



## STAFF REPORT

DATE: 01/21/2020

**REGULAR**

**TO:** City Council  
**FROM:** Ken Roberts, Planning Director  
**AGENDA ITEM:** **Comprehensive Plan Amendments** – MUSA Boundary Change, Update to City’s Wastewater Facilities and Land Use Plans – **Heritage Farms** Sanitary Sewer Service Area Extension and Re-guidance to Rural Single Family Sewered  
**REVIEWED BY:** Ben Prchal, City Planner  
Jack Griffin, City Engineer

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### **BACKGROUND:**

The City Council recently approved a public improvement project to extend sanitary sewer to the existing Heritage Farms subdivision. This development is located west of Manning Avenue and south of 30<sup>th</sup> Street and has 44 single-family homes that are now served by on-site sanitary sewer (septic) systems. The proposed public improvement project will extend sanitary sewer throughout the subdivision (along with other improvements) and will allow the property owners to connect to the City sanitary sewer system. The City is planning this improvement project for the 2020 construction season.

This sewer change, however, requires City Council and Met Council approval of several changes to the recently adopted 2040 Comprehensive Plan. The changes are required because the Heritage Farms subdivision is not now included in the MUSA (Metropolitan Urban Service Area) nor had the City included these 44 properties in the Wastewater calculations in the 2040 Comprehensive Plan. The proposed comprehensive plan amendments require a 4/5th affirmative vote by the City Council and approval by the Metropolitan Council.

(Please see the attached maps and tables for more information about the proposed changes).

On January 13, 2020, the Planning Commission reviewed the proposed changes to the Comprehensive Plan for the Heritage Farms sanitary sewer project. It was the consensus of the 3 commissioners in attendance that the City Council should approve the proposed changes.

### **ISSUES BEFORE THE CITY COUNCIL:**

The City Council is being asked to:

1. Amend the MUSA Boundary and other relevant sections and elements of the 2040 Comprehensive Plan to include the Heritage Farms subdivision in the sanitary sewer service area;
2. Amend the land use plan designation for the subdivision from RAD (rural area development) to RSFS (Rural Single Family Sewered);-and
3. Authorize City staff to submit the proposed amendments to the Metropolitan Council for review.

## **PROPOSAL DETAILS/ANALYSIS:**

**Amendment to the MUSA Boundary.** The MUSA Boundaries for the sanitary sewer service areas in the City of Lake Elmo are depicted on the maps on Pages 3-11 (Map 3-2), 3-17 (Map 3-3), 3-19 (Map 3-5), 3-26 (Map 3-7) and 9-5 (Map 9-1) of the 2040 Comprehensive Plan. The Heritage Farms subdivision is not now included in the MUSA in the City. As noted above, the City needs to change the MUSA boundary on all relevant maps in the Comprehensive Plan to include the Heritage Farms subdivision in the MUSA as part of a Comprehensive Plan Amendment in order for the sanitary sewer project to proceed.

**Amendment to Wastewater Services and Facilities Plan.** As part of their feasibility study, Engineering reviewed the possibility and effects of adding the 44 properties to the sanitary sewer system. They determined the sanitary system can accommodate these additional properties on the system. The City will need to amend several tables in the existing Comprehensive Plan to show the addition of 44 single-family properties to the sanitary sewer system. They include Table 3-4 (page 3-21), Table 9-2 (page 9-8), Tables 9-3 and 9-4 (on page 9-9) and Table 9-5 (on page 9-10).

**Amendment to Land Use Plan.** The City will need to re-guide (change the land use designation) of aforementioned single-family properties in the Heritage Farms subdivision from RAD (rural area development) to V-LDR (village low density) or to Rural Single Family Sewered (RSFS). This is because the RAD land use designation is for areas not in the MUSA while the V-LDR designation is planned for areas within the Village Planning Area and the RSFS “identifies existing previously unsewered rural single-family land uses located within the Village Planning Area. These properties have either recently been served with municipal sewer and water, or are planned to be served as part of the planned MUSA extensions within the Village Planning Area.”

**Met Council Review.** The Met Council has confirmed that the usual jurisdictional review period for this Comprehensive Plan Amendment will likely not be required. Additionally, the request may qualify for administrative review by the Met Council, rather than full Council review, meaning that the approval process for this request may take a shorter time period than a typical Comprehensive Plan Amendment.

## **FISCAL IMPACT:**

The City will be assessing the full cost (100%) of the sanitary sewer extension project to the 44 benefitting properties. The additional 44 properties on the City sanitary sewer system also will generate additional Sewer Access Charge (SAC) fees to the Sanitary Sewer Enterprise Fund.

## **RECOMMENDATION:**

Staff recommends that the City Council approve the proposed amendments to the Land Use Plan and to the Wastewater Services and Facilities Plan of the 2040 Comprehensive Plan by adding the 44 existing single-family home sites in the Heritage Farms subdivision to the City’s sanitary sewer area.

***“Motion to adopt Resolution 2020 – 009 approving all necessary amendments to the 2040 Lake Elmo Comprehensive Plan (including those to the Land Use Plan and to Wastewater Services Plan) to add the existing 44 single-family properties in the Heritage Farms subdivision to the City’s sanitary sewer area.”***

Additionally, Staff recommends that the City Council approve an amendment to the Land Use Plan of the Comprehensive Plan, re-guiding the aforementioned existing 44 single-family properties from RAD (Rural Area Development) to RSFS (Rural Single Family Sewered) and authorize City staff to submit the proposed amendments to the Metropolitan Council for review.

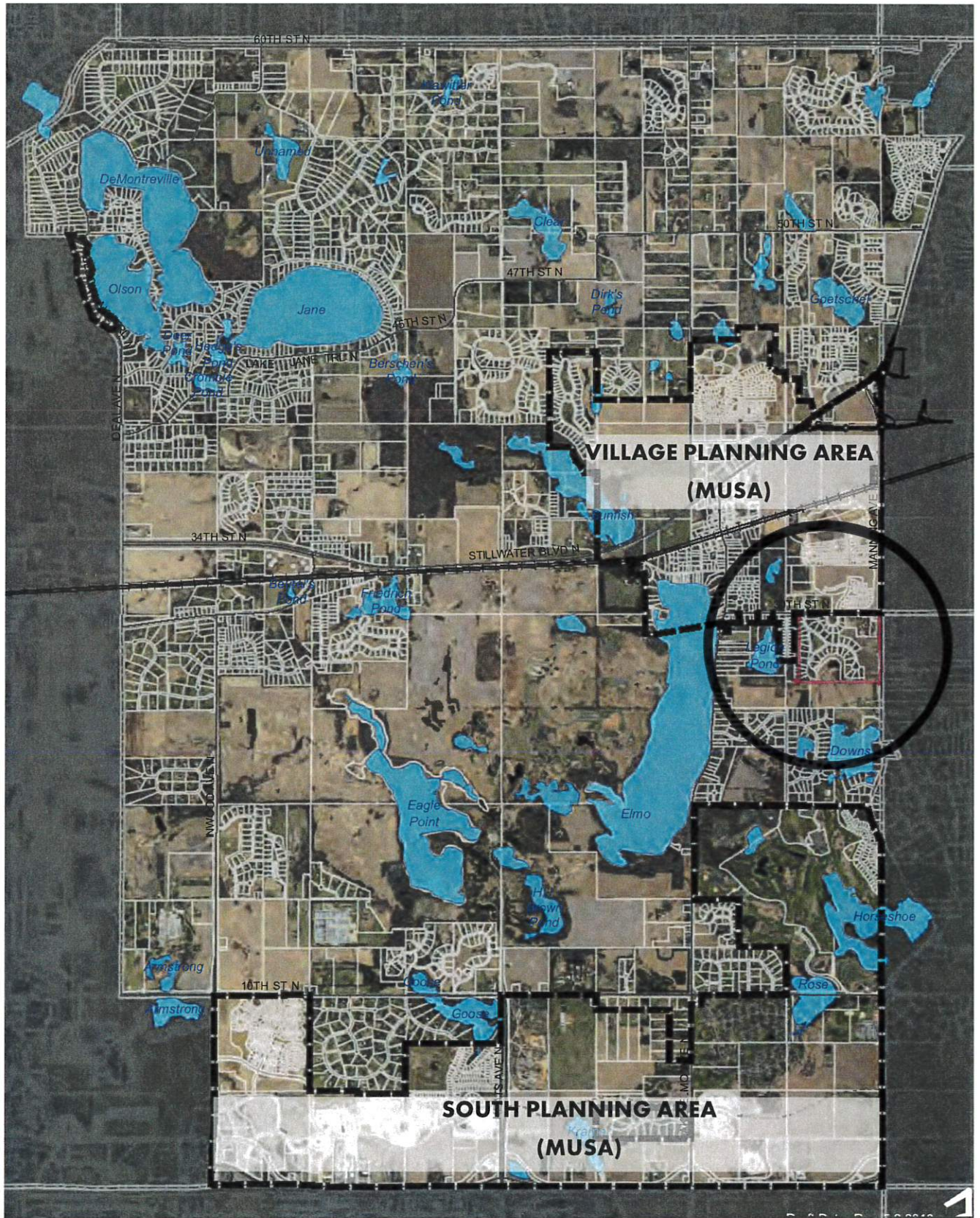
***“Motion to adopt Resolution 2020 – 009 approving a Comprehensive Plan Amendment re-guiding on the City’s Land Use Plan the existing single-family homes in the Heritage Farms subdivision from RAD***

*(Rural Area Development) to RSFS (Rural Single Family Sewered) and authorize City staff to submit the proposed amendments to the Metropolitan Council for review.”*

**ATTACHMENTS:**

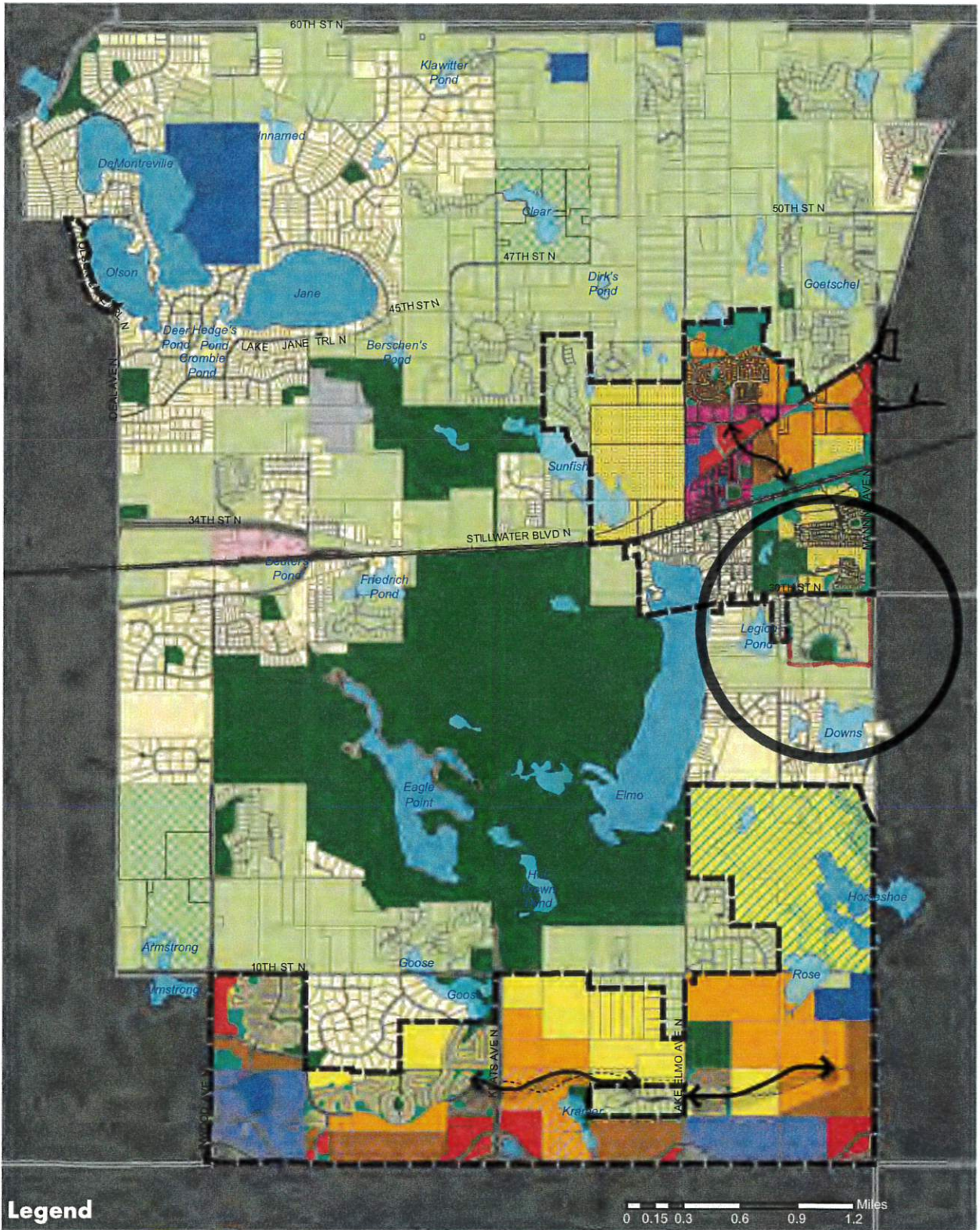
- Page 3-11 (Map 3-2)
- Page 3-17 (Map 3-3)
- Page 3-19 (Map 3-5)
- Page 3-26 (Map 3-7)
- Page 9-5 (Map 9-1)
- Page 3-21 (Table 3-4)
- Page 9-8 (Table 9-2)
- Page 9-9 (Tables 9-3 and 9-4)
- Page 9-10 (Table 9-5)
  
- Resolution 2020 – 009
- Resolution 2020 - 009

Map 3-2. 2018 – 2040 MUSA



3-11

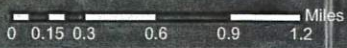
Map 3-3. Future Land Use Map



3-17

**Legend**

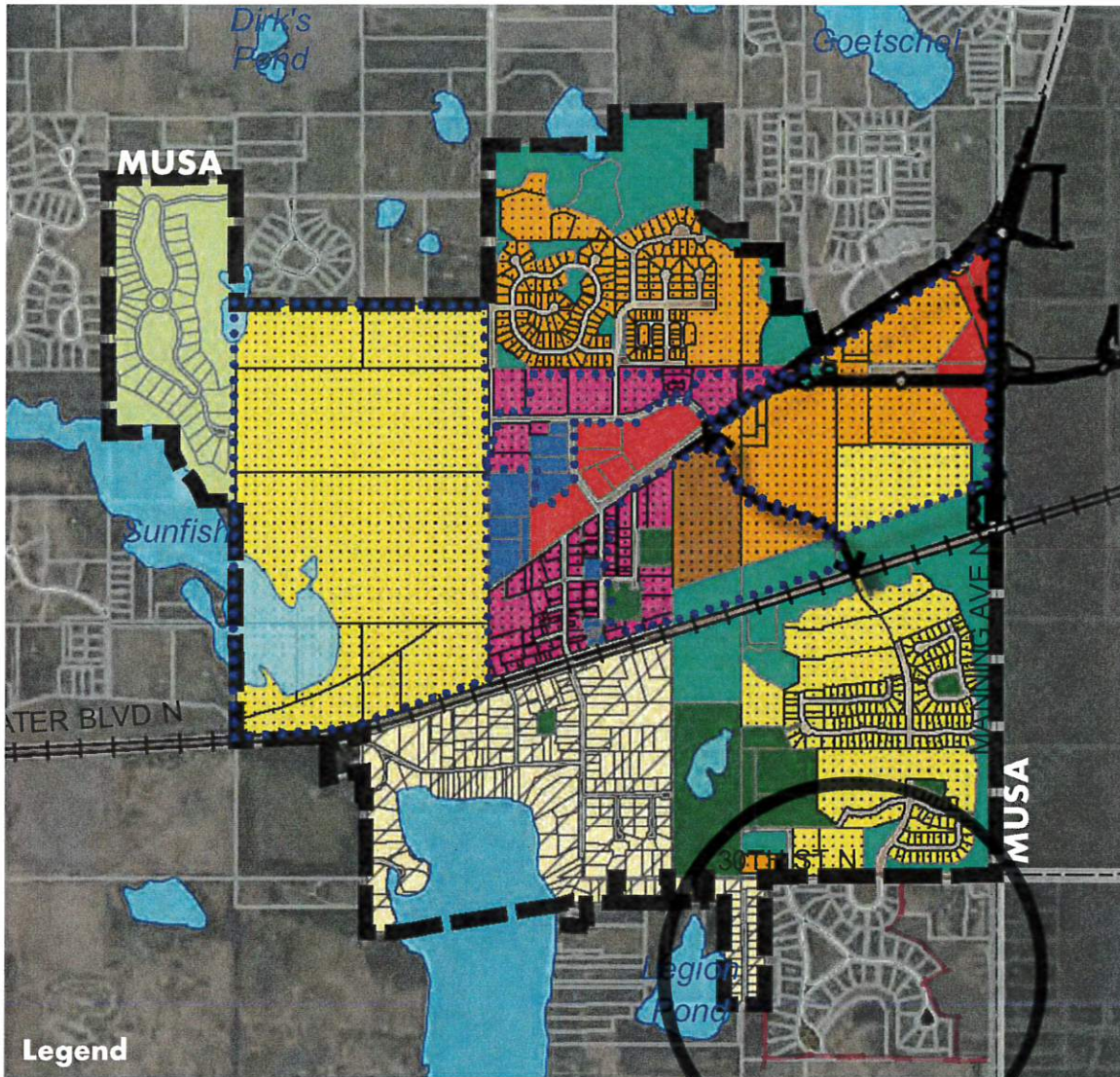
	AP		LDR		V-MDR		Closed Landfill		Planned Roadway (Parkway)
	RAD		MDR		V-HDR		Institutional		
	RSF		HDR		V-MU		Park		
	RSFS		MU-BP		LB		PSP		
	GC		MU-C		BP		ROW		
			V-LDR		C		MUSA 2040 (Revised)		



Draft Date: Rev. 6.11.2018  
 Source: Washington County, MNGEO, City of Lake Elmo, SHC



Map 3-5. Future Land Use – Village Planning Area Planned Growth



**Legend**

AP	LDR	V-MDR	Closed Landfill	Areas Planned for Growth
RAD	MDR	V-HDR	Institutional	Planned Roadway (Parkway)
RSF	HDR	V-MU	Park	
RSFS	MU-BP	LB	PSP	
GC	MU-C	BP	ROW	
	V-LDR	C	MUSA 2040 (Revised)	

Draw Date: Rev. 6.11.2018  
 Source: Washington County, MNGEO, City of Lake Elmo, SHC

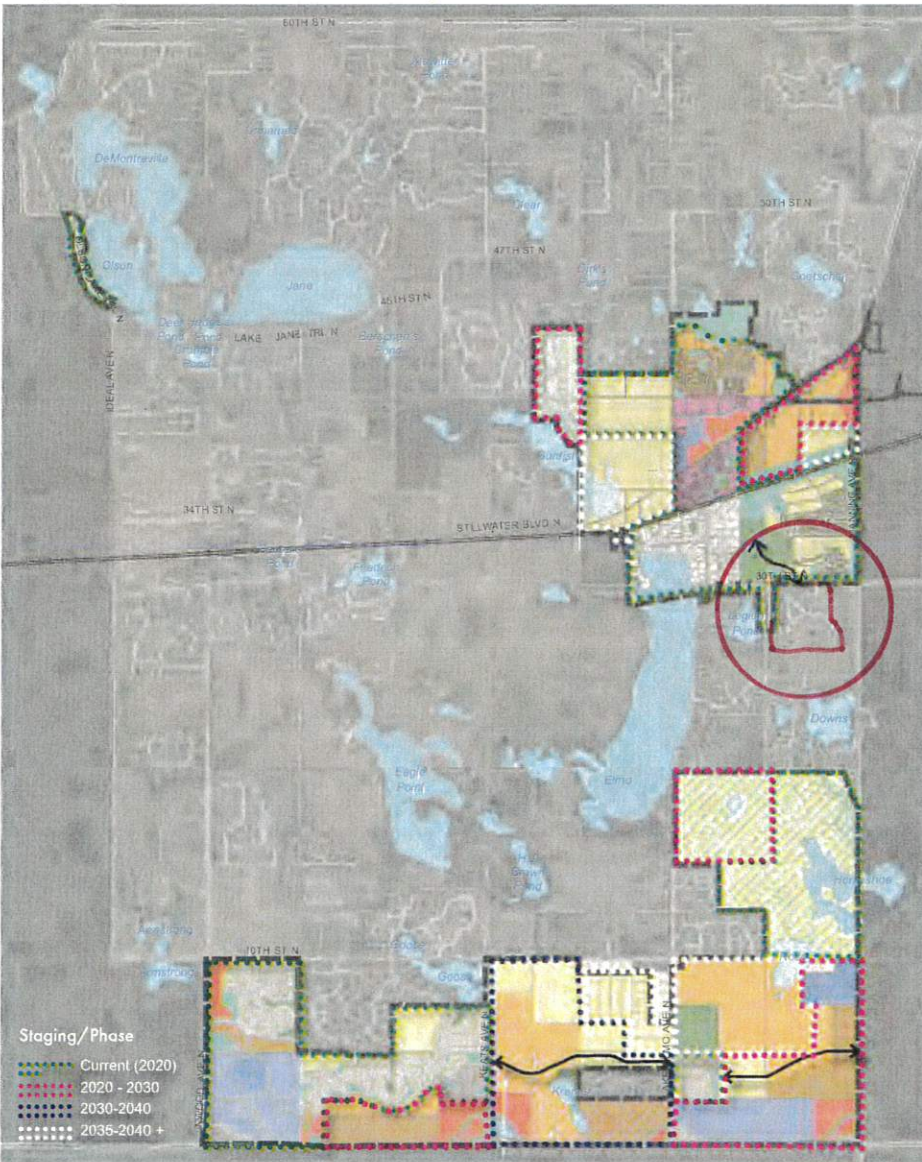


## Phasing & Staged Growth

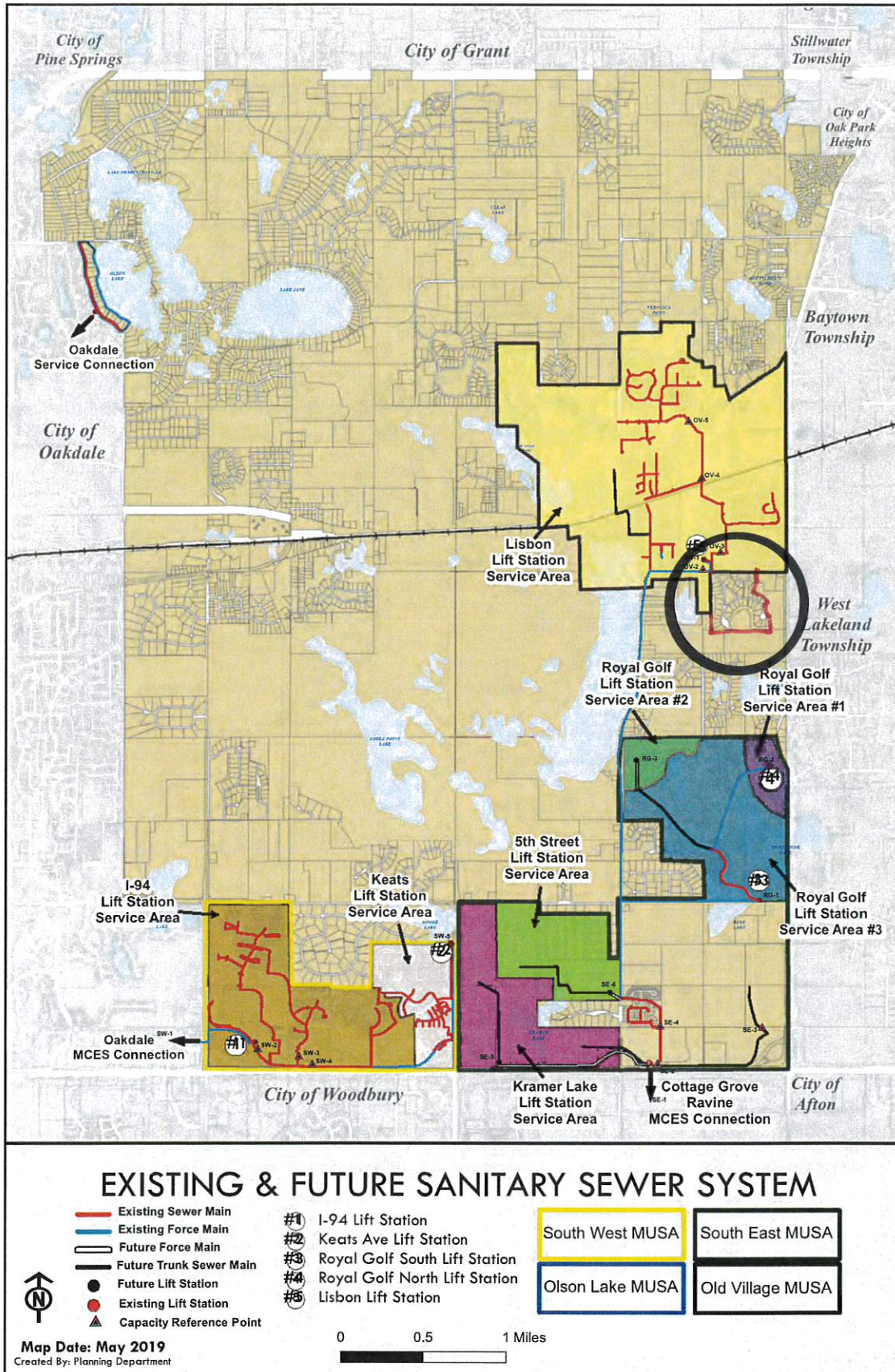
The majority of the City's growth in households and employment is anticipated to occur within the designated MUSA boundaries; however, there will be some continued development in the rural residential areas of the community consistent with the community's land use designations. Table 3-6 identifies gross acreages per land use designation, while calculations found in Table 3-3 provide net acreage calculations for each residential land use designation within the designated MUSA as noted. The City's objective is to plan for phased, contiguous growth to ensure adequate infrastructure and capacity are available to support development. Map 3-7 identifies four staging areas consistent with existing and planned water, wastewater and transportation infrastructure. The City acknowledges that market conditions, as well as other

Map 3-7. MUSA Growth & Phasing Plan

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Map 9-1. Existing and Future Sanitary Sewer System





## Revised Population & Household Projections

As noted in Table 3-3 the number of households, and thus the corresponding projected population, is consistent with the revised forecasts for the City as agreed to with the Metropolitan Council in June of 2019. As denoted in subsequent sections of this Chapter and the Sanitary Sewer Chapter, the City's infrastructure may need additional improvements to its infrastructure to serve the entire MUSA area depending on the ultimate commercial and/or business user and density of the residential neighborhoods. Thus capacity of the infrastructure within later staging areas will need to be evaluated, and development approvals contingent on appropriate system upgrades. Regardless, this Plan identifies and guides all land within the MUSA with an urbanized land use designation.

*Table 3-4. Revised Population & Household Projections*

	2020	2030	2040
Population Unsewered	6,502 <del>6,371</del>	7,319	7,457
Population Sewered	4,518 <del>4,646</del>	10,686	14,847
<b>Total Population</b>	<b>11,020</b>	<b>18,005</b>	<b>22,304</b>
Households Unsewered	2,242 <del>2,198</del>	2,642	2,742
Households Sewered	1,558 <del>1,602</del>	3,858	5,458
<b>Total Households</b>	<b>3,800</b>	<b>6,500</b>	<b>8,200</b>

Source: Metropolitan Council, SHC, City of Lake Elmo

## FORECASTS

### Population

The Metropolitan Council projects and publishes population and sewer usage forecasts for each City in the Metropolitan Area. This allocation is used in projecting future wastewater flows and system capacity to plan for additional infrastructure needs. Table 9-2 shows such forecasts for Lake Elmo.

*Table 9-2. Population Forecasts for Lake Elmo*

Forecast Year	Forecast Component	Population	Households	Employment
2010	MCES Sewered	0	0	623
	Unsewered	8,061	2,776	1,318
2020	MCES Sewered	<del>4640</del> 4,518	<del>1602</del> 1,558	2,338
	Unsewered	<del>6374</del> 6,502	<del>2198</del> 2,242	562
2030	MCES Sewered	10,687	3,858	2,788
	Unsewered	7,318	2,642	562
2040	MCES Sewered	14,846	5,458	3,238
	Unsewered	7,458	2,742	562

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### Projections, Capacity and Staging for Regional Sewer Service

Wastewater flow projections were generated for each MUSA area and regional interceptor for the 2020, 2030 and 2040 planning periods based on the anticipated land uses. Table 9-3 outlines these projections by sewer REC units, average day wastewater flows, and peak day wastewater flows. Table 9-4 summarizes projected flows for each MCES interceptor.

Table 9-5 then provides the capacity and design flow information for each major trunk sewer and lift station together with the estimated 2040 design flows. The Existing and Future Sanitary Plan Map (Map 9-1) shows sewer service staging in four phases in accordance with the Future Land Use Plan in Chapter 3.

Table 9-3. Projections by Sewer REC Units

Current (2020) Wastewater Flows by Interceptor						
	MCES WONE Interceptor/Oakdale			MCES Cottage Grove Ravine Interceptor		
	REC Units	Average Day Projected Flow (MGD)	Peak Day Projected Flow (GPM)	REC Units	Average Day Projected Flow (MGD)	Peak Day Projected Flow (GPM)
Old Village MUSA				<del>821</del> 865	<del>0.23</del> 0.24	<del>594</del> 609
Southeast Planning MUSA				150	0.04	114
Southwest Planning MUSA	821	0.23	594			
<b>TOTALS</b>	<b>821</b>	<b>0.23</b>	<b>594</b>	<del>971</del> 1,015	<del>0.27</del> 0.28	<del>684</del> 715

2020-2030 Wastewater Flows by Interceptor						
	MCES WONE Interceptor/Oakdale			MCES Cottage Grove Ravine Interceptor		
	REC Units	Average Day Projected Flow (MGD)	Peak Day Projected Flow (GPM)	REC Units	Average Day Projected Flow (MGD)	Peak Day Projected Flow (GPM)
Old Village MUSA				1,879	0.52	1,216
Southeast Planning MUSA				437	0.12	333
Southwest Planning MUSA	1,821	0.50	1,212			
<b>TOTALS</b>	<b>1,821</b>	<b>0.50</b>	<b>1,212</b>	<b>2,316</b>	<b>0.64</b>	<b>1,499</b>

2030-2040 Wastewater Flows by Interceptor						
	MCES WONE Interceptor/Oakdale			MCES Cottage Grove Ravine Interceptor		
	REC Units	Average Day Projected Flow (MGD)	Peak Day Projected Flow (GPM)	REC Units	Average Day Projected Flow (MGD)	Peak Day Projected Flow (GPM)
Old Village MUSA				2,109	0.58	1,365
Southeast Planning MUSA				1,383	0.38	948
Southwest Planning MUSA	2,290	0.63	1,482			
<b>TOTALS</b>	<b>2,290</b>	<b>0.63</b>	<b>1,482</b>	<b>3,492</b>	<b>0.96</b>	<b>2,127</b>

Table 9-4. Projected Flows for Each MCES Interceptor Service Area (MGD)

Average Day Projected Wastewater Flows by Interceptor (MGD)			Peak Day Projected Wastewater Flows by Interceptor (GPM)		
Year	WONE	Cottage Grove	Year	WONE	Cottage Grove
2020	0.23	<del>0.27</del> 0.28	2020	594	<del>684</del> 715
2030	0.50	0.64	2030	1,212	1,499
2040	0.63	0.96	2040	1,492	2,127

TABLE 9-5 Capacity and Design Flows for Local Trunk Sewers and Lift Stations

EASTERN LOCAL SEWER SERVICE DISTRICT: MCES COTTAGE GROVE RAVIDNE METER STATION

TRUNK SEWER / LIFT STATION SERVICE AREA	DESIGN CAPACITY				ESTIMATED 2040 REC				ESTIMATED EXCESS CAPACITY	
	TRUNK SEWER DIAMETER	REC	FLOW (MGD)	PEAK FLOW (GPM)	REC	FLOW (MGD)	PEAK FACTOR	PEAK FLOW (GPM)	REC	FLOW (MGD)
OV-5	12-inch Gravity Sewer	1,158	0.317		830	0.227	3.8	600	328	0.09
OV-4	15-inch Gravity Sewer	1,795	0.492		1,349	0.370	3.6	924	446	0.12
OV-3	18-inch Gravity Sewer	3,570	0.978		1,819	0.498	3.5	1,211	1,751	0.48
OV-2	15-inch Gravity Sewer	1,105	0.303		290	0.079	4.0	221	815	0.22
OV-1 (Lisbon LS)	16-inch Forcemain	2,580	0.707	1620	2,153	0.590	3.4	1,393	427	0.12
RG-3 (RG LS-1)	4-inch Forcemain	88	0.024	100	88	0.024	4.0	67	0	0.00
RG-2 (RG LS-2)	4-inch Forcemain	73	0.020	100	73	0.020	4.0	56	0	0.00
RG-1 (RG LS-3)	6-inch Forcemain	291	0.080	327	291	0.080	4.0	221	0	0.00
SE-6 (5th Street LS) - Future LS Post 2040	Forcemain Size TBD	855	0.234	620	0	0.000	4.0	0	855	0.23
SE-5 (Kramer Lk LS)	Forcemain Size TBD	1,479	0.405	990	220	0.060	4.0	167	1,259	0.34
SE-4 (MH 3-3)	24-inch Gravity Sewer	5,124	1.404		2,497	0.684		1,600*	2,627	0.72
SE-3	18-inch Gravity Sewer	2,453	0.672		500	0.137	3.9	371	1,953	0.54
SE-2 (MH 0-2)	24-inch Gravity Sewer	8,261	2.264		3,272	0.897	3.2	1,992	4,989	1.37
MCES CONNECTION LOCATION										
SE-1 (MH 0-1)	24-inch Gravity Sewer	9,740			3,492				6,248	1.71

\*Peak flow based on combined lift station flow rates pumping into the system

WESTERN LOCAL SEWER SERVICE DISTRICT: MCES WONE INTERCEPTOR (CONNECTION THROUGH CITY OF OAKDALE)

TRUNK SEWER / LIFT STATION SERVICE AREA	EXISTING DESIGN CAPACITY				ESTIMATED 2040 REC				ESTIMATED EXCESS CAPACITY	
	TRUNK SEWER DIAMETER	REC	FLOW (MGD)	PEAK FLOW (GPM)	REC	FLOW (MGD)	PEAK FACTOR	PEAK FLOW (GPM)	REC	FLOW (MGD)
SW-5 (KEATS LS)	8-inch Forcemain	600	0.164	388	600	0.164		338*	0	0.00
SW-4	12-inch Gravity Sewer	1,065	0.292		1220	0.334	3.6	836	-155	-0.04
SW-3	12-inch Gravity Sewer	1,104	0.302		452	0.124	3.9	335	652	0.18
SW-2	15-inch Gravity Sewer	3,526	0.966		2290	0.627	3.4	1,482	1,236	0.34
MCES CONNECTION LOCATION										
SW-1 (1-94 LS)	8-inch Forcemain	1,500	0.411	1,000	2,290	0.627		1,482	-790	-0.22

\*Peak flow based on combined lift station flow rates pumping into the system

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**CITY OF LAKE ELMO  
WASHINGTON COUNTY  
STATE OF MINNESOTA**

**RESOLUTION NO. 2020- 009**

*A RESOLUTION APPROVING AMENDMENTS TO THE CITY OF LAKE ELMO  
COMPREHENSIVE PLAN TEXT AND MAPS INCLUDING AMENDING THE MUSA  
BOUNDARY TO INCLUDE THE HERITAGE FARMS SUBDIVISION AND AMENDING THE  
WASTEWATER SERVICES PLAN.*

**WHEREAS**, the City of Lake Elmo is a municipal corporation organized and existing under the laws of the State of Minnesota; and

**WHEREAS**, The City of Lake Elmo has established a Comprehensive Plan that includes background data, policy statements, standards, and maps that help to guide the future physical, social, and economic development of the City; and

**WHEREAS**, several residents in the Heritage Farms subdivision petitioned the City to have the City extend sanitary sewer to their properties; and

**WHEREAS**, in 2019, the Lake Elmo City Council ordered a public improvement project to extend sanitary sewer to serve the 44 single-family homes in Heritage Farms; and

**WHEREAS**, the extension of sanitary sewer to the Heritage Farms subdivision requires amendments to the MUSA boundary, the Wastewater Services and Facilities Plan and to the land use map in the Lake Elmo Comprehensive Plan;

**WHEREAS**, the City has prepared a map of the proposed MUSA expansion showing the affected properties to be added to the MUSA of the City; and

**WHEREAS**, the City has prepared amendments to the Wastewater Services and Facilities Plan and to the Land Use Map that reflect the addition of the 44 single-family homes to the sanitary sewer service area in Lake Elmo; and

**WHEREAS**, the notice has been published, mailed and posted pursuant to the Lake Elmo Zoning Ordinance, Section 154.109, and MN State Statute 473.858; and

**WHEREAS**, the Lake Elmo Planning Commission held a public hearing about the proposed Comprehensive Plan amendments on January 13, 2020; and

**WHEREAS**, the Lake Elmo Planning Commission has submitted its recommendation of approval of the proposed Comprehensive Plan Amendments to the City Council; and

**WHEREAS**, the City Council considered the said matter at its January 21, 2020 meeting;  
and

**NOW, THEREFORE**, based on the testimony elicited and the information received, the City makes the following:

**Findings**

1. Several of the property owners in the Heritage Farms subdivision petitioned the City to have the City extend sanitary sewer to their neighborhood.
2. The Lake Elmo City Council has ordered a public improvement project that will extend sanitary sewer to the neighborhood in 2020.
3. The City will be assessing the affected property owners for the costs associated with the public improvement project.
4. The proposed sanitary sewer extension project for the Heritage Farms subdivision requires amendments to the MUSA boundary and to the Wastewater Services and Facilities plan in the Lake Elmo Comprehensive Plan.
5. The expansion of the MUSA to include the additional 44 single-family properties is consistent with goals and policies of the City.
6. The expansion of the MUSA for the Heritage Farm subdivision is consistent with improving the health, safety and welfare of the City of Lake Elmo residents.
7. The Metropolitan Council has administratively reviewed the proposed amendment and appeared to have no objection and had waived adjacent jurisdictional review.

**NOW, THEREFORE, BE IT RESOLVED** that based on the foregoing, the Lake Elmo City Council does hereby approve the necessary Lake Elmo Comprehensive Map Amendments for the Heritage Farms sanitary sewer improvement project including the expansion the MUSA, subject to and contingent upon the following:

1. The Metropolitan Council's approval of the Comprehensive Plan Map Amendment.

This resolution was adopted by the City Council of the City of Lake Elmo on this \_\_\_\_ day of \_\_\_\_\_, 2020.

\_\_\_\_\_  
Mike Pearson, Mayor

ATTEST:

\_\_\_\_\_  
Julie Johnson, City Clerk

**CITY OF LAKE ELMO  
WASHINGTON COUNTY  
STATE OF MINNESOTA**

**RESOLUTION NO. 2020-XXX**

*A RESOLUTION APPROVING AN AMENDMENT TO THE CITY OF LAKE ELMO COMPREHENSIVE LAND USE PLAN REGARDING THE 44 SINGLE-FAMILY RESIDENTIAL PROPERTIES IN THE HERITAGE FARMS SUBDIVISION THE CITY RECENTLY ADDED TO THE METROPOLITAN SERVICE AREA (MUSA) FROM RURAL AREA DEVELOPMENT (RAD) TO RURAL SINGLE FAMILY SEWERED (RSFS) LAND USE DESIGNATION*

**WHEREAS**, the City of Lake Elmo is a municipal corporation organized and existing under the laws of the State of Minnesota; and

**WHEREAS**, the City of Lake Elmo has established a Comprehensive Plan that includes background data, policy statements, standards, and maps that help to guide the future physical, social, and economic development of the City; and

**WHEREAS**, the City's Land Use Plan has currently guided the 44 single-family homes in the Heritage Farms subdivision RAD (rural area development); and

**WHEREAS**, the Lake Elmo Comprehensive Plan describes the rural area development land use designation as inclusive of large-lot rural single-family detached residential uses and future conventional subdivisions and is for areas not within MUSA planning areas; and

**WHEREAS**, the City Council has approved an amendment to the City's Wastewater Services and Facilities Plan, adding the 44 single-family homes in the Heritage Farms subdivision to the Metropolitan Urban Service Area (MUSA); and

**WHEREAS**, the 44 single-family homes in the Heritage Farms subdivision now more closely fit the Land Use Designation of RSFS (rural single family sewerred); and

**WHEREAS**, the notice to re-guide the 44 residential properties in the Heritage Farms subdivision has been published, mailed, and posted pursuant to the Lake Elmo City Code and MN State Statute 473.858; and

**WHEREAS**, the Lake Elmo Planning Commission held a public hearing on the matter on January 13, 2020; and

**WHEREAS**, the Lake Elmo Planning Commission has submitted its recommendation of approval to the City Council; and

**WHEREAS**, the City Council considered the said matter at its January 21, 2020 meeting; and

**NOW, THEREFORE**, based on the testimony elicited and the information received, the City makes the following findings:

1. The re-guiding of the 44 single-family residential properties in the Heritage Farms subdivision will remove inconsistency between the amended MUSA designation and Land Use category definition in the City's Comprehensive Plan.

**NOW, THEREFORE, BE IT RESOLVED** that based on the foregoing, the Lake Elmo City Council does hereby approve the Lake Elmo Comprehensive Plan Amendment, amending the City's Land Use Plan by re-guiding the 44 single-family residential properties in the Heritage Farms subdivision to Rural Single Family Sewered and authorize City staff to submit all the proposed Comprehensive Plan Amendments to the Metropolitan Council for review, subject to and contingent upon the following:

1. The Metropolitan Council's approval of the Comprehensive Plan Amendment.

This resolution was adopted by the City Council of the City of Lake Elmo on this 21<sup>st</sup> day of January, 2020.

\_\_\_\_\_  
Mike Pearson, Mayor

ATTEST:

\_\_\_\_\_  
Julie Johnson, City Clerk