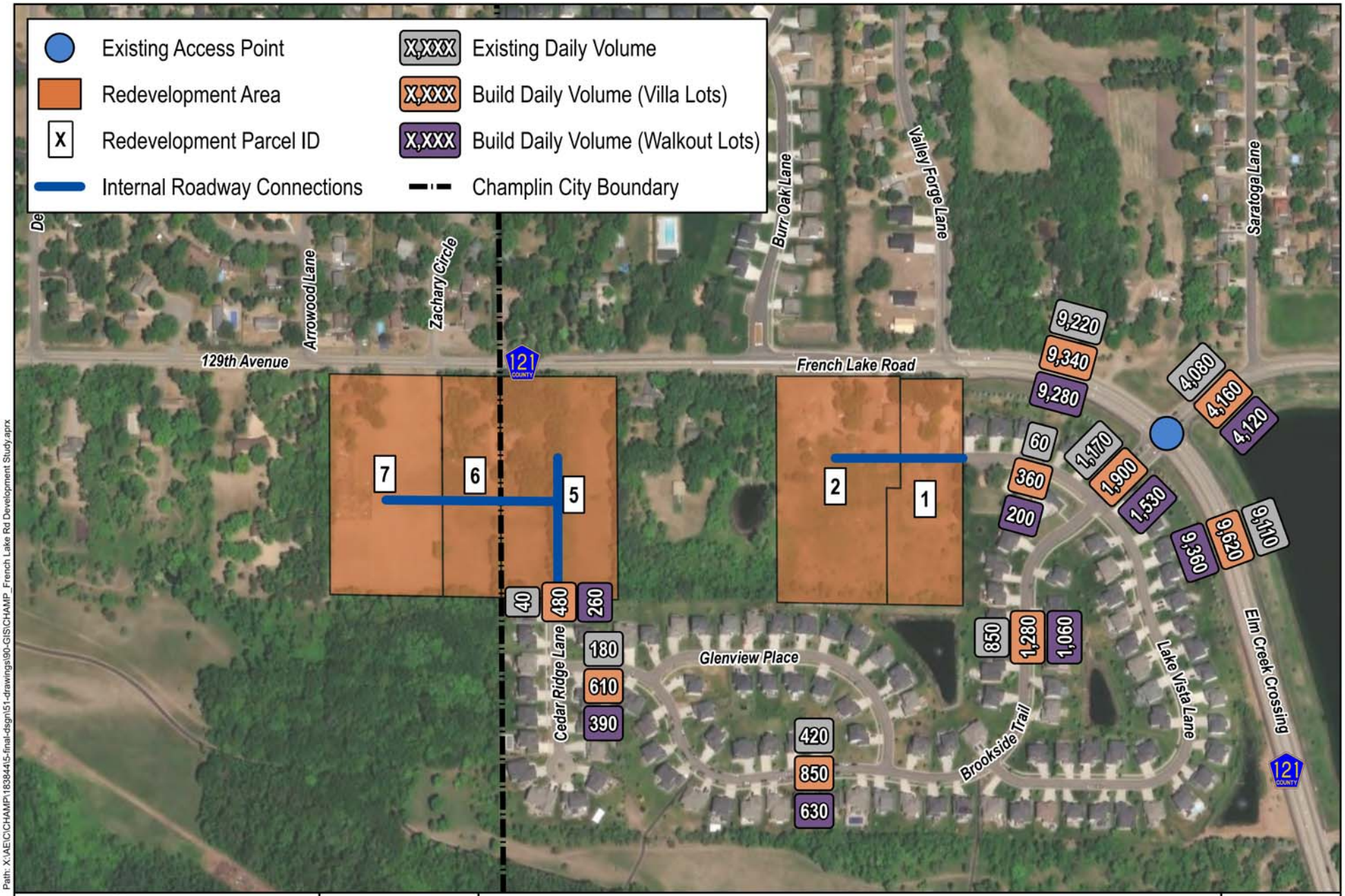
Project: CHAMP 183844
Print Date: 4/18/2025

Map by: jdanibas
Projection: Hennepin County Coords.
Source: ESRI

BUILD 1 - INITIAL REDEVELOPMENT

French Lake Road Development Traffic Study
Champlin, MN

Figure 4



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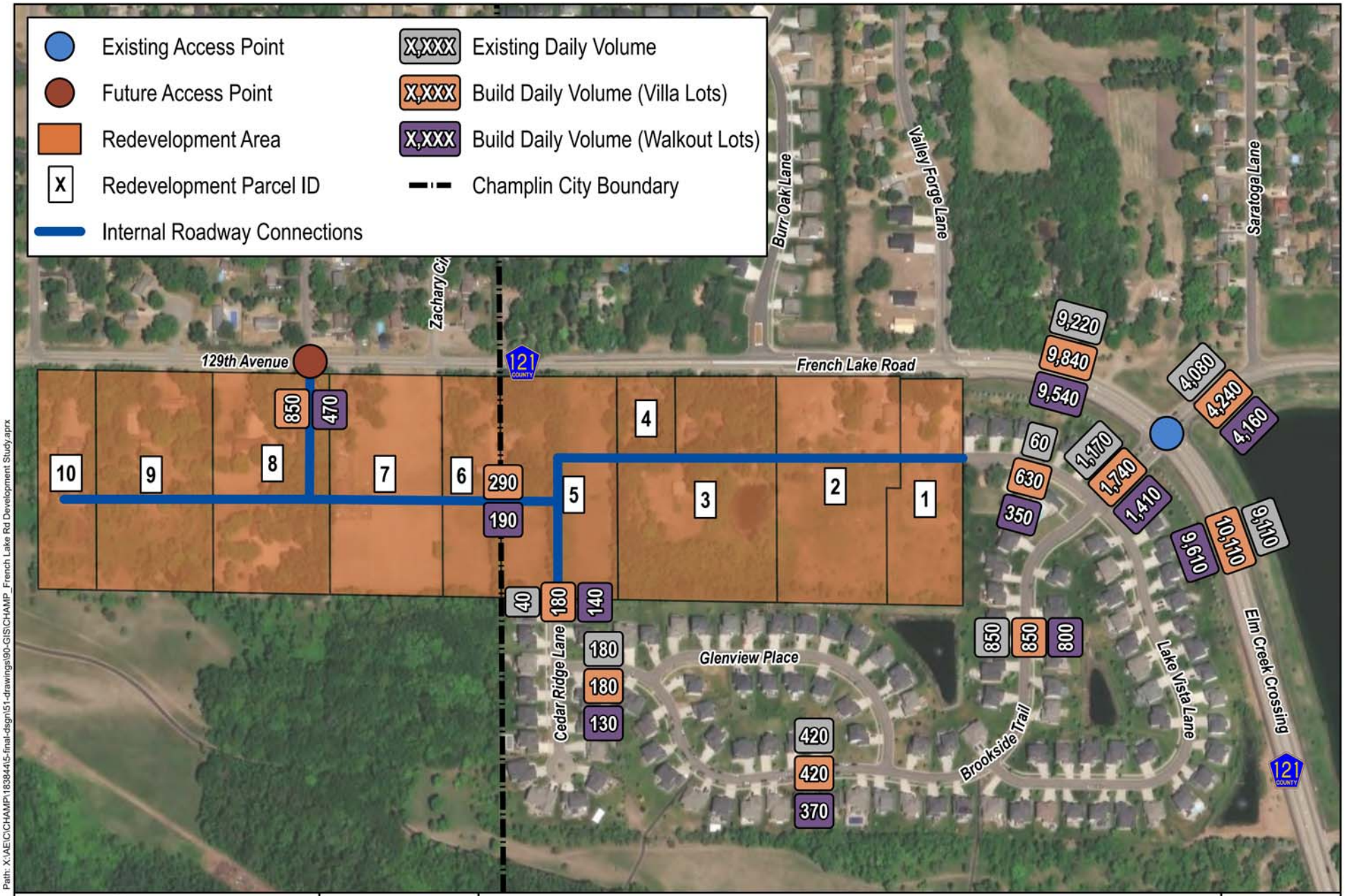
Project: CHAMP 183844
Print Date: 4/22/2025

Map by: jdanibas
Projection: Hennepin County Coords.
Source: ESRI

BUILD 2 - LIMITED ACCESS REDEVELOPMENT

French Lake Road Development Traffic Study
Champlin, MN

Figure 5



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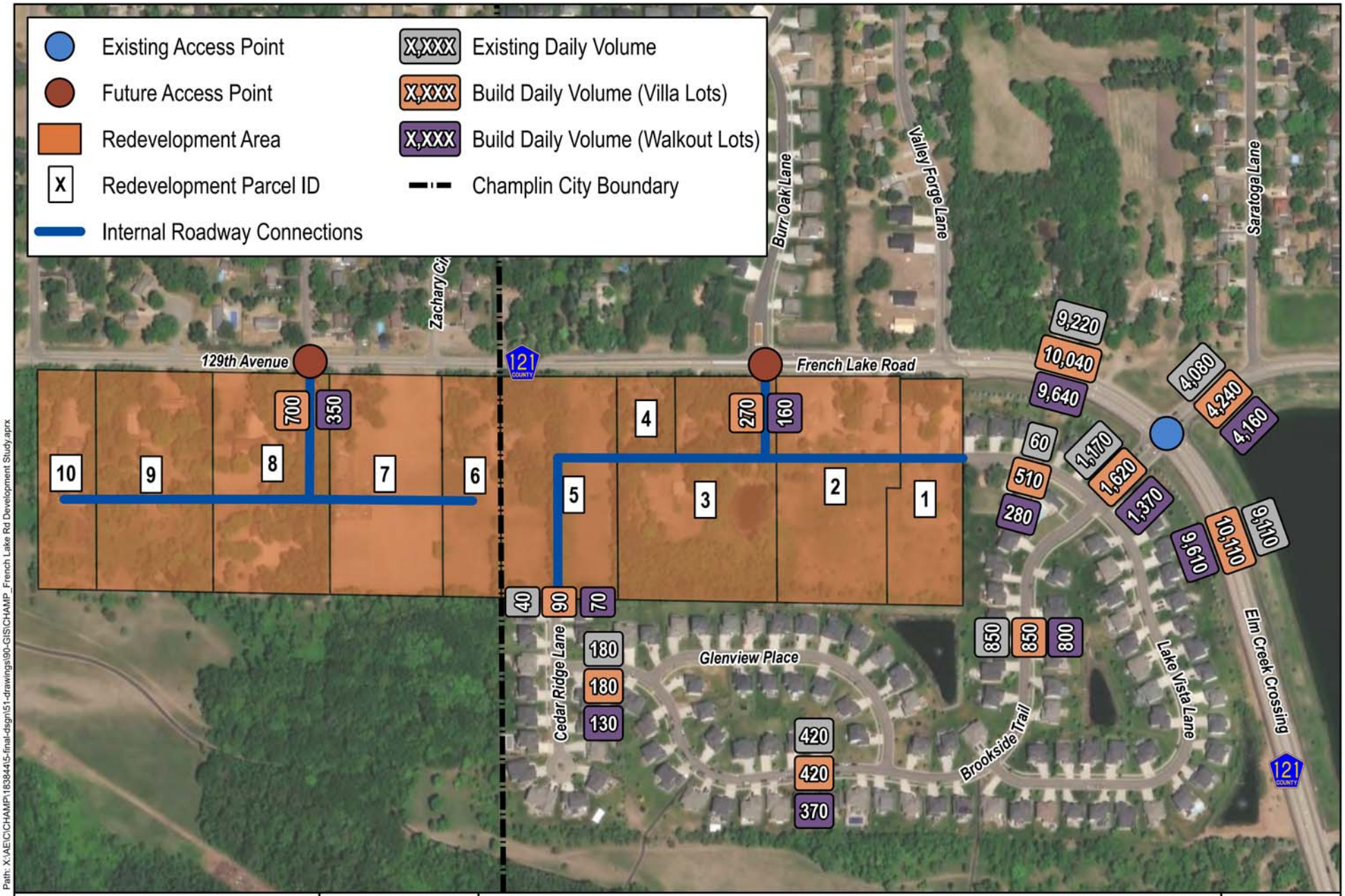
Project: CHAMP 183844
Print Date: 4/22/2025

Map by: jdanibas
Projection: Hennepin County Coords.
Source: ESRI

BUILD 3 - FULL DEVELOPMENT WITH DAYTON CONNECTION

French Lake Road Development Traffic Study
Champlin, MN

Figure 6



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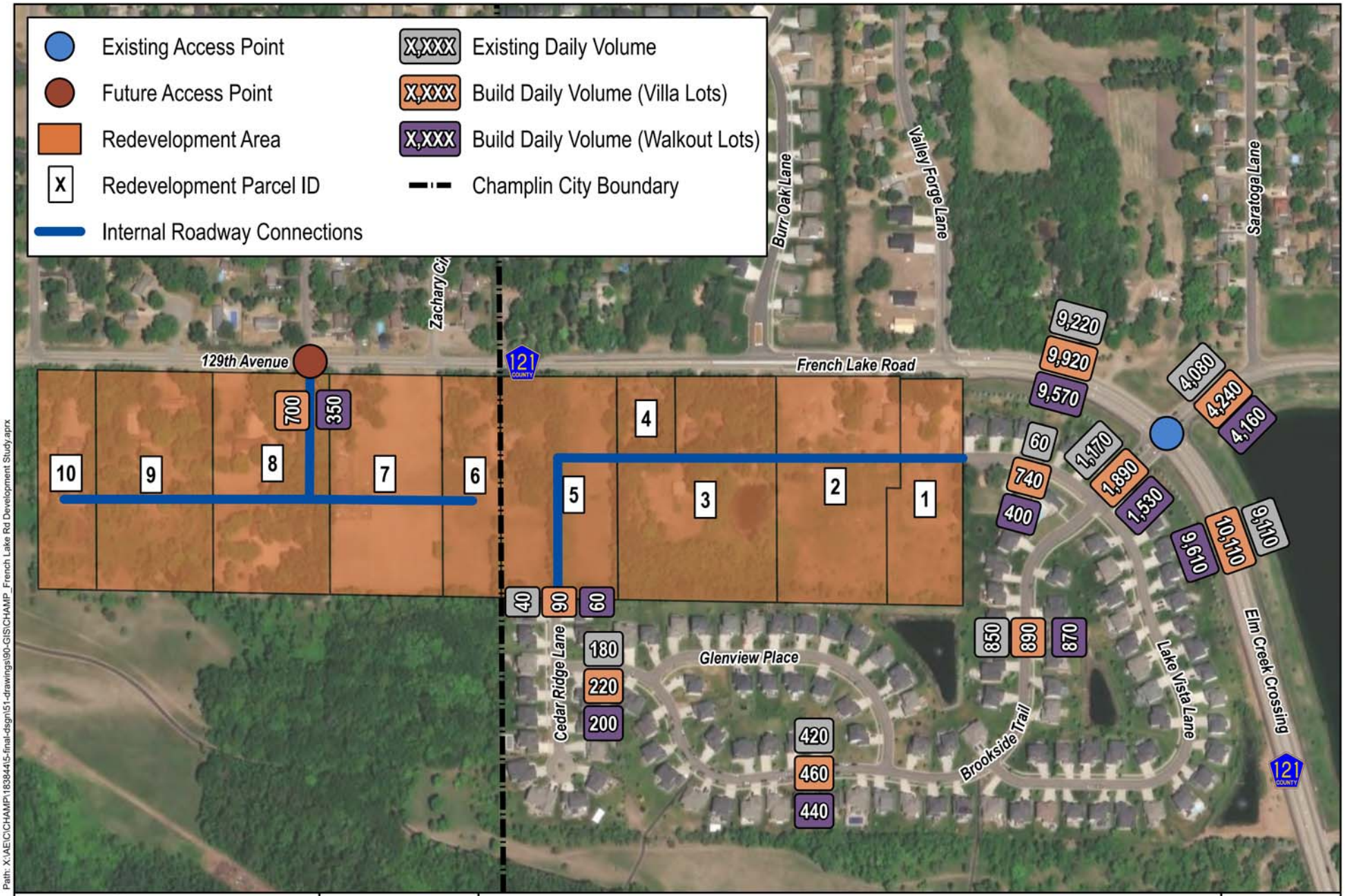
Project: CHAMP 183844
Print Date: 4/22/2025

Map by: jdanibas
Projection: Hennepin County Coords.
Source: ESRI

BUILD 4 - FULL DEVELOPMENT WITHOUT DAYTON CONNECTION

French Lake Road Development Traffic Study
Champlin, MN

Figure 7



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Project: CHAMP 183844
Print Date: 4/22/2025

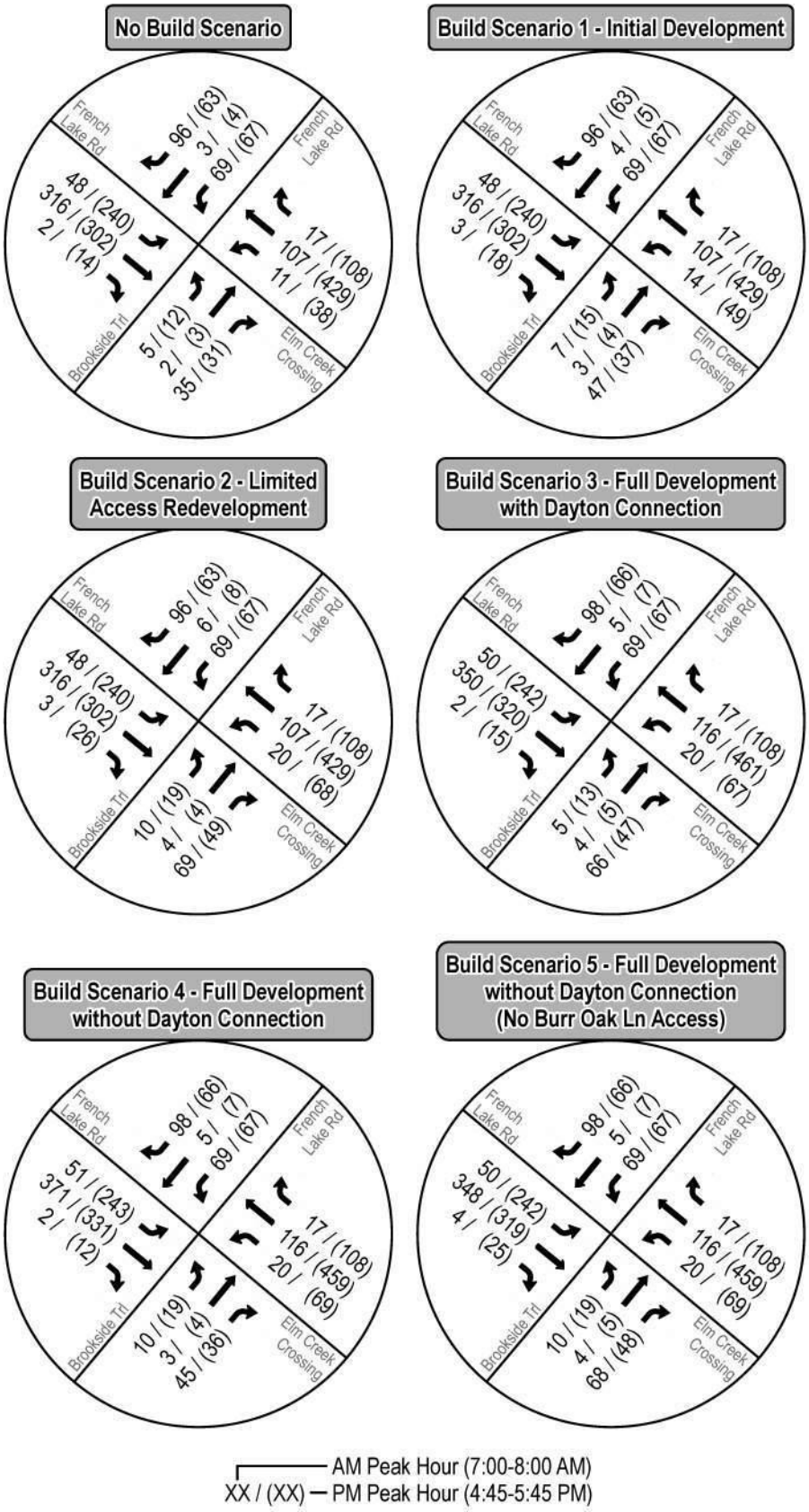
Map by: jdanibas
Projection: Hennepin County Coords.
Source: ESRI

BUILD 5 - FULL DEVELOPMENT WITHOUT DAYTON CONNECTION (NO BURR OAK LANE ACCESS)

French Lake Road Development Traffic Study
Champlin, MN

Figure 8

Figure 9 – 2030 Build Traffic Volumes (Villa Lots)



5 Intersection Warrant Analysis

The Minnesota Manual on Uniform Traffic Control Devices (MnMUTCD) provides guidance on when it may be appropriate to use all-way stop or signal control at an intersection. This guidance is provided in the form of "warrants," or criteria, and engineering analysis of the intersection's design factors to determine when all-way stop or signal control may be justified. Meeting a control warrant at an intersection does not in itself require the installation of a particular control type. The particular control type also requires an engineering analysis of the intersection's design and traffic operations in order for it to be justified. Currently, there are no traffic control warrants for roundabouts; therefore, under the MnDOT Intersection Control Evaluation (ICE) process, a roundabout is considered to be warranted if traffic volumes meet the criteria for either all-way stop or traffic signal control. Similar to other traffic control options, a roundabout being warranted does not mean that a roundabout should be installed, it is just an indication it may be beneficial. For this study, the traffic operations analysis is more important for determining when the planned single-lane roundabout would be needed.

Warrant analysis was completed for the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing under the following scenarios:

- 2023 Existing
- 2030 No Build
- 2030 Build Scenario 1 - Initial Redevelopment
- 2030 Build Scenario 2 – Limited Access Redevelopment
- 2030 Build Scenario 3 – Full Development with Dayton Connection
- 2030 Build Scenario 4 – Full Development without Dayton Connection
- 2030 Build Scenario 5 – Full Development without Dayton Connection (No Burr Oak Lane Access)

5.1 Requirements for Installation of an All-way Stop

For all-way stop control installation, the study reviewed the minimum volume criteria outlined in the MnMUTCD (Chapter 2B.7). This criteria states that for any 8 hours of the day, the combined major approach volumes and combined minor approach volumes should be at or greater than the volume thresholds. Based on the speed limit on CSAH 121, the all-way stop warrant volume thresholds for this intersection are 210 vehicles on the major approach and 140 vehicles on the minor approach. An engineering study that considers factors, including warrants, should be performed to determine the "best" type of control at an intersection.

5.2 Requirements for Installation of a Traffic Signal

For traffic signal installation, many agencies typically require volume thresholds for Warrant 1 – eight-hour vehicular volume to be satisfied, which requires 8-hours of combined major approach volumes and the highest minor street approach volume to meet MnMUTCD thresholds. These thresholds vary with the number of approach lanes on the major and minor street. Other warrants may be used as indicators of a need to consider traffic control change; an engineering study that considers factors, including warrants, should be performed to determine the optimum type of control at an intersection. Warrant 2 (four hour) and Warrant 3 (peak hour) were also included in the analysis for the study intersection.

5.3 Warrant Analysis Assumptions

MnMUTCD guidelines suggest that for the purpose of traffic signal warrant analysis, 100% of right turning traffic from the minor leg should be removed because right turning vehicles are typically able to enter the traffic stream with minimal delay or conflict; the right turning traffic would not require a traffic signal to reduce delay or improve safety. In certain circumstances (i.e., high right turn volume, minimal mainline gaps, shared through/right turn lane, etc.), typical procedures allow for the inclusion of some of the minor street right turning traffic in the analysis. The guidance states "if right turning volume exceeds 70% of its potential capacity for any hour for each approach, 50% of the right turning volume for all hours should be added back in."

- For this analysis, 75 percent of minor approach right turning traffic was included in the traffic signal warrant analysis for the intersection due to the shared southbound through/right turn lane and the high volume of northbound right turns compared to the left turn and through movements. This is the same methodology that was used in the 2024 ICE study for the intersection.

MnMUTCD guidelines suggest that the warrant thresholds may also be reduced based on the roadway speeds and population of the city the intersection is within. If either major approach to the intersection has a posted speed, or 85th percentile speed, that exceeds 40 mph, then a reduction to 70% threshold volumes is allowed. If the population of the city is less than 10,000 people, a reduction to 70% threshold volumes is allowed.

- Based upon the guidance, the analysis of the intersection includes the reduction based on speed as CSAH 121 (French Lake Road/Elm Creek Crossing) has a posted speed limit of 45 mph. This is the same methodology that was used in the 2024 ICE study for the intersection.

5.4 Warrant Analysis Results

Based on the warrant analysis, the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing does not meet the volume thresholds for either all-way stop or traffic signal warrants under 2023 existing conditions. However, under 2030 No Build conditions, with only background traffic growth, the intersection is expected to meet the volume thresholds for the all-way stop warrant, which means the single-lane roundabout is considered warranted based on volumes. Despite a roundabout being warranted under No Build conditions, the planned single lane roundabout is not needed until the traffic operations analysis shows a delay or queuing issue.

Under Build Scenario 1 and 2, the all-way stop warrant would continue to be met but the intersection would not meet the volume thresholds for any of the traffic signal warrants. Under Build Scenarios 3, 4, and 5, which include full redevelopment of the study parcels, the intersection would meet the all-way stop warrant and traffic signal Warrant 3 (peak hour). With full redevelopment traffic volumes resulting the peak hour warrant being met, traffic control beyond the existing all-way stop, such as the planned single-lane roundabout, would be warranted.

Table 5 provides the all-way stop and traffic signal warrant summary for the 2023 existing, 2030 No Build, and five 2030 Build scenarios. Complete all-way stop and traffic signal analysis results can be found in **Appendix B**.

Table 5 – Warrant Analysis Results

Scenario	All-way Stop Warrant	Traffic Signal Warrants		
		Warrant 1 (8 Hour)	Warrant 2 (4 hour)	Warrant 3 (Peak Hour)
2023 Existing	Not Met	Not Met	Not Met	Not Met
	6 of 8 hours	3 of 8 hours	2 of 4 hours	0 of 1 hours
2030 No Build	**MET**	Not Met	Not Met	Not Met
	10 of 8 hours	3 of 8 hours	2 of 4 hours	0 of 1 hours
2030 Build Scenario 1	**MET**	Not Met	Not Met	Not Met
	11 of 8 hours	3 of 8 hours	3 of 4 hours	0 of 1 hours
2030 Build Scenario 2	**MET**	Not Met	Not Met	Not Met
	13 of 8 hours	4 of 8 hours	3 of 4 hours	0 of 1 hours
2030 Build Scenario 3	**MET**	Not Met	Not Met	**MET**
	12 of 8 hours	5 of 8 hours	3 of 4 hours	**2 of 1 hours**
2030 Build Scenario 4	**MET**	Not Met	Not Met	**MET**
	12 of 8 hours	5 of 8 hours	3 of 4 hours	**2 of 1 hours**
2030 Build Scenario 5	**MET**	Not Met	Not Met	**MET**
	13 of 8 hours	5 of 8 hours	3 of 4 hours	**2 of 1 hours**

6 Traffic Operations Analysis

Traffic operations analyses were conducted at the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing to determine the level of service (LOS), delay, and queueing information for the AM, midday, and PM peak hour conditions.

LOS is a qualitative rating system used to describe the efficiency of traffic operations at an intersection. Six LOS are defined, designated by letters A through F. LOS A represents the best operating conditions (no congestion), and LOS F represents the worst operating conditions (severe congestion). For the study intersection, it was assumed that a LOS D or better for the intersection and LOS E for all movements and approaches represent acceptable operating conditions. If the LOS thresholds are exceeded, mitigations to improve intersection operations should be considered.

LOS for intersections is determined by the average control delay per vehicle. The range of control delay for each LOS is different for signalized and unsignalized intersections. The expectation is that a signalized intersection is designed to carry higher traffic volumes and will experience greater delays than an unsignalized intersection. Driver tolerance for delay is greater at a signal than at a stop sign; therefore, the LOS thresholds for each LOS category are lower for unsignalized intersections than for signalized intersections.

Table 6 shows the LOS thresholds for signalized and unsignalized intersections.

Table 6 – Level of Service Thresholds

Level of Service	Average Vehicle Delay (sec/veh)	
	Signalized Intersection	Unsignalized (Stop or Roundabout) Intersection
A	0 to 10	0 to 10
B	> 10 and ≤ 20	> 10 and ≤ 15
C	> 20 and ≤ 35	> 15 and ≤ 25
D	> 35 and ≤ 55	> 25 and ≤ 35
E	> 55 and ≤ 80	> 35 and ≤ 50
F	> 80	> 50

All traffic operations analysis was performed using the HCS 2024 software, which utilizes the equations and calculations from the Highway Capacity Manual. All relevant traffic operations reports can be found in **Appendix B**.

The following scenarios were analyzed; all future scenarios were analyzed both with the existing all-way stop control and the planned single-lane roundabout control:

- **2023 Existing**
- **2030 No Build**
  - Background traffic growth only

- **2030 Build Scenario 1 - Initial Redevelopment**
  - 28 new homes
  - No additional neighborhood access points
- **2030 Build Scenario 2 – Limited Access Redevelopment**
  - 77 new homes
  - No additional neighborhood access points
  - This scenario has a similar number of homes to the full redevelopment of all 10 parcels with walkout lots (75 walkout lots); this scenario can be used as an indicator for any operational issues under full development with walkout lots.
- **2030 Build Scenario 3 – Full Development with Dayton Connection**
  - 150 new homes
  - Internal connection between Champlin and Dayton
  - New neighborhood access to CSAH 121 at Arrowood Lane (full access)
- **2030 Build Scenario 4 – Full Development without Dayton Connection**
  - 150 new homes
  - No connection between Champlin and Dayton
  - New neighborhood access to CSAH 121 at Arrowood Lane (full access), which is the only access point for the 74 new homes in Dayton.
  - New neighborhood access to CSAH 121 at Burr Oak Lane (right-in/right-out only), which can only be accessed by the existing homes and 76 new homes in Champlin.
- **2030 Build Scenario 5 – Full Development without Dayton Connection (No Burr Oak Lane Access)**
  - 150 new homes
  - No connection between Champlin and Dayton
  - New neighborhood access to CSAH 121 at Arrowood Lane (full access), which is the only access point for the 74 new homes in Dayton.
  - No new neighborhood access for the Champlin neighborhood; all existing homes and 76 new homes must use Brookside Trail to access the neighborhood.

6.1 2023 Existing Conditions

Under 2023 existing conditions, with the all-way stop control, the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing operates acceptably with the intersection operating at LOS C or better during each peak hour. During the AM peak hour, all approaches operate at LOS B or better and the longest 95th percentile queue, which is on the eastbound CSAH 121 (French Lake Road) approach, is approximately 60 feet (2 to 3 vehicles). During the PM peak hour, the westbound CSAH 121 (Elm Creek Crossing) approach operates at LOS D with a 95th percentile queue of approximately 200 feet (7 to 8 vehicles); all other approaches operate at LOS B.

Table 7 shows a summary of the 2023 existing operations at the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing during the AM and PM peak hour.

Table 7 – 2023 Existing Traffic Operations

Intersection Control	Approach	AM Peak Hour		PM Peak Hour	
		Approach (delay / LOS)	Intersection (delay / LOS)	Approach (delay / LOS)	Intersection (delay / LOS)
All-way Stop	Eastbound	11.9 / B	10.6 / B	13.2 / B	18.1 / C
	Westbound	9.3 / A		25.3 / D	
	Northbound	8.4 / A		10.0 / B	
	Southbound	9.2 / A		10.7 / B	

6.2 2030 No Build Conditions

Under 2030 No Build conditions, with the existing all-way stop control and background growth, the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing operates acceptably with the intersection operating at LOS C or better during each peak hour. During the AM peak hour, all approaches operate at LOS B or better and the longest 95th percentile queue, which is on the eastbound CSAH 121 (French Lake Road) approach, is approximately 75 feet (3 to 4 vehicles). During the PM peak hour, the westbound CSAH 121 (Elm Creek Crossing) approach operates at LOS E with a 95th percentile queue of approximately 270 feet (10 to 11 vehicles); all other approaches operate at LOS B.

Under 2030 No Build conditions, with the planned single-lane roundabout, the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing operates acceptably at LOS A during both the AM and PM peak hours. During the AM peak hour, each approach operates at LOS A with queues of less than 40 feet (2 vehicles). During the PM peak hour, the westbound CSAH 121 (Elm Creek Crossing) approach operates at LOS B with a 95th percentile queue of approximately 100 feet (3 to 4 vehicles); all other approaches operate at LOS A.

Table 8 shows a summary of the 2030 No Build operations at the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing during the AM and PM peak hour with both the existing all-way stop and planned single-lane roundabout control.

Table 8 – 2030 No Build Traffic Operations

Intersection Control	Approach	AM Peak Hour		PM Peak Hour	
		Approach (delay / LOS)	Intersection (delay / LOS)	Approach (delay / LOS)	Intersection (delay / LOS)
All-way Stop	Eastbound	13.1 / B	11.3 / B	14.6 / B	23.5 / C
	Westbound	9.6 / A		**36.0 / E**	
	Northbound	8.6 / A		10.3 / B	
	Southbound	9.5 / A		11.1 / B	
Single-Lane Roundabout	Eastbound	6.0 / A	5.2 / A	8.2 / A	9.2 / A
	Westbound	3.8 / A		11.1 / B	
	Northbound	4.8 / A		5.9 / A	
	Southbound	4.5 / A		6.2 / A	

6.3 2030 Build Scenario 1 Conditions – Initial Redevelopment

Under Build Scenario 1 – Initial Redevelopment conditions, 28 new homes are added to the existing Reserve neighborhood with no additional neighborhood accesses, meaning all trips use Brookside Trail and the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing to enter and exit the neighborhood.

Under 2030 Build Scenario 1 conditions, with the existing all-way stop control, the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing operates acceptably with the intersection operating at LOS C or better during each peak hour. During the AM peak hour, all approaches operate at LOS B or better and the longest 95th percentile queue, which is on the eastbound CSAH 121 (French Lake Road) approach, is approximately 75 feet (3 to 4 vehicles). During the PM peak hour, the westbound CSAH 121 (Elm Creek Crossing) approach operates at LOS E with a 95th percentile queue of approximately 280 feet (11 to 12 vehicles); all other approaches operate at LOS B.

Under 2030 Build Scenario 1 conditions, with the planned single-lane roundabout, the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing operates acceptably at LOS A during both the AM and PM peak hours. During the AM peak hour, each approach operates at LOS A with queues of less than 40 feet (2 vehicles). During the PM peak hour, the westbound CSAH 121 (Elm Creek Crossing) approach operates at LOS B with a 95th percentile queue of just over 100 feet (4 to 5 vehicles); all other approaches operate at LOS A.

Table 9 shows a summary of the 2030 Build Scenario 1 operations at the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing during the AM and PM peak hour with both the existing all-way stop and planned single-lane roundabout control.

Table 9 – 2030 Build Scenario 1 Traffic Operations

Intersection Control	Approach	AM Peak Hour		PM Peak Hour	
		Approach (delay / LOS)	Intersection (delay / LOS)	Approach (delay / LOS)	Intersection (delay / LOS)
All-way Stop	Eastbound	13.1 / B	11.3 / B	14.9 / B	24.1 / C
	Westbound	9.6 / A		**37.1 / E**	
	Northbound	8.7 / A		10.4 / B	
	Southbound	9.6 / A		11.2 / B	
Single-Lane Roundabout	Eastbound	6.0 / A	5.2 / A	8.4 / A	9.5 / A
	Westbound	3.8 / A		11.5 / B	
	Northbound	5.0 / A		6.1 / A	
	Southbound	4.5 / A		6.4 / A	

6.4 2030 Build Scenario 2 Conditions – Limited Access Redevelopment

Under Build Scenario 2 – Limited Access Redevelopment conditions, 77 new homes are added to the existing Reserve neighborhood with no additional neighborhood accesses, meaning all trips use Brookside Trail and the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing to enter and exit the neighborhood.

Under 2030 Build Scenario 2 conditions, with the existing all-way stop control, the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing operates acceptably with the intersection operating at LOS D or better during each peak hour. During the AM peak hour, all approaches operate at LOS B or better and the longest 95th percentile queue, which is on the eastbound CSAH 121 (French Lake Road) approach, is approximately 80 feet (3 to 4 vehicles). During the PM peak hour, the westbound CSAH 121 (Elm Creek Crossing) approach operates at LOS E with a 95th percentile queue of approximately 295 feet (11 to 12 vehicles); all other approaches operate at LOS C or better.

Under 2030 Build Scenario 2 conditions, with the planned single-lane roundabout, the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing operates acceptably at LOS A during both the AM and PM peak hours. During the AM peak hour, each approach operates at LOS A with queues of less than 40 feet (2 vehicles). During the PM peak hour, the westbound CSAH 121 (Elm Creek Crossing) approach operates at LOS B with a 95th percentile queue of approximately 110 feet (4 to 5 vehicles); all other approaches operate at LOS A.

The 77 new homes analyzed under Build Scenario 2 has a similar number of homes to the full redevelopment of all 10 study parcels with walkout lots (75 walkout lots). Under full build out with the walkout lots, a new full access intersection would be created at Arrowwood Lane to provide a access to at least the Dayton parcels. Therefore, it is expected that full redevelopment with 75 walkout lots would operate similar or better than those shown under Build Scenario 2, meaning the existing all-way stop control could provide acceptable traffic operations.

Table 10 shows a summary of the 2030 Build Scenario 2 operations at the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing during the AM and PM peak hour with both the existing all-way stop and planned single-lane roundabout control.

Table 10 – 2030 Build Scenario 2 Traffic Operations

Intersection Control	Approach	AM Peak Hour		PM Peak Hour	
		Approach (delay / LOS)	Intersection (delay / LOS)	Approach (delay / LOS)	Intersection (delay / LOS)
All-way Stop	Eastbound	13.4 / B	11.4 / B	15.7 / C	25.3 / D
	Westbound	9.7 / A		**39.2 / E**	
	Northbound	9.0 / A		10.7 / B	
	Southbound	9.7 / A		11.4 / B	
Single-Lane Roundabout	Eastbound	6.0 / A	5.2 / A	8.9 / A	9.9 / A
	Westbound	3.9 / A		12.1 / B	
	Northbound	5.3 / A		6.3 / A	
	Southbound	4.6 / A		6.6 / A	

6.5 2030 Build Scenario 3 Conditions – Full Development with Dayton Connection

Under Build Scenario 3 – Full Development with Dayton Connection conditions, the 10 study parcels are full redeveloped with 150 new homes. For Build Scenario 3, there is an internal neighborhood connection between Champlin and Dayton and a new neighborhood access to CSAH 121 at Arrowood Lane, which is expected to be a full access intersection. The second access point provides route choices for both Champlin and Dayton traffic when entering and exiting the neighborhood. In this scenario, the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing, Build Scenario 3 will experience increased eastbound and westbound traffic going to and from the Arrowood Lane access point, in addition to vehicles entering and exiting the neighborhood via Brookside Trail.

Under 2030 Build Scenario 3 conditions, with the existing all-way stop control, the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing operates acceptably during the AM peak hour with the intersection operating at LOS B and each approach operating at LOS B or better. During the AM peak hour, the eastbound 95th percentile queue is approximately 95 feet (3 to 4 vehicles). During the PM peak hour, the westbound through/right turn lane operates at LOS F with a 95th percentile queue of approximately 350 feet (14 to 15 vehicles); however, the westbound CSAH 121 (Elm Creek Crossing) approach overall operates at LOS E. Overall, the intersection operates at LOS D in the PM peak hour.

Under 2030 Build Scenario 3 conditions, with the planned single-lane roundabout, the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing operates acceptably at LOS B or better during both the AM and PM peak hours. During the AM peak hour, each approach operates at LOS A with queues of less than 45 feet (2 vehicles). During the PM peak hour, the westbound CSAH 121 (Elm Creek Crossing) approach operates at LOS B with a 95th percentile queue of approximately 125 feet (4 to 5 vehicles); all other approaches operate at LOS A.

Table 11 shows a summary of the 2030 Build Scenario 3 operations at the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing during the AM and PM peak hour with both the existing all-way stop and planned single-lane roundabout control.

Table 11 – 2030 Build Scenario 3 Traffic Operations

Intersection Control	Approach	AM Peak Hour		PM Peak Hour	
		Approach (delay / LOS)	Intersection (delay / LOS)	Approach (delay / LOS)	Intersection (delay / LOS)
All-way Stop	Eastbound	14.5 / B	12.1 / B	16.1 / C	30.4 / D
	Westbound	9.9 / A		**49.5 / E**	
	Northbound	9.0 / A		10.7 / B	
	Southbound	9.8 / A		11.4 / B	
Single-Lane Roundabout	Eastbound	6.3 / A	5.4 / A	9.0 / A	10.4 / B
	Westbound	3.9 / A		12.9 / B	
	Northbound	5.4 / A		6.3 / A	
	Southbound	4.6 / A		6.8 / A	

6.6 2030 Build Scenario 4 Conditions – Full Development without Dayton Connection

Under Build Scenario 4 – Full Development without Dayton Connection conditions, the 10 study parcels are full redeveloped with 150 new homes. For Build Scenario 4, there is no internal neighborhood connection between Champlin and Dayton, so traffic from all 74 homes in Dayton would need to use the new access at Arrowood Lane. In Champlin, Build Scenario 4 includes a new neighborhood access to CSAH 121 at Burr Oak Lane, which is expected to be a right-in/right-out only access. The second access point provides route choices for Champlin traffic when entering and exiting the neighborhood. At the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing, Build Scenario 4 has additional eastbound and westbound traffic going to and from the Arrowood Lane and Burr Oak Lane access points, in addition to vehicles entering and exiting the neighborhood via Brookside Trail.

Under 2030 Build Scenario 4 conditions, with the existing all-way stop control, the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing operates acceptably during the AM peak hour with the intersection operating at LOS B and each approach operating at LOS C or better. During the AM peak hour, the eastbound 95th percentile queue is approximately 100 feet (4 to 5 vehicles). During the PM peak hour, the westbound through/right turn lane operates at LOS F with a 95th percentile queue of approximately 350 feet (14 to 15 vehicles); however, the westbound CSAH 121 (Elm Creek Crossing) approach overall operates at LOS E. Overall, the intersection operates at LOS D in the PM peak hour.

Under 2030 Build Scenario 4 conditions, with the planned single-lane roundabout, the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing operates acceptably at LOS B or better during both the AM and PM peak hours. During the AM peak hour, each approach operates at LOS A with queues of less than 50 feet (2 vehicles). During the PM peak hour, the westbound CSAH 121 (Elm Creek Crossing) approach operates at LOS B with a 95th percentile queue of just over 125 feet (5 to 6 vehicles); all other approaches operate at LOS A.

Table 12 shows a summary of the 2030 Build Scenario 4 operations at the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing during the AM and PM peak hour with both the existing all-way stop and planned single-lane roundabout control.

Table 12 – 2030 Build Scenario 4 Traffic Operations

Intersection Control	Approach	AM Peak Hour		PM Peak Hour	
		Approach (delay / LOS)	Intersection (delay / LOS)	Approach (delay / LOS)	Intersection (delay / LOS)
All-way Stop	Eastbound	15.1 / C	12.5 / B	16.3 / C	29.9 / D
	Westbound	9.8 / A		**48.3 / E**	
	Northbound	9.0 / A		10.7 / B	
	Southbound	9.8 / A		11.4 / B	
Single-Lane Roundabout	Eastbound	6.5 / A	5.5 / A	9.2 / A	10.6 / B
	Westbound	3.9 / A		13.1 / B	
	Northbound	5.3 / A		6.4 / A	
	Southbound	4.6 / A		6.9 / A	

6.7 2030 Build Scenario 5 Conditions – Full Development without Dayton Connection (No Burr oak Lane Access)

Under Build Scenario 5 – Full Development without Dayton Connection (No Burr Oak Lane Access) conditions, the 10 study parcels are full redeveloped with 150 new homes. For Build Scenario 5, there is no internal neighborhood connection between Champlin and Dayton, so traffic from all 74 homes in Dayton would need to use the new access at Arrowood Lane. = Build Scenario 5 does not include any additional access points in Champlin, meaning all traffic from all 76 new homes must use Brookside Trail and the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing to enter and exit the neighborhood.

Under 2030 Build Scenario 5 conditions, with the existing all-way stop control, the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing operates acceptably during the AM peak hour with the intersection operating at LOS B and each approach operating at LOS B or better. During the AM peak hour, the eastbound 95th percentile queue is approximately 95 feet (3 to 4 vehicles). During the PM peak hour, the westbound through/right turn lane operates at LOS F with a 95th percentile queue of approximately 355 feet (14 to 15 vehicles); the westbound CSAH 121 (Elm Creek Crossing) approach overall also operates at LOS F. Overall, the intersection operates at LOS D in the PM peak hour.

Under 2030 Build Scenario 4 conditions, with the planned single-lane roundabout, the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing operates acceptably at LOS B or better during both the AM and PM peak hours. During the AM peak hour, each approach operates at LOS A with queues of less than 45 feet (2 vehicles). During the PM peak hour, the westbound CSAH 121 (Elm Creek Crossing) approach operates at LOS B with a 95th percentile queue of just over 125 feet (5 to 6 vehicles); all other approaches operate at LOS A.

Table 13 shows a summary of the 2030 Build Scenario 5 operations at the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing during the AM and PM peak hour with both the existing all-way stop and planned single-lane roundabout control.

Table 13 – 2030 Build Scenario 5 Traffic Operations

Intersection Control	Approach	AM Peak Hour		PM Peak Hour	
		Approach (delay / LOS)	Intersection (delay / LOS)	Approach (delay / LOS)	Intersection (delay / LOS)
All-way Stop	Eastbound	14.6 / B	12.5 / B	16.6 / C	29.9 / D
	Westbound	9.9 / A		**50.5 / F**	
	Northbound	9.1 / A		10.8 / B	
	Southbound	9.8 / A		11.5 / B	
Single-Lane Roundabout	Eastbound	6.3 / A	5.5 / A	9.2 / A	10.5 / B
	Westbound	3.9 / A		13.1 / B	
	Northbound	5.5 / A		6.4 / A	
	Southbound	4.6 / A		6.9 / A	

6.8 Sensitivity Analysis

In order to understand how many new homes could be added to the neighborhood without adding additional access before the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing would begin having traffic operational issues, a sensitivity analysis was completed for both the existing all-way stop control and the planned single lane roundabout. For the sensitivity analysis, it was assumed that all trips from the new homes would use Brookside Trail to access the neighborhood, so only movements onto and off of Brookside Trail were increased. The sensitivity analysis was completed iteratively to determine how many homes could be added to the neighborhood before certain traffic operational milestones were met. The traffic operations were analyzed for both the AM and PM peak hour. However, the PM peak hour has higher traffic volumes and operates worse under all scenarios.

Based on the sensitivity analysis for the existing all-way stop, the following number of new homes would result in the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing reaching certain traffic operational milestones:

- 0 new homes – westbound CSAH 121 (Elm Creek Crossing) approach operates at LOS E under No Build conditions.
- 25 new homes – minimal development
- 65 new homes – intersection operates at LOS D
- 135 new homes – westbound through/right turn lane operates at LOS F; this is when a roundabout would be needed
- 150 new homes (maximum allowable) – intersection operates at LOS D; westbound CSAH 121 (Elm Creek Crossing) approach at LOS E; through/right turn lane at LOS F

Based on the sensitivity analysis for the planned single-lane roundabout, traffic from all 150 new homes that would be allowed in the ten study parcels could be accommodated with the intersection operating at LOS B or better and each approach operating at LOS B or better during each peak hour.

Table 14 shows a summary of the sensitivity analysis results for the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing during the AM and PM peak hour with both the existing all-way stop and planned single-lane roundabout control.

Table 14 – Sensitivity Analysis Traffic Operations

Scenario	Number of Homes	Approach	AM Peak Hour		PM Peak Hour	
			Approach (delay / LOS)	Intersection (delay / LOS)	Approach (delay / LOS)	Intersection (delay / LOS)
All-way Stop Control Sensitivity Analysis						
LOS E Approach	0 homes No Build	Eastbound	13.1 / B	11.3 / B	14.6 / B	23.5 / C
		Westbound	9.6 / A		**36.0 / E**	
		Northbound	8.6 / A		10.3 / B	
		Southbound	9.5 / A		11.1 / B	
Minimal Development	25 homes	Eastbound	13.1 / B	11.3 / B	14.9 / B	24.0 / C
		Westbound	9.6 / A		**37.0 / E**	
		Northbound	8.7 / A		10.4 / B	
		Southbound	9.6 / A		11.2 / B	
Intersection LOS D	65 homes	Eastbound	13.5 / B	11.5 / B	15.5 / C	25.0 / D
		Westbound	9.7 / A		**38.8 / E**	
		Northbound	8.9 / A		10.6 / B	
		Southbound	9.7 / A		11.3 / B	
Movement/ Lane LOS F	135 homes	Eastbound	13.8 / B	11.6 / B	16.9 / C	28.0 / D
		Westbound	9.9 / A		**44.3 / E**	
		Northbound	9.3 / A		11.1 / B	
		Southbound	9.8 / A		11.6 / B	
Maximum Homes	150 homes	Eastbound	13.9 / B	11.6 / B	17.2 / C	28.4 / D
		Westbound	10.0 / B		**45.0 / E**	
		Northbound	9.4 / A		11.1 / B	
		Southbound	9.9 / A		11.7 / B	
Single-Lane Roundabout Sensitivity Analysis						
Maximum Homes	150 homes	Eastbound	6.1 / A	5.3 / A	9.8 / A	11.0 / B
		Westbound	3.9 / A		13.5 / B	
		Northbound	5.7 / A		6.9 / A	
		Southbound	4.7 / A		7.0 / A	

7 Conclusion

Recently, the City of Champlin placed a six-month moratorium on the five properties along the south side of French Lake Road adjacent to the existing Reserve neighborhood. While there is currently no proposed redevelopment plan for the parcels, there has been interest in the past and the moratorium is intended to study the challenges the area currently faces, including traffic and access concerns. The primary focus of the traffic impact study is to determine the impact of the potential redevelopment of the 10 parcels on the south side of French Lake Road (five in Champlin, five in Dayton) on the both the surrounding network as well as the impact to traffic volumes within the existing Reserve neighborhood. The traffic operations analysis focused on the existing access at the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing but also looked at other potential access locations to the neighborhood.

The intersection of French Lake Road at Brookside Trail/Elm Creek Crossing was converted from minor street stop-control to all-way stop control in Spring 2024 to address safety and operational issues at the intersection. An Intersection Control Evaluation (ICE) study was completed in 2024, which recommended a future single-lane roundabout at the intersection. The single-lane roundabout is tentatively planned for 2027 as this is when the $500,000 cost participation funding from Hennepin County would expire.

Under existing conditions, the all-way stop-controlled intersection of French Lake Road at Brookside Trail/Elm Creek Crossing operates acceptably with the intersection operating at LOS C or better during each peak hour. As background traffic volumes continue to grow through 2030, the existing all-way stop is still expected to operate acceptably at LOS C or better during each peak hour. However, the westbound CSAH 121 (Elm Creek Crossing) approach does operate at LOS E under 2030 No Build conditions. Based on the warrant analysis, the intersection meets the all-way stop warrant under all 2030 scenarios.

Under 2030 No Build conditions, the planned single-lane roundabout at the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing operates at LOS A during both the AM and PM peak hours with minimal delay and queueing.

As part of this study, five 2030 Build Scenarios were analyzed, which included various levels of redevelopment, internal roadway connections, and external access locations. Below is a brief summary of each scenario. The scenarios were created based on discussions between City of Champlin, SEH, Hennepin County, and City of Dayton staff.

- **2030 Build Scenario 1 - Initial Redevelopment**
  - Development of just the parcels on either side of the Champlin/Dayton city boundary
  - 28 new homes
  - No additional neighborhood access points
  - The Existing all-way stop would continue to operate acceptably at LOS C or better; the westbound CSAH 121 (Elm Creek Crossing) approach would continue to operate at LOS E.
  - The planned single-lane roundabout would operate at LOS A during both peak hours with minimal delay and queueing

- **2030 Build Scenario 2 – Limited Access Redevelopment**
  - Development of the specific parcels that would not allow for a new access point at Arrowwood Lane or Burr Oak Lane.
  - 77 new homes
  - No additional neighborhood access points
  - The existing all-way stop would continue to operate acceptably at LOS D or better; the westbound CSAH 121 (Elm Creek Crossing) approach would continue to operate at LOS E.
  - The planned single-lane roundabout would operate at LOS A during both peak hours with minimal delay and queueing.
  - This scenario has a similar number of homes to the full redevelopment of all 10 parcels with walkout lots (75 walkout lots). The full redevelopment with walkouts would provide access at a new Arrowwood Lane. Therefore, it is expected that full redevelopment with 75 walkout lots would operate similar or better than those shown under Build Scenario 2, meaning the existing all-way stop control could provide acceptable traffic operations.
- **2030 Build Scenario 3 – Full Development with Dayton Connection**
  - 150 new homes (full redevelopment)
  - Internal connection between Champlin and Dayton
  - New neighborhood access to CSAH 121 at Arrowood Lane (full access)
  - The westbound through/left turn lane at the existing all-way stop control would operate at LOS F during the PM peak hour, with the approach still operating at LOS E; overall intersection at LOS D.
  - The planned single-lane roundabout would operate at LOS B or better during both peak hours with minimal delay and queueing
  - Based on the warrant analysis, volumes would meet traffic signal Warrant 3 (peak hour) indicating a traffic control change beyond the existing all-way stop may be needed, which in this case would be the planned single-lane roundabout.
- **2030 Build Scenario 4 – Full Development without Dayton Connection**
  - 150 new homes (full redevelopment)
  - No connection between Champlin and Dayton
  - New neighborhood access to CSAH 121 at Arrowood Lane (full access), which is the only access point for the 74 new homes in Dayton.
  - New neighborhood access to CSAH 121 at Burr Oak Lane (right-in/right-out only), which can only be accessed by the existing homes and 76 new homes in Champlin.
  - The westbound through/left turn lane at the existing all-way stop control would operate at LOS F during the PM peak hour, with the approach still operating at LOS E; overall intersection at LOS D.
  - The planned single-lane roundabout would operate at LOS B or better during both peak hours with minimal delay and queueing
  - Based on the warrant analysis, volumes would meet traffic signal Warrant 3 (peak hour) indicating a traffic control change beyond the existing all-way stop may be needed, which in this case would be the planned single-lane roundabout.

- **2030 Build Scenario 5 – Full Development without Dayton Connection (No Burr Oak Lane Access)**
  - 150 new homes (full redevelopment)
  - No connection between Champlin and Dayton
  - New neighborhood access to CSAH 121 at Arrowood Lane (full access), which is the only access point for the 74 new homes in Dayton.
  - No new neighborhood access for the Champlin neighborhood; all existing homes and 76 new homes must use Brookside Trail to access the neighborhood.
  - The westbound through/left turn lane at the existing all-way stop control would operate at LOS F during the PM peak hour, with the approach also operating at LOS F; overall intersection at LOS D.
  - The planned single-lane roundabout would operate at LOS B or better during both peak hours with minimal delay and queueing
  - Based on the warrant analysis, volumes would meet traffic signal Warrant 3 (peak hour) indicating a traffic control change beyond the existing all-way stop may be needed, which in this case would be the planned single-lane roundabout.

A typical 2-lane residential street, such as those in the Reserve neighborhood, has a capacity of approximately 1,500 vehicles per day. Based on the daily volume estimates for the neighborhood roadways under each build scenario, the only section of roadway that would exceed 1,500 vehicles per day is Brookside Trail between French Lake Road and Three Oaks Lane/Lake Vista Lane. This short segment of roadway does not have any residential driveways, has a short median, and has turns lane for vehicles exiting the neighborhood, which means that this segment of roadway was designed to carry higher traffic volumes than the typical 1,500 vehicles per day.

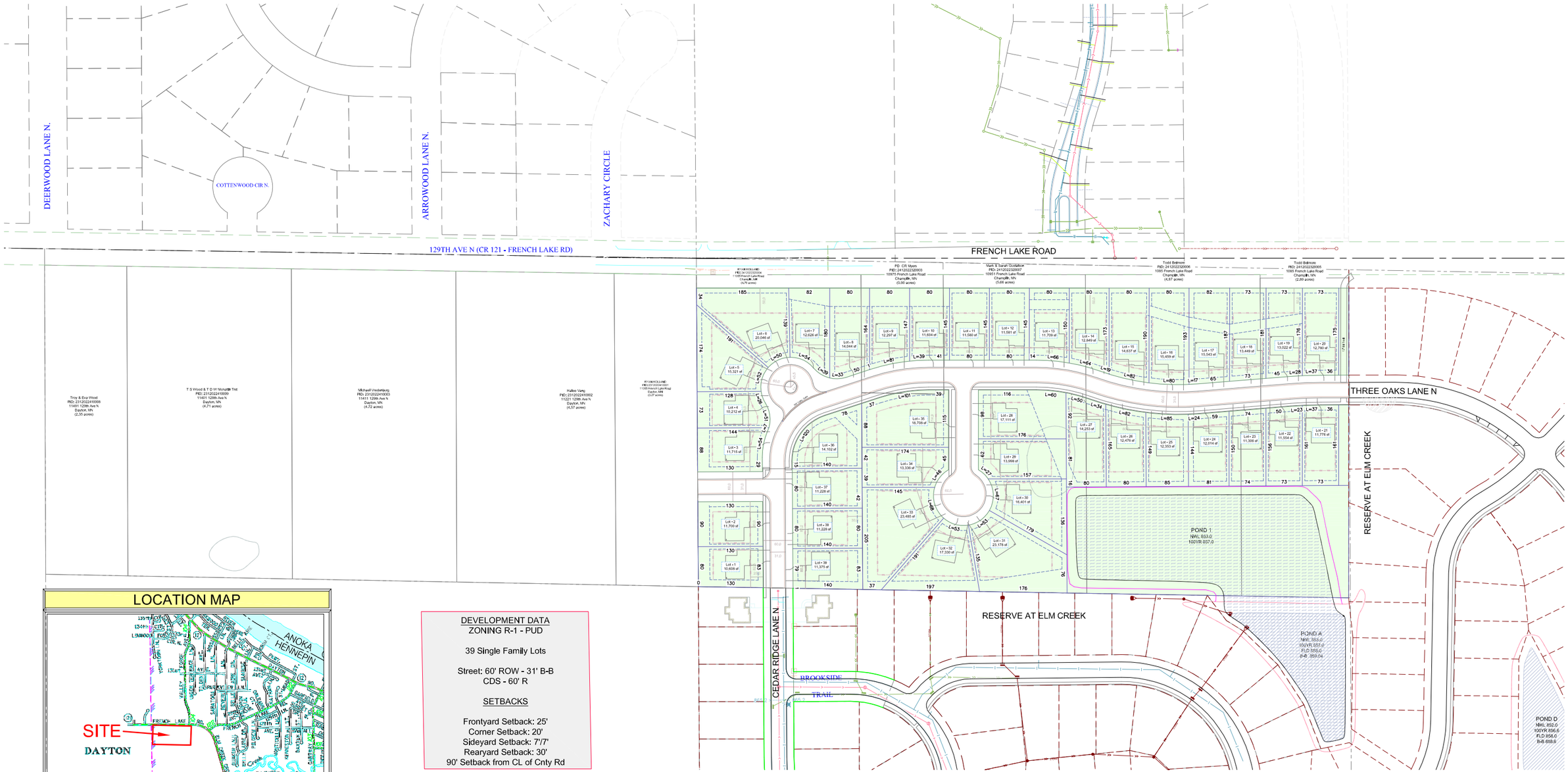
7.1 Recommendation

Based on the analysis presented in this report the following improvements are recommended as the study area develops.

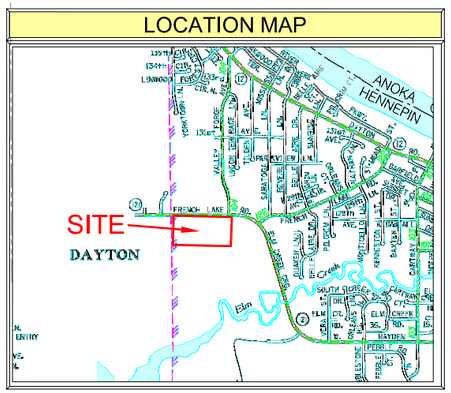
- The two parcels on either side of the Champlin/Dayton city boundary, where there is currently interest in redeveloping, can be developed without adding any additional neighborhood access points or making any changes to the existing all-way stop control at the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing.
- It would be beneficial to have the planned single-lane roundabout at the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing in place prior to full redevelopment of the study area with villa lots (150 new homes), regardless of whether a connection between Champlin and Dayton is constructed.
  - The sensitivity analysis showed that at 135 new homes the planned single-lane roundabout would be recommended.
  - If the parcels are developed as walkout lots (75 new homes), the existing all-way stop control can accommodate the additional trips.
- It is recommended to provide an additional access to the 10 study parcels at Arrowood Lane, with a connection between Champlin and Dayton.
  - While traffic operations analysis did not necessarily show a need for a second access, it would provide route choices for those entering and exiting the neighborhood and provide additional access for emergencies.

  - Based on the trip distribution and neighborhood daily traffic volume estimates, it is expected that more Champlin traffic will go through Dayton to access Arrowood Lane than Dayton traffic going through Champlin to access Brookside Trail. This is due to the proximity of the development parcels to the Arrowood Lane access, particularly those in Dayton, and Arrowood Lane being full access, providing entering and exiting routes from all directions.
  - Providing the connection to Dayton is expected to reduce the traffic volumes on existing Champlin Neighborhood roadways by up to 150 vehicles per day.
- A right-in/right-out at Burr Oak Lane would not be needed from a traffic operations standpoint, regardless of whether a connection between Champlin and Dayton is constructed. However, some sort of emergency vehicle only access, potentially via a trail connection, could be considered.
  - With a majority of traffic entering and exiting the neighborhood to/from the north and east, the right in/right-out access would be expected to serve limited traffic demands, which would limit the relief to the intersection of French Lake Road at Brookside Trail/Elm Creek Crossing.
- If additional parcels develop, but do not allow for a connection to either Arrowood Lane or Burr Oak Lane like in Build Scenario 2, traffic operations show that the existing all-way stop control could operate acceptably without additional access. An emergency vehicle only access, potentially via a trail connection, could be considered.

Attachment C



LOCATION MAP



DEVELOPMENT DATA
ZONING R-1 - PUD

39 Single Family Lots

Street: 60' ROW - 31' B-B
CDS - 60' R

SETBACKS

Frontyard Setback: 25'
Corner Setback: 20'
Sideyard Setback: 7'/7'
Rearyard Setback: 30'
90' Setback from CL of Cnty Rd

NORTH

100 50 0 50 100 200
SCALE IN FEET

EXISTING UTILITIES SHOWN ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ANY AND ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES ARISING OUT OF HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL EXISTING UTILITIES.

DRAWING NAME	NO.	BY	DATE	REVISIONS
XXX	-	-	-	-
DRAWN BY				
XXX				
CHECKED BY				
XXX				
DATE				
XX-XX-XX				

I HEREBY CERTIFY THAT THIS PLAN OR SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Name, P.E.
Date: _____ Lic. No. _____

SATHRE-BERGQUIST, INC.
14000 25TH AVE N #120 PLYMOUTH, MN. 55447 (952) 476-6000

CITY PROJECT NO.
--

CHAMPLIN, MINNESOTA

CONCEPT PLAN - 042425

FRENCH LAKE RD PARCELS

CITY OF CHAMPLIN

FILE NO.
1424-005

CP

Councilmember Miller introduced the following resolution and moved its adoption:

CITY OF CHAMPLIN
HENNEPIN COUNTY, MINNESOTA
RESOLUTION NO. 2015-56

RESOLUTION APPROVING THE RESERVE AT ELM CREEK FINAL PLANNED UNIT DEVELOPMENT PLAN

WHEREAS, Gonyea Companies has requested consideration of a planned unit development (PUD) plan for a 111-lot single family residential development to be known as The Reserve at Elm Creek; and

WHEREAS, a PUD plan is necessary to accommodate the development plan, including subdivision/zoning ordinance variances, planned common areas and development amenities; and

WHEREAS, the Reserve at Elm Creek PUD is consistent with City of Champlin's Comprehensive Land Use Plan and the Northwest Area Development Guidelines; and

WHEREAS, a preliminary planned unit development plan was presented and approved by the City Council at their meeting April 27, 2015.

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of Champlin, Minnesota, that The Reserve at Elm Creek Planned Unit Development Plan be approved, including the following stipulations:

1. **General Standards – Variances.**

   - The following variances become part of the Planned Unit Development:

     1. Cul-de-sac Right-of-way - Cul-de-sac right-of-way is set at 100 feet in diameter (City standard is 120 feet). The development includes one cul-de-sac.

     2. The project has one access to Elm Creek Crossing. The single access creates a temporary dead-end exceeding the Subdivision Ordinance 500-foot maximum.

     3. 25 foot front yard setbacks shall be allowed.

     4. The minimum lot width allowed shall be as follows:

        68 foot wide lots – 4 lots (Lots 2-5, Block 1)
        72 foot wide lots – 45 lots
        75+ foot wide lots – 62 lots

     5. The minimum lot area shall be 9,000 square feet.

     6. Minimum side yard setbacks shall be seven feet.

2. **Home Design Standards and Building Materials.** Minimum design standards ensure quality aesthetic appeal and to create a varied and distinctive neighborhood.

- Stone, brick, cement fiber lap, synthetic wood lap, board and batten, and shake siding are acceptable exterior materials. Vinyl, steel, and aluminum siding that simulate lap or other standard wood materials are only acceptable on the sides and back elevations, except that steel or aluminum soffit and fascia are permitted on front elevations. Lap exposure should be consistent with the style of the home or be in proportion to other trim details. Window wrapping is required for all front elevations.

- No asphalt driveways permitted.

- A minimum of three home-builders shall be included in the development unless otherwise approved by the City Council.

3. Landscaping / Amenities

- All disturbed lot areas must be graded and sodded and landscaped. A minimum of one front yard tree per lot must be planted. The deciduous tree shall be a minimum of two inches in diameter.

- To create a tree canopy, a minimum of one deciduous tree per lot shall be planted in the boulevard. Boulevard trees shall be a minimum of two inches in diameter. The Homeowner's Association shall maintain boulevard trees.

- The developer shall install an irrigated landscaped berm and decorative fence with masonry end posts along the west side of Elm Creek Crossing. The design shall be similar to that in "Prominence Woods." The improvements west of Elm Creek Crossing shall be provided under a maintenance easement agreement and maintained by the Association.

- The developer shall install irrigation along the east boulevard of Elm Creek Crossing and along the south boulevard of French Lake Road. The irrigation system design shall be approved by the City and owned by the City.

- A landscaped cul-de-sac island shall be provided in the cul-de-sac. The Homeowner's Association shall be responsible for island maintenance.

- An approved entry monument sign shall be installed by the Developer and maintained by the Association. The entry sign shall be similar in design to that in "Prominence Woods."

- The developer shall install a 400 linear foot decorative fence with masonry pillars in the southeast corner of the Elm Creek Crossing/French Lake Road intersection. The fencing shall "frame" this intersection corner. The fence location shall be positioned outside of the clear zone of the intersection. The City shall own the fence.

- The development includes a private community building, outdoor pool and play area on Lot 8, Block 4. The Homeowner's Association shall own and maintain the facilities in perpetuity. Four indented parking stalls shall be provided along the public street supporting vehicle parking.

4. Trails and Sidewalks

- The developer shall construct two bituminous trails eight feet in width extending to the Elm Creek Park Reserve trail system. The City shall pay for trail costs outside the plat

boundary.

- The developer shall construct bituminous trail eight feet in width along the east side of Elm Creek Crossing and along the south side of French Lake Road.

- The developer shall construct concrete sidewalk five feet in width on one side of all streets within the development.

5. Native American Indian Burial Sites

- A protective covenant and conservation easement shall be provided over presumed Native American burial sites.

6. Homeowner's Association / Covenants

- A Homeowner's Association shall be established and continued in perpetuity to ensure maintenance of commons areas and other requirements under this Planned Unit Development.

The motion for the adoption of the foregoing resolution was duly seconded by Councilmember Johnson, and upon vote being taken thereon, the following voted in favor thereof: Mayor Nelson, Councilmembers Miller, Johnson and Karasek, and the following voted against the same: none, whereupon said resolution was passed this 27th day of July 2015.

ArMand Nelson, Mayor

ATTEST:

Roberta Colotti, CMC, City Clerk