

May 20, 2019

Joe Widing
Long Range Planner
City of Shakopee
485 Gorman Street
Shakopee, MN, 55379

RE: City of Shakopee 2040 Comprehensive Plan — Incomplete for Review
Metropolitan Council Review File No. 22004-1
Metropolitan Council District 4, Deb Barber

Dear Mr. Widing:

Thank you for the submission of the City of Shakopee's 2040 Comprehensive Plan (Plan) on April 29, 2019. Council staff found that there are areas where the Plan is incomplete. Review of the Plan will be suspended until the additional information is submitted and found complete for review. The following items were found incomplete:

REQUIRED INFORMATION

Wastewater (Roger Janzig, 651-602-1119)

- Provide an electronic map or maps (GIS shape files or equivalent) showing the following information about the existing sanitary sewer system:
 - o Future connection points for new growth if needed. **See new Figure 9-1.**
 - o Proposed changes in government boundaries based on orderly annexation agreements. **See new Figure 9-1.**
- Include table or tables that provide the following local system information:
 - o Capacity and design flows for existing trunk sewers and lift stations. For local sanitary sewer lines 12" and larger that connect to a Metropolitan Interceptor, provide the 2040 design flow and pipe capacity for each connecting trunk sewer and lift station. **See new Table 3-4 and existing Table 3-1.**
 - o Assignment of 2040 household and employment growth forecasts by Metropolitan interceptor facility. **See new Table 4-3. Original Table 4-3 renumbered to Table 4-4.**
 - 9206-2 (Entering interceptor west of Townline Avenue)
 - 9206-1 (Entering interceptor east of Townline Avenue to 7120)
 - 7120
 - 6903/6904
- For new trunk sewer systems that require connection to the Metropolitan Disposal System, provide a table that details the proposed time schedule for the construction of the new trunk sewer system. **See new Table 9-4.**

Transportation (Russ Owen, 651-602-1724)

Freight

The Plan needs to identify any local roadway issues or problems for goods' movement. This can include weight-restricted roads or bridges, bridges with insufficient height or

Table 3-3 Historical Wastewater Flow

Year	Population	Average Annual Flow (MGD)	Average Dry Weather Flow (MGD)	Peak Day Flow (MGD)	Average Annual Per Capita Flow (GPCD)	Average Dry Weather Per Capita Flow ⁽¹⁾ (GPCD)
2008	35,630	3.22	3.18	4.97	90	89
2009	35,075	3.47	3.14	4.07	99	89
2010	36,946	3.82	3.37	4.99	103	91
2011	37,999	4.05	3.42	5.75	107	90
2012	38,765	3.42	3.25	5.42	88	84
2013	39,209	3.47	2.95	5.07	89	75
2014	39,552	3.09	2.83	7.04	78	72
2015	39,940	2.84	2.80	3.65	71	70
2016	40,521	2.82	2.74	4.20	70	68
2017	40,893	2.80	2.64	4.71	68	65
Average		3.30	3.03	4.99	75.2⁽²⁾	70.0⁽²⁾

⁽¹⁾ Dry weather flow is for the months of January, February, November, and December.

⁽²⁾ 5-year average for 2013 – 2017.

Historically, flows through the Whispering Oaks lift station that are discharged to the City of Savage collection system have not been metered. Now that a gravity extension to the neighborhood has been installed, flows from this neighborhood will be measured through Meter Station M402A/B.

Table 3-4 provides the locations of existing trunk sewer connections to the MCES interceptor system, along with pipe capacities and 2040 design flows at those locations.

Table 3-4 Existing Trunk Sewer Connections to MCES Interceptors

Connection Location	City Sewershed	Pipe Diameter (in)	MCES Interceptor ID	2040 Design Flow (MGD)	Pipe Capacity (MGD)
Marystown Road	South Louisville Jackson	27	9206-2	4.579	7.796
Friesian Street	South Louisville Jackson	24	9206-2	0.734	20.932
Spencer Street South	Jackson Shakopee	12	9206-2	0.302	2.892
Princeton Avenue	Jackson Shakopee	18	9206-2	1.839	6.283
Balinese Street	Central Shakopee	15	9206-2	1.752	3.148
Eagle Creek Boulevard	West Shakopee	24	9206-2	2.017	5.345
Mystic Lake Drive South	South Shakopee	24	9206-1	2.982	13.944
West of Dean Lakes Blvd.	South Shakopee	12	9206-1	0.209	1.129
Valley Park Drive	North Central Shakopee	12	9206-1	0.099	1.716
Pike Lake Road	Southeast Shakopee	15	7120	0.583	1.741
North of Wakefield Circle	Southeast Shakopee	21	7120	2.114	4.627
Innovation Boulevard	North Shakopee	42	6904	5.244	12.715
Checkered Flag Boulevard	Northeast Shakopee	24	6904	0.323	4.516

3.8 SYSTEM CONDITION

According to City public works maintenance staff, the existing collection system is in good overall condition. As sewer mains age, some replacement and/or rehabilitation work is inevitable. Since 2008, the City has replaced 7.7 miles of gravity sewer mains and has lined 7.94 miles of existing sewer (Figure 3-5). In addition to lining main line sewers, the City has also lined 370 service laterals.

There is an existing building at the site of lift station L16 that is no longer needed and should be demolished. The old wet well inside the building provides additional storage during peak flow

Table 4-2 Metropolitan Council Projections (Sewered & Unsewered)

Forecast Year	Component	Population	Households	Employment
2010	MCES Sewered	34,646	11,942	18,831
2010	Unsewered	2,300	780	Unknown
2020	MCES Sewered	45,500	15,530	25,700
2020	Unsewered	2,300	770	Unknown
2030	MCES Sewered	53,650	18,650	29,100
2030	Unsewered	2,250	750	Unknown
2040	MCES Sewered	60,500	21,400	32,800
2040	Unsewered	2,100	700	Unknown

Table 4-3 provides a breakdown of 2040 household and employment projections for each MCES interceptor in the City.

Table 4-3 2040 Household & Employment Growth Forecasts Tied to Interceptors

MCES Interceptor	2015 - 2040	
	Household Growth	Employment Growth
9206-2	2560	1,800
9206-1	2975	2,700
7120	690	1,300
6904	1975	8,650
Totals	8,200	14,450

4.3 TOWNSHIP PROJECTIONS

At the time the City's 2030 Comprehensive Sanitary Sewer Plan was adopted in 2008, MCES was contemplating construction of a potential wastewater treatment facility in Louisville Township as part of its long-range plan. Consequently, the City's 2030 Plan looked at two scenarios for its future wastewater collection system: (1) Diverting a portion of its future collection system to a new treatment facility in Louisville Township; and (2) Routing all future flows from Louisville and Jackson Townships through the City's collection system to the Blue Lake treatment facility.

In recent discussions with MCES, they have indicated they have no plans for another treatment facility along the Minnesota River within a 2050 planning horizon. Without a new treatment facility, any extension of municipal sewer into Jackson and Louisville Townships would have to come through Shakopee. While the two townships are not currently served by municipal sewer, the City of Shakopee (consistent with previous comprehensive planning efforts) believes it is prudent to account for potential long-term development in the townships in planning for its sanitary sewer system. The City has an orderly annexation agreement in place with Jackson Township but does not have an agreement in place with Louisville Township. Population, household, and employment projections for the two townships are shown in Table 4-4.

Table 4-4 Metropolitan Council Projections - TOWNSHIPS

Jackson Township				
	Forecast Year			
	2010	2020	2030	2040
Population	1,464	1,490	1,440	1,420
Households	486	500	510	510
Employment	168	340	430	530
Louisville Township				
	Forecast Year			
	2010	2020	2030	2040
Population	1,266	1,270	1,270	1,280
Households	425	440	450	450
Employment	298	420	450	460

5.0 SANITARY SEWER FLOW PROJECTIONS

5.1 GENERAL

Using population, household, and employment projections developed by MCES, in conjunction with proposed land uses and development phasing identified in the Envision Shakopee Land Use Plan, and an ultimate service area for municipal sewer, future sanitary sewer flows were predicted. Predicted flows were then allocated to the proposed trunk sewer system, to aid in routing and sizing of the future system.

Data from previous comprehensive sewer planning efforts indicates wastewater generation rates of 75 gpcd for residential property and 800 gal/Ac for non-residential property are sufficient for planning purposes.

9.3 FUTURE TRUNK SEWER CONNECTIONS TO MCES INTERCEPTORS

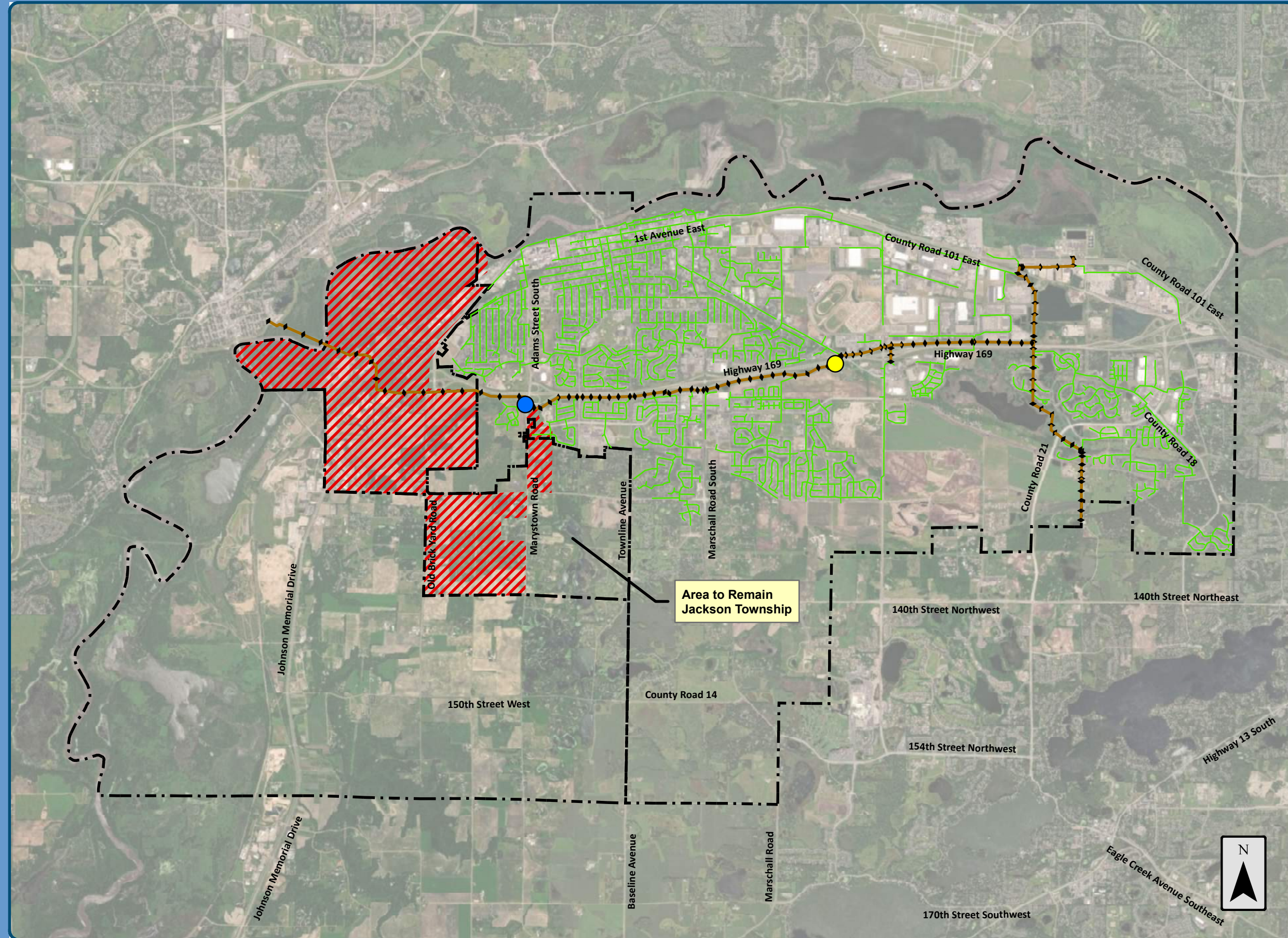
Table 9-4 identifies the locations of likely future connection points to the MCES Chaska Interceptor. The locations are also shown in Figure 9-1.

Table 9-4 Future Trunk Sewer Connections to MCES Interceptor Facilities

Connection Location *	City Sewershed	Pipe Diameter (in) **	MCES Interceptor ID	Projected Year of Connection
Marystown Road	South Louisville Jackson	16	9206-2	2030
W/o Sharon Parkway	South Shakopee	10	9206-2	2020

* Proposed interceptor connection only applies to Future Trunk Sewer Alternate No. 2.

** Proposed pipe connection is a forcemain.



- Future Forcemain Connection
- Future Gravity Connection
- ◆ MCES Interceptor
- City Sewer
- Existing City Limits/Township
- Planned City Expansion

City of Shakopee Sanitary Sewer System

Future
Connections
to MCES
Interceptors

Figure 9-1

