Burnsville Center Village Area

Final Alternative Urban Areawide Review

July 2021

Prepared for:

City Of Burnsville

Prepared by:

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Alternative Urban Areawide Review

This Environmental Assessment Worksheet (EAW) form and EAW Guidelines are available at the Environmental Quality Board's website at: http://www.eqb.state.mn.us/EnvRevGuidanceDocuments.htm. This EAW form is being used to delineate the issues and analyses to be reviewed in an Alternative Urban Areawide Review (AUAR). Where the AUAR guidance provided by the Minnesota Environmental Quality Board (EQB) indicates that an AUAR response should differ notably from what is required for an EAW, the guidance is noted in *italics*.

1. Project Title

Burnsville Center Village Area AUAR

2. Proposer

Proposer: City of Burnsville
Contact Person: Regina Dean
Title: Assistant Community Development Director
Address: 100 Civic Center Pkwy
City, State, ZIP: Burnsville, Minnesota, 55337
Phone: (952) 895-4453
Email: regina.dean@burnsvillemn.gov

3. RGU

RGU: City of Burnsville
Contact Person: Deb Garross
Title: City Planner
Address: 100 Civic Center Pkwy,
City, State, ZIP: Burnsville, Minnesota, 55337
Phone: (952) 895-4446
Email: deb.garross@burnsvillemn.gov

4. Reason for EAW Preparation

AUAR Guidance: Not applicable to an AUAR.

5. Project Location

County: Dakota
City/Township: Burnsville
PLS Location (¼, ¼, Section, Township, Range): SE ¼ of Section 23 Township 115N, Range 21N and SE ¼ & SW ¼ of Section 24, Township 115N Range 21N and NE ¼, NW ¼, SE ¼, & SW ¼ of Section 25 Township 115N, Range 21N and NE ¼ of Section 26 Township 115N, Range 21N
Watershed (81 major watershed scale): Black Dog Lake Watershed Management Organization
Tax Parcel Number(s): Includes 77 existing tax parcels
At a minimum, attach each of the following to the AUAR:

- **US Geological Survey 7.5 minute, 1:24,000 scale map indicating project boundaries** (See Figure 1)

- **A map clearly depicting the boundaries of the AUAR and any subdistricts used in the AUAR analysis** (See Figure 2)
- **A cover type map as required for Item 7** (See Figure 4)
- **Land use and planning and zoning maps as required in conjunction with Item** (See Figure 5 and Figure 6)

Figure 1: USGS

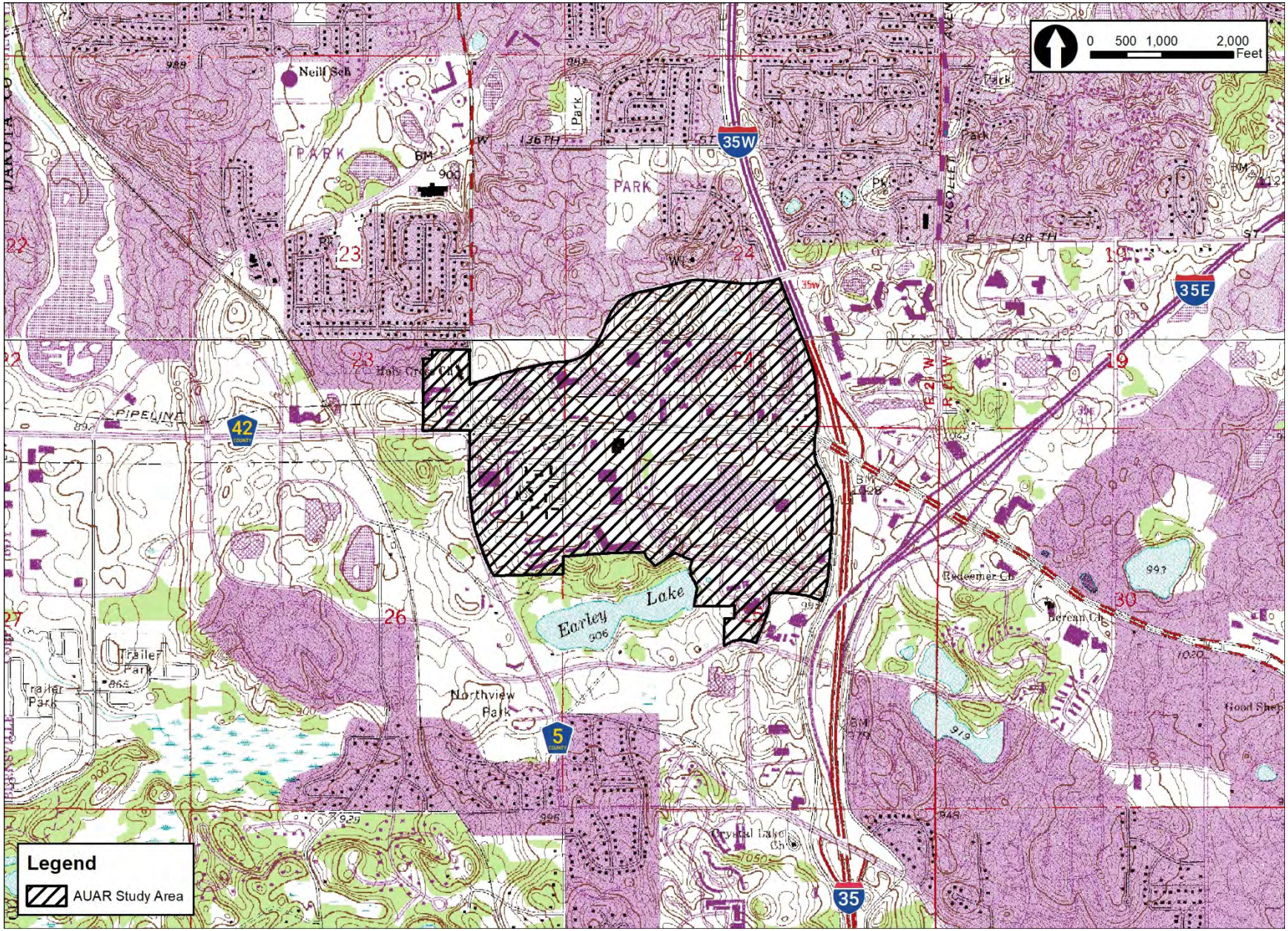
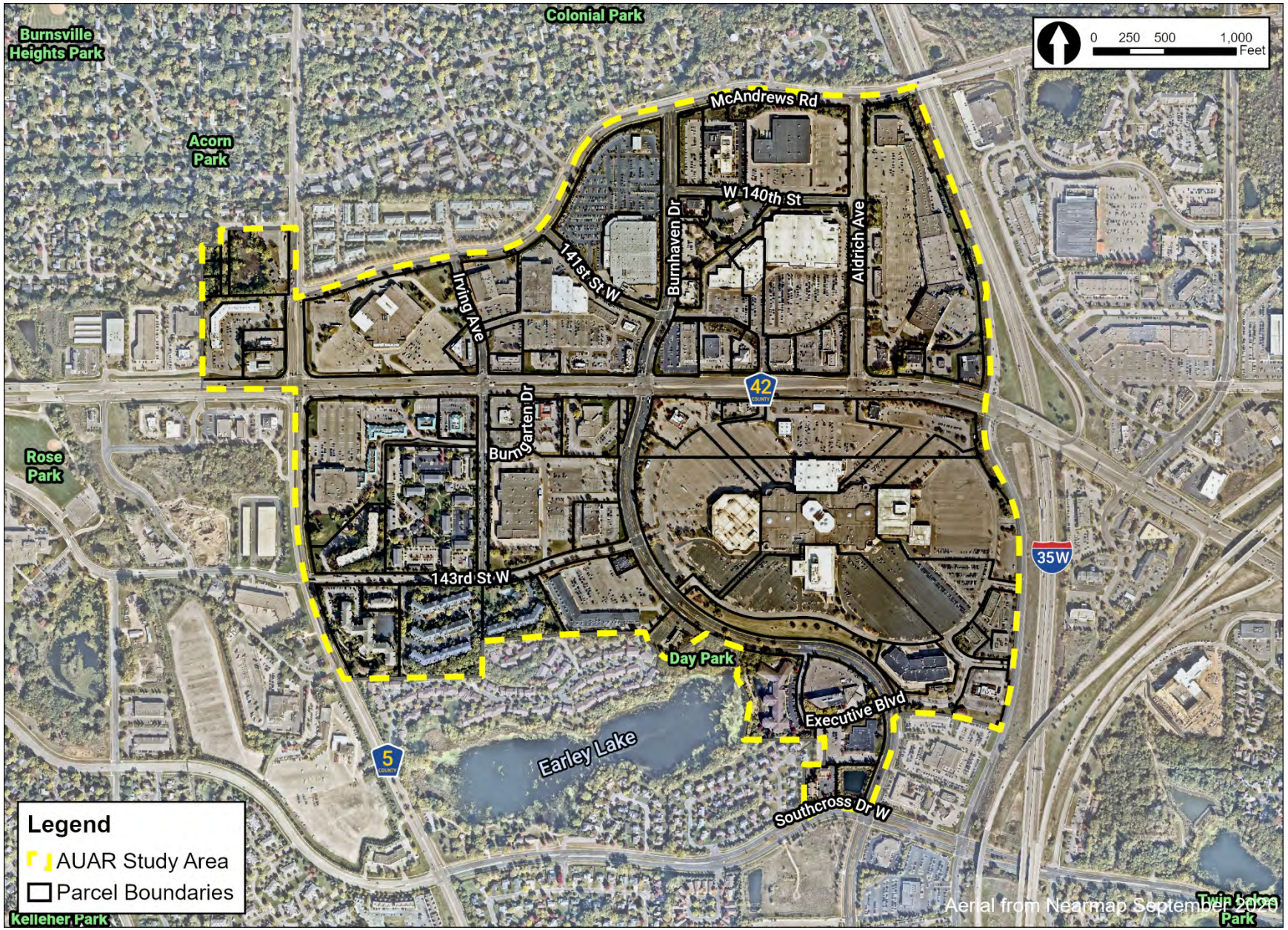


Figure 2: AUAR Study Area



6. Project Description

AUAR Guidance: Instead of the information called for on the EAW form, the description section of an AUAR should include the following elements for each major development scenario included:

- *Anticipated types and intensity (density) of residential and commercial/warehouse/light industrial development throughout the AUAR area.*
- *Infrastructure planned to serve development (roads, sewers, water, stormwater system, etc.). Roadways intended primarily to serve as adjoining land uses within an AUAR area are normally expected to be reviewed as part of an AUAR. More "arterial" types of roadways that would cross an AUAR area are an optional inclusion in the AUAR analysis; if they are included, a more intensive level of review, generally including an analysis of alternative routes, is necessary.*
- *Information about the anticipated staging of various developments, to the extent known, and of the infrastructure, and how the infrastructure staging will influence the development schedule*

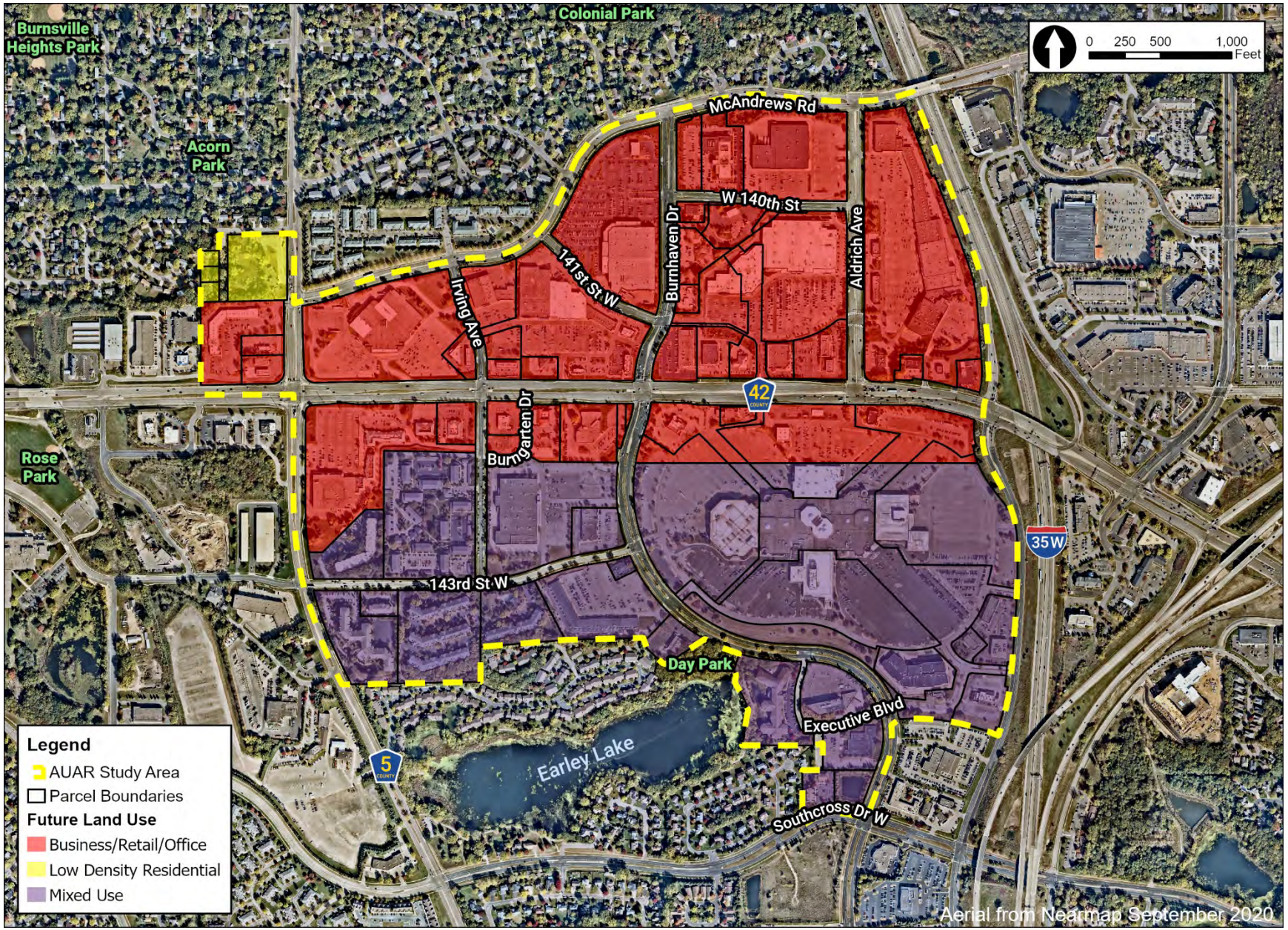
Important Note: Every AUAR document MUST review one or more development scenarios based on and consistent with the RGU's Comprehensive Plan in effect when the AUAR is officially ordered. (This is equivalent to reviewing the "no-build" alternative in an EIS.) If an RGU expects to amend its existing Comprehensive Plan, it has the options of deferring the start of the AUAR until after adopting the amended plan or reviewing developments based on both the existing and amended comprehensive plans; however, it cannot review only a development based on an expected amendment to the existing plan. Also, the rules require that one or more development scenarios analyzed must be consistent with known development plans of property owners within the AUAR area.

The AUAR study area encompasses 426 acres, including 77 existing tax parcels generally located north and south of County Road 42 (CR 42) between County Road 5 (CR 5) and Interstate 35W (I-35W) (see Figure 2). One development scenario is proposed for evaluation in the AUAR (described in Table 1 and shown on Figure 3). The AUAR development scenario is based on the maximum development allowed under the future land uses depicted in the Burnsville 2040 Comprehensive Plan and was identified in the Center Village Redevelopment Vision (January 2019). The intent of the AUAR is to identify the worst-case potential impacts and the mitigation measures that may be taken to compensate for those impacts.

Table 1: AUAR Development Scenario

Land Use	Scenario Density
Residential apartment units	1,600
Hotel rooms	200
Commercial (square feet)	1,100,000
Non-commercial: office, medical, institutional (square feet)	705,000

Figure 3: Development Scenario- Burnsville 2040 Comprehensive Plan



7. Cover Types

AUAR Guidance: The following information should be provided:

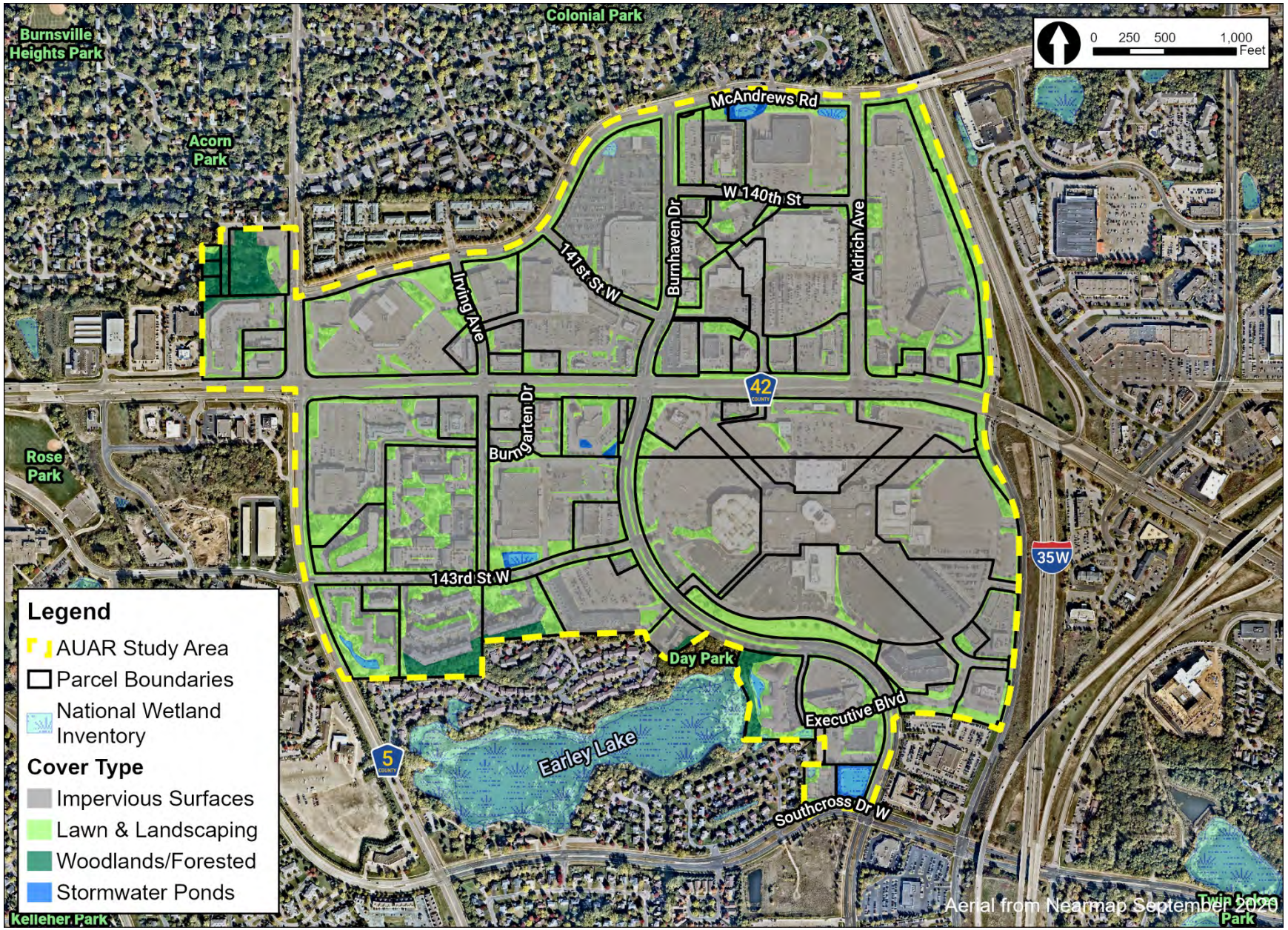
- *A cover type map, at least at the scale of a USGS topographic map, depicting:*
    - *Wetlands (identified by Circular 39 type)*
    - *Watercourses (rivers, streams, creeks, ditches)*
    - *Lakes (identify public waters status and shoreland management classification)*
    - *Woodlands (break down by classes where possible)*
    - *Grassland (identify native and old field)*
    - *Cropland*
    - *Current development*
- *An "overlay" map showing anticipated development in relation to the cover types. This map should also depict any "protection areas," existing or proposed, that will preserve sensitive cover types. Separate maps for each major development scenario should be generally provided.*

The AUAR study area covers approximately 426 acres of urban land. This area is highly developed with varying low to medium density residential and commercial uses. Existing cover types within the study area are shown on Table 2 and Figure 4 and were determined by reviewing aerial photography and land cover classification maps. The National Wetland Inventory identifies several stormwater ponds within the study area. Earley Lake lies just south of the site and is the only existing water body adjacent to the AUAR study area.

Table 2: Cover Types

Cover Type	Existing (Acres)	AUAR Scenario (Acres)
Impervious Surface	317.2	317.2
Lawn and Landscaping	97.7	97.7
Wooded/Forest	9.0	9.0
Stormwater Ponding	2.5	2.5
Total	**426.4**	**426.4**

Figure 4: Cover Types



8. Permits and Approvals Required

AUAR Guidance: A listing of major approvals (including any comprehensive plan amendments and zoning amendments) and public financial assistance and infrastructure likely to be required by the anticipated types of development projects should be given for each major development scenario. This list will help orient reviewers to the framework that will protect environmental resources. The list can also serve as a starting point for the development of the implementation aspects of the mitigation plan to be developed as part of the AUAR.

Table 3: Permits and Approvals Required

Unit of Government	Type of Application	Status
State		
Minnesota Pollution Control Agency	National Pollutant Discharge Elimination System Stormwater Permit for Construction Activities	To be applied for, if applicable
	Sanitary Sewer Extension Permit	To be applied for, if applicable
	Notice of Intent of Demolition	To be applied for, if applicable
	Construction Contingency Plan and Response Action Plan approval	To be applied for, if applicable
Minnesota Department of Natural Resources	Temporary Water Appropriation Permit for Construction Dewatering	To be applied for, if applicable
Regional		
Dakota County	Right-of-Way Permit	To be applied for, if applicable
Metropolitan Council	Sewer Extension Permit	To be applied for, if applicable
	Sewer Connection Permit to Connect	To be applied for, if applicable
	Direct Connection Permit	To be applied for, if applicable
Local		
City of Burnsville	Preliminary/Final Plat	To be applied for, if applicable
	Building Permit	To be applied for, if applicable
	Erosion Control, Grading, and Stormwater Permit	To be applied for, if applicable
	Demolition Permit	To be applied for, if applicable
	Right-of-Way Permit	To be applied for, if applicable
	Comprehensive Plan Amendment	In process
	Rezoning	In process

9. Land Use

a. Describe:

i. Existing land use of the site as well as areas adjacent to and near the site, including parks, trails, and prime or unique farmlands.

The AUAR study area consists of 77 parcels, 15 of which constitute the Burnsville Center Mall. The 426-acre study area is located along CR 42 and west of I-35W. The AUAR study area is an urban area that has been significantly developed over time. The Burnsville Center Mall which was built in 1977 makes up the majority of the southeast quadrant of the AUAR study area. The other three quadrants contain a variety of residential and commercial land uses including several restaurants, retail stores, and apartment complexes.

County Road 38 (McAndrews Road) borders the study area to the north. There are multi-family and single-family homes on the north side of McAndrews Road. The areas south of the study area contain additional residential areas, industrial land use west of Highway 5, and a large strip of automotive sales businesses along Buck Hill Road. East and west of the AUAR study area, there are additional low density commercial and industrial land uses along County Highway 42. I-35W is adjacent to the study area to the east of Buck Hill Road (see Figure 5).

There are a number of small parks within the study area and a public trail around Earley Lake. Additionally, a section of the Lake Marion Greenway was recently completed just west of the AUAR study area, providing a trail connection for the study area. When fully complete, the greenway will connect between the Murphy-Hanrehan Park Reserve and the Minnesota River Greenway.

There is no farmland within or adjacent to the study area.

ii. Planned land use as identified in comprehensive plans (if available) and any other applicable plan for land use, water, or resource management by a local, regional, state, or federal agency.

2040 Comprehensive Plan

The City of Burnsville completed a study to identify redevelopment opportunities completed the Center Village Redevelopment Vision in 2019, which was a study to identify redevelopment opportunities and create a plan for the Burnsville Center Village Area. The Center Village Redevelopment Vision was adopted by the City in January 2019 and incorporated into the city of Burnsville's 2040 Comprehensive Plan. The City of Burnsville's 2040 Comprehensive Plan provides a vision for the future of the city and policies that govern future development throughout the city.

The development scenario represents the maximum density allowable under the 2040 Comprehensive Plan. Within the AUAR study area, the Comprehensive Plan defines three future densities and land uses. According to the future land use plan, there is a small pocket of Low Density Residential in the northwest of the site, and the majority of the parcels north of and adjacent to Highway 42 are currently designated as

Business/Retail/Office. The entire southern portion of the study area not adjacent to Highway 42 is designated as Mixed Use (see Figure 3).

The City has started the process to rezone the northern portion of the AUAR study area, including the north part of the Burnsville Center property, from Low Density Residential and Business/Retail/Office to Mixed Use which would be consistent with the goals of the 2040 comprehensive plan and the Center Village Redevelopment Vision. The Comprehensive Plan Amendment is in process and will be finalized after the completion of the AUAR.

iii. Zoning, including special districts or overlays such as shoreland, floodplain, wild and scenic rivers, critical area, agricultural preserves, etc.

AUAR Guidance: Water-related land use management districts should be delineated on appropriate maps, and the land use restrictions applicable in those districts should be described. If any variances or deviations from these restrictions within the AUAR area are envisioned, this should be discussed.

Burnsville Zoning Code

The majority of the northern portion of the study area is zoned as commercial (B-2 and B-3) and the southern portion of the study area is zoned as mixed use (MIX). Four residential parcels located in the very northwest edge of the study area.

Parcels south of 143rd Street W are located within the city's Shoreland Overlay District and Wetlands Overlay District.

The statutory boundary of the Shoreland Overlay District is defined as 1,000 feet from the shore of a lake of 10 acres or more or 300 feet from a river or stream. Earley Lake lies just south of the study area and the lake's shoreland boundary covers several parcels in the south end of the AUAR study area (see Figure 6).

Several wetlands included within the City's Wetland Overlay district are within the study area and development must adhere to Wetlands Overlay District standards listed in Burnsville City Code 10-8-5 as well as the wetland buffer strips and setbacks listed in Table 4.

Table 4: Wetland Buffer Strips and Setbacks

Wetland Classification	Principal and Accessory Structure Setback (Feet)	Permanent Buffer Strip Average Width (Feet)	Minimum Permanent Buffer Zone Width (Feet)	Percent Native Vegetation
Protection	50	50	30	Entire
Improvement	35	35	25	Entire
Management	25	25	20	Majority
Management II	None	20	20	Majority

b. Discuss the project's compatibility with nearby land uses, zoning, and plans listed in Item 9a above, concentrating on implications for environmental effects.

The development scenario is based upon the maximum development allowable under the 2040 Comprehensive Plan and is consistent with future land uses designated within this area. The City of Burnsville has certified that its Comprehensive Plan complies with the requirements set forth in Minnesota Rules, part 4410.3610, subpart 1.

Policy 1.5 of the Burnsville Comprehensive Plan seeks to "protect sensitive natural areas and enhancement of wildlife habitats through use of the Open Space land use designation, Conservancy Zoning District, and Environmental Overlay District zoning tools." Under the maximum allowable development scenario, the City's environmental overlay districts including the Shoreland Overlay District and Wetland Overlay District must be adhered to.

c. Identify measures incorporated into the proposed project to mitigate any potential incompatibility as discussed in Item 9b above.

There is no incompatibility with planned land use or zoning under the AUAR development scenario. In order to provide flexibility for redevelopment in the AUAR study area, the City has started the process to update the Comprehensive Plan to change land use and rezone the northern section of the AUAR study area (including the north part of the Burnsville Center property), to Mixed Use. The Comprehensive Plan amendment and rezoning will be finalized after the AUAR has been adopted by the City Council.

Figure 5: Current Land Use

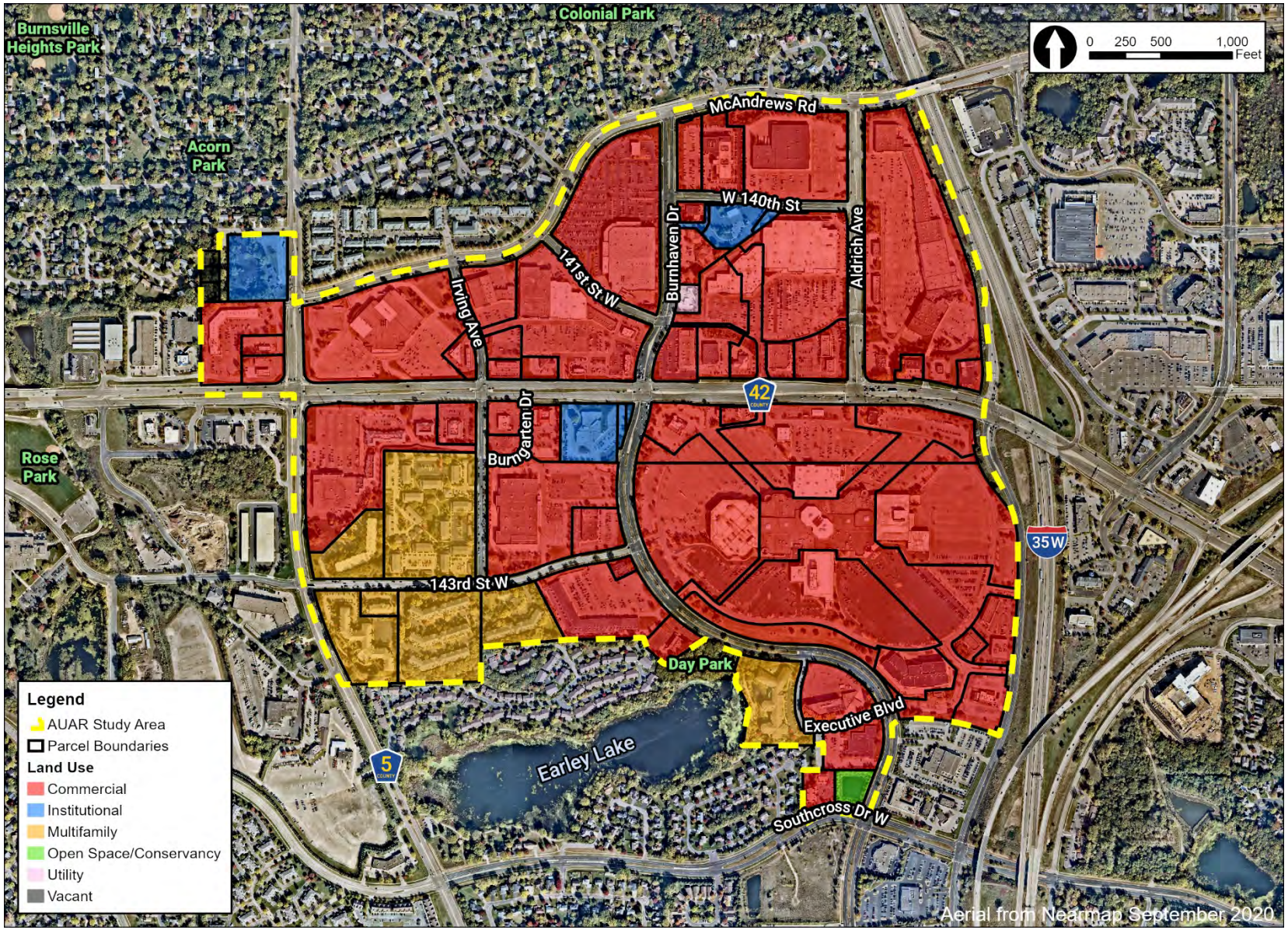
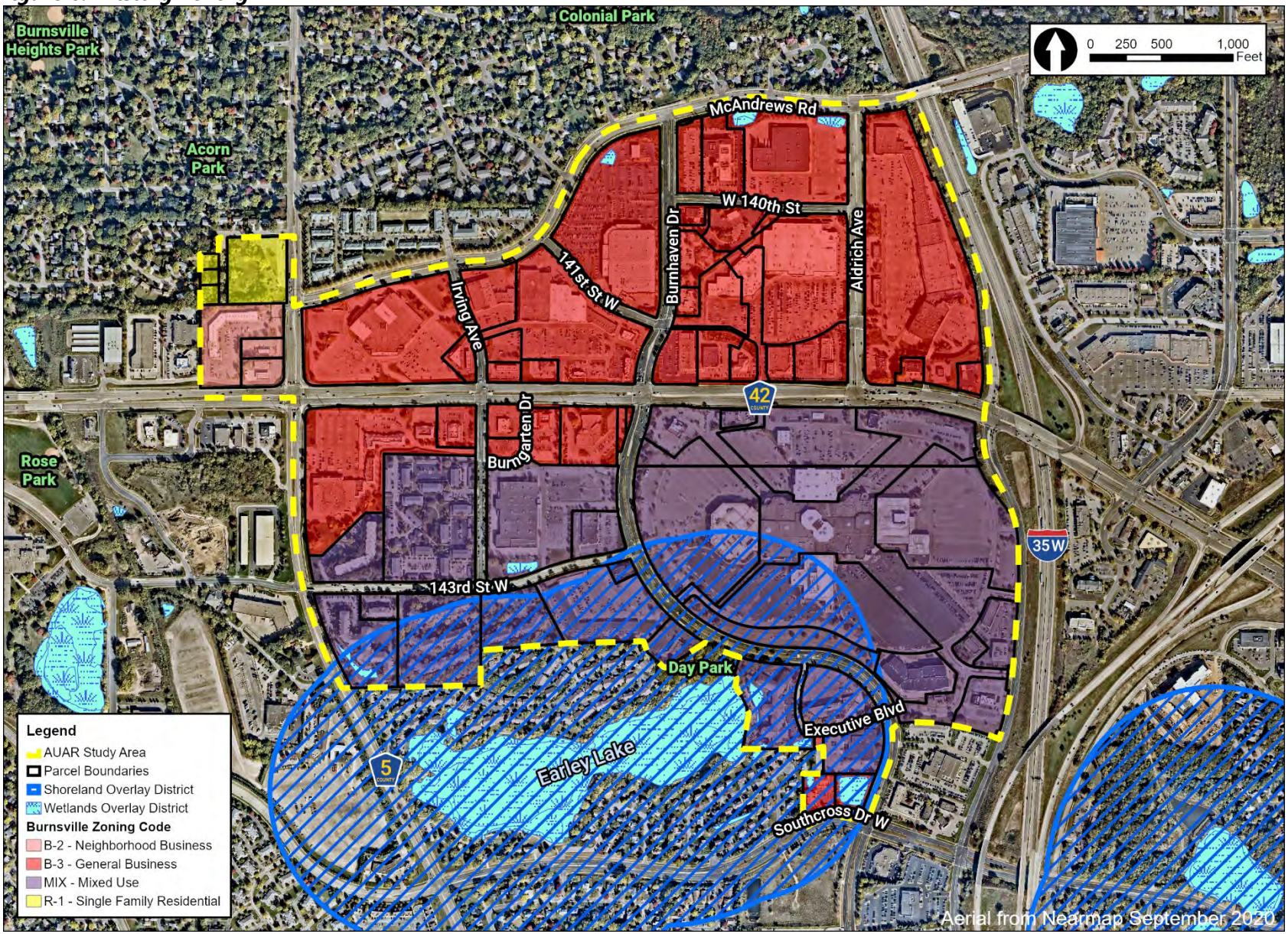


Figure 6: Existing Zoning



10. Geology, Soils, and Topography/Land Forms

AUAR Guidance: A map should be included to show any groundwater hazards identified. A standard soils map for the area should be included.

a. Geology - Describe the geology underlying the project area and identify and map any susceptible geologic features such as sinkholes, shallow limestone formations, unconfined/shallow aquifers, or karst conditions. Discuss any limitations of these features for the project and any effects the project could have on these features. Identify any project designs or mitigation measures to address effects to geologic features.

AUAR Guidance: A map should be included to show any groundwater hazards identified.

According to the Geologic Atlas of Dakota County (Minnesota Geological Survey, 1990), the AUAR study area is underlain by glacial till, glacial outwash, limestone, and sandstone.

Bedrock is encountered at varying depths across the AUAR study area, ranging in depth from approximately 50-100 feet below ground surface (bgs) across most of the northern study area to 150-200 feet bgs on the southern extent. Bedrock is comprised of limestone and sandstone. In descending order, the upper three formations are the Glenwood Shale, the St. Peter Sandstone, and the Prairie Du Chien Group.

Groundwater is present at approximately 0 to 50 feet below the surface.

There are no known sinkholes, unconfined/shallow aquifers, or karst conditions located within the AUAR study area.

b. Soils and Topography - Describe the soils on the site, giving NRCS (SCS) classifications and descriptions, including limitations of soils. Describe topography, any special site conditions relating to erosion potential, soil stability, or other soil limitations, such as steep slopes or highly permeable soils. Provide estimated volume and acreage of soil excavation and/or grading. Discuss impacts from project activities (distinguish between construction and operational activities) related to soils and topography. Identify measures during and after project construction to address soil limitations including stabilization, soil corrections, or other measures. Erosion/sedimentation control related to stormwater runoff should be addressed in response to Item 11.b.ii.

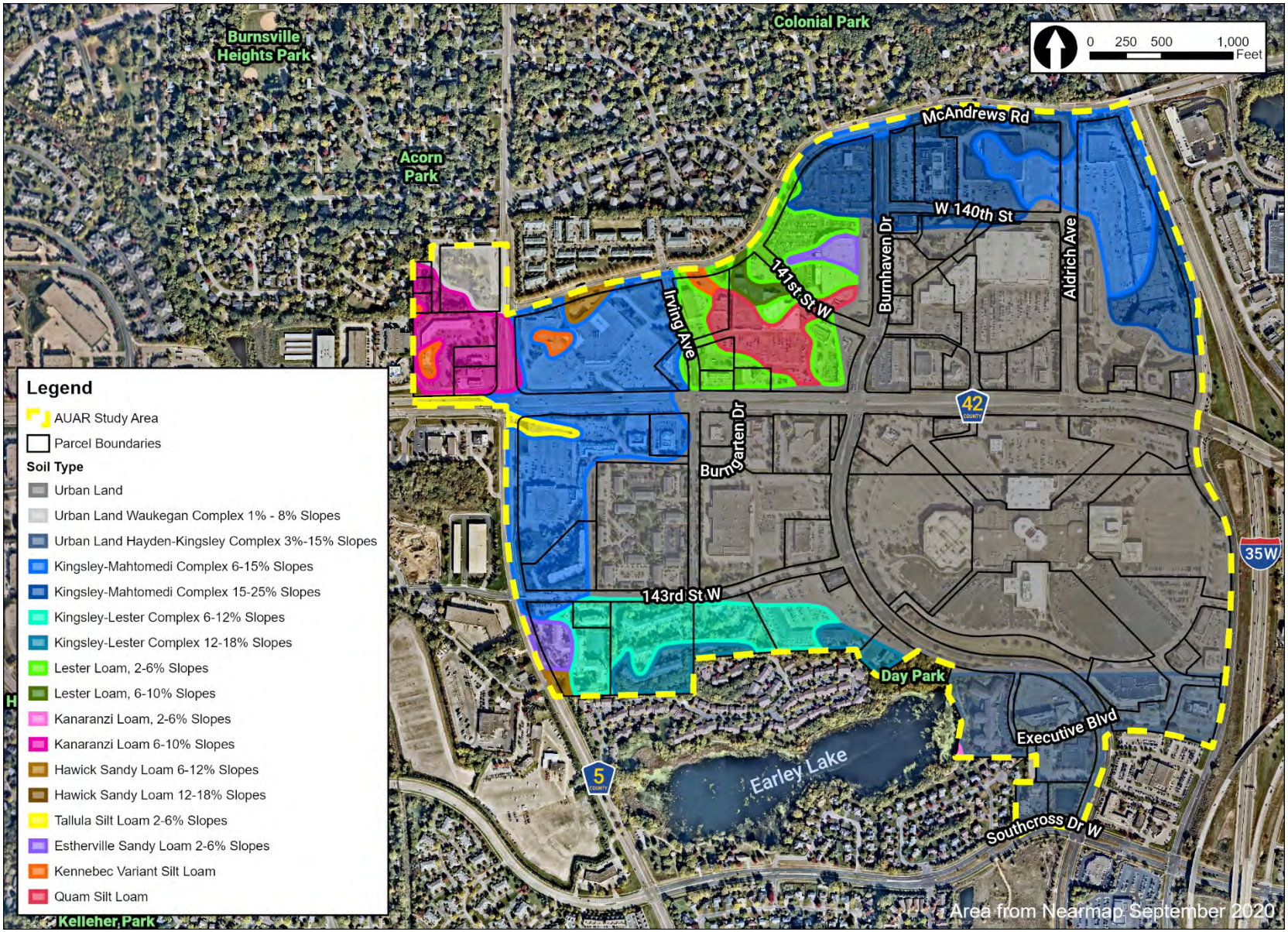
AUAR Guidance: The number of acres to be graded and number of cubic yards of soil to be moved need not be given; instead, a general discussion of the likely earthmoving needs for development of the area should be given, with an emphasis on unusual or problem areas. In discussing mitigation measures, both the standard requirements of the local ordinances and any special measures that would be added for AUAR purposes should be included. A standard soils map for the area should be included.

According to the Natural Resources Conservation Service (NRCS) Web Soil Survey, the area is comprised of 17 different soil types (see Figure 7).

Table 5: Soil Types

Soil Code	Soil Type	Acres within Site	Percent of Site
1039	Urban Land	224.28	52.5%
857B	Urban Land Waukegan Complex 1% - 8% Slopes	4.61	1.1%
860C	Urban Land Hayden-Kingsley Complex 3%-15% Slopes	28.30	6.6%
895C	Kingsley-Mahtomedi Complex 6-15% Slopes	63.36	14.8%
896E	Kingsley-Mahtomedi Complex 15-25% Slopes	33.58	7.9%
888C	Kingsley-Lester Complex 6-12% Slopes	16.71	3.9%
888D	Kingsley-Lester Complex 12-18% Slopes	6.77	1.6%
106B	Lester Loam, 2-6% Slopes	18.16	4.3%
106C	Lester Loam, 6-10% Slopes	1.69	0.4%
415B	Kanaranzi Loam, 2-6% Slopes	0.10	0.02%
415C	Kanaranzi Loam 6-10% Slopes	10.98	2.6%
611C	Hawick Sandy Loam 6-12% Slopes	1.97	0.5%
611D	Hawick Sandy Loam 12-18% Slopes	0.09	0.02%
320B	Tallula Silt Loam 2-6% Slopes	2.11	0.5%
41B	Estherville Sandy Loam 2-6% Slopes	4.02	0.9%
1816	Kennebec Variant Silt Loam	2.08	0.5%
344	Quam Silt Loam	8.01	1.9%
Total		**426.48**	**100%**

Figure 7: Soil Types



11. Water Resources

AUAR Guidance: The information called for on the EAW form should be supplied for any of the infrastructure associated with the AUAR development scenarios, and for any development expected to physically impact any water resources. Where it is uncertain whether water resources will be impacted depending on the exact design of future development, the AUAR should cover the possible impacts through a "worst case scenario" or else prevent impacts through the provisions of the mitigation plan.

a. Describe surface water and groundwater features on or near the site below.

i. Surface Water - Lakes, streams, wetlands, intermittent channels, and county/judicial ditches. All surface water features should be described and identified on a map of the project area. Include any special designations such as public waters, trout stream/lake, wildlife lakes, migratory waterfowl feeding/resting lake, and outstanding resource value water. Include water quality impairments or special designations listed on the current MPCA 303d Impaired Waters List that are within one mile of the project. Include DNR Public Waters Inventory number(s), if any.

The AUAR study area is within a highly developed urban area; however, 2.63 acres of stormwater pond wetlands are located within the AUAR study area (based on 2021 National Wetlands Inventory data from the Minnesota Department of Natural Resource (DNR)). The AUAR study area is within the Black Dog Watershed Management Organization watershed.

There are no DNR Public Waters or other waterways identified within the AUAR study area; however, Earley Lake is located just south of the study area. Earley Lake is identified as a DNR Public Water (Shoreland Natural Environment Lake). Any future development will be designed to avoid adverse impacts to the lake and will be consistent with the City's stormwater and floodplain requirements.

Drainage from the project area flows north toward the Minnesota River.

ii. Groundwater - Groundwater – aquifers, springs, and seeps. Include 1) depth to groundwater; 2) if project is within a MDH well protection area; and 3) identification of any onsite and/or nearby wells, including unique numbers and well logs, if available. If there are no wells known on site or nearby, explain the methodology used to determine this.

According to the DNR Minnesota Hydrology Atlas, the depth to groundwater within the AUAR study area is 0 to 50 feet below the surface beneath the Jordan Sandstone formation (Prairie Du Chien-Jordan aquifer).

Based on the Minnesota Department of Health (MDH) Well Index, there are up to five unverified wells located within the AUAR study area (see Table 6).

Table 6: Wells within AUAR study area

Identifying Organization	Well ID Number	Well Location	Well Depth	Date Completed
MDH	553731	1501 143rd Street	24 Feet	10/10/1994

Identifying Organization	Well ID Number	Well Location	Well Depth	Date Completed
MDH	637463	1701 143rd Street	55 Feet	10/26/1999
MDH	564349	901 CR 42	23 Feet	03/29/1995
MDH	272828	Burnsville Center near Dayton's (current JCPenney)	54 Feet	09/28/1980
MDH	768541	Between I-35W and Buck Hill Road just South of CR 42	32.5 Feet	12/17/2009
Dakota County	206168	14020 Co Rd 5	N/A	N/A
Dakota County	496480	1600 143rd St W	N/A	N/A
Dakota County	N/A	810 Co Rd 42 W	N/A	N/A
Dakota County	N/A	1000 Co Rd 42	N/A	N/A
Dakota County	N/A	900 Co Rd 42	N/A	N/A
Dakota County	N/A	400-410 Co Rd 42	N/A	N/A
Dakota County	N/A	400 Co Rd 42	N/A	N/A
Dakota County	N/A	14250 Buck Hill Rd	N/A	N/A
Dakota County	N/A	14301 Burnhaven Drive	N/A	N/A
Dakota County	N/A	1401 143rd St W	N/A	N/A

If wells are encountered on site that will not be used, they will be sealed and abandoned following Minnesota Department of Health (MDH) and MPCA protocol.

b. Describe effects from project activities on water resources and measures to minimize or mitigate the effects below.

iii. Wastewater - For each of the following, describe the sources, quantities, and composition of all sanitary, municipal/domestic, and industrial wastewaters projected or treated at the site.

AUAR Guidance: Observe the following points of guidance in an AUAR:

- *Only domestic wastewater should be considered in an AUAR—industrial wastewater would be coming from industrial uses that are excluded from review through an AUAR process*
- *Wastewater flows should be estimated by land use subareas of the AUAR area; the basis of flow estimates should be explained*
- *The major sewer system features should be shown on a map and the expected flows should be identified*
- *If not explained under Item 6, the expected staging of the sewer system construction should be described*
- *The relationship of the sewer system extension to the RGU's comprehensive sewer plan and (for metro area AUARs) to Metropolitan Council regional systems plans, including MUSA expansions, should be discussed. For non-metro area AUARs, the AUAR must discuss the capacity of the RGU's wastewater treatment system compared to the flows from the AUAR area; any necessary improvements should be described.*

- *If on-site systems will serve part of the AUAR, the guidance in the February 2000 edition of the EAW Guidelines on page 16 regarding item 18b under Residential development should be followed.*

    1) **If the wastewater discharge is to a publicly owned treatment facility, identify any pretreatment measures and the ability of the facility to handle the added water and waste loadings, including any effects on, or required expansion of, municipal wastewater infrastructure.**

       The AUAR study area is located within the 3-BV-39-B and 3-BV-39-C Met Council Sanitary Sewershed. Sewer flows from the properties are collected in City sanitary sewers which ultimately drain to the Metropolitan Council Environmental Services (MCES) interceptor system, which eventually exits the City at a single outfall point at meter M501 in the northwest part of the City to the Seneca Metropolitan Council Wastewater Treatment Plant. The plant currently treats approximately 21.9 million gallons per day (GPD), with a total capacity of up to 34 million GPD according to the Met Council's Seneca Wastewater Treatment Plant factsheet. Thus, the existing plant has excess capacity.

       Based on the MCES Sewer Availability Charge (SAC) program, it is assumed the AUAR scenario will result in approximately 2,650 SAC units (Assumed 90% of commercial area is retail and remaining 10% is food/drink) the estimated daily flow for the AUAR Development Scenario is approximately 0.73 million gallons per day (MGD). Based on a Ten States Standards peaking factor of 2.955, the estimated peak flow generated is 2.16 MGD (less than 18% percent of existing capacity). No land uses that would generate wastewater requiring pretreatment are anticipated. The proposed development scenario is consistent with the City's planned sanitary sewer usage as identified in the 2040 Comprehensive Plan.

       The City completed a Citywide Sanitary Sewer Model Development Technical Memorandum in February 2020 that included an analysis on sewer capacity for future development and growth (see Appendix B). Anticipated development through the year 2040 for the Burnsville Center Village Area was added to the model and it was determined that the existing 12-inch pipe on Burnhaven Drive should have sufficient capacity to handle the additional wastewater flow generated by the AUAR Development Scenario.

    2) **If the wastewater discharge is to a subsurface sewage treatment system (SSTS), describe the system used, the design flow, and suitability of site conditions for such a system.**

       No subsurface sewage treatment systems (SSTS) are anticipated within the AUAR study area as part of the development scenario.

    3) **If the wastewater discharge is to surface water, identify the wastewater treatment methods, discharge points, and proposed effluent limitations to mitigation impacts. Discuss any effects to surface or groundwater from wastewater discharges.**

No wastewater discharge to surface waters is anticipated for the development scenario.

iv. Stormwater – Describe the quantity and quality of stormwater runoff at the site prior to and post construction. Include the routes and receiving water bodies for runoff from the site (major downstream water bodies as well as the immediate receiving waters). Discuss any environmental effects from stormwater discharges. Describe stormwater pollution prevention plans including temporary and permanent runoff controls and potential BMP site locations to manage or treat stormwater runoff. Identify specific erosion control, sedimentation control, or stabilization measures to address soil limitations during and after project construction.

AUAR Guidance: For an AUAR the following additional guidance should be followed in addition to that in EAW Guidelines:

- *It is expected that an AUAR will have a detailed analysis of stormwater issues*
- *A map of the proposed stormwater management system and of the water bodies that will receive stormwater should be provided*
- *The description of the stormwater systems would identify on-site and "regional" detention ponding and also indicate whether the various ponds will be new water bodies or converted existing ponds or wetlands. Where on-site ponds will be used but have not yet been designed, the discussion should indicate the design standards that will be followed.*
- *If present in or adjoining the AUAR area, the following types of water bodies must be given special analyses:*
    - *Lakes: Within the Twin Cities metro area, a nutrient budget analysis must be prepared for any "priority lake" identified by the Metropolitan Council. Outside of the metro area, lakes needing a nutrient budget analysis must be determined by consultation with the MPCA and DNR staffs.*
    - *Trout streams: If stormwater discharges will enter or affect a trout stream, an evaluation of the impacts on the chemical composition and temperature regime of the stream and the consequent impacts on the trout population (and other species of concern) must be included.*

Drainage from the AUAR study area is typically collected via public or private storm sewer and then conveyed downstream to the natural receiving body of water. The AUAR study area is part of both the City of Burnsville's West Subwatershed and Sunset Pond Subwatershed and is subject to the City of Burnsville and Black Dog Lake Watershed Management Organization (WMO) rules. The existing drainage areas are shown in Appendix C. The existing impervious areas total is approximately 316 acres within the AUAR study area, which is approximately 74% of the AUAR study area. The AUAR study area currently has some existing properties which provide on-site stormwater management as well as many sites that do not have any existing stormwater management best management practices (BMPs).

Future development as part of the AUAR Development Scenario will treat the stormwater on site and will comply with City and Black Dog Lake Watershed Management

Organization rules and requirements for water quality, volume and rate control, and erosion control at the time of proposed development.

As required by the City and WMO development projects within the AUAR area will be required to provide stormwater BMPs to manage the rate, quantity, and quality of the stormwater runoff. Furthermore, some existing property owners have current agreements with the city or have received special assessments to implement stormwater projects within the AUAR study area. The redevelopment projects will be required to provide 1.1-inches of volume reduction over the proposed impervious surface coverage for the development through an infiltration BMP. If infiltration of stormwater is not practical due to existing site conditions, filtration of stormwater will be used. The post-development discharge rates should be less than or equal to the existing runoff rates for the 2-, 10-, and 100-year, 24-hour rainfall events. The proposed development scenario will also be required to incorporate effective non-point source pollution reduction best management practices (BMPs) to achieve either 60% (Redevelopment) or 75% (New Development) percent total phosphorus removals for the stormwater runoff.

The National Pollutant Discharge Elimination System (NPDES) Stormwater Permit requires treatment of 1-inch of runoff for the new impervious area since more than one acre of disturbance will occur. Since the NPDES Stormwater Permit requirement is less than the City's 1.1-inch requirement, the City's requirements will control design.

v. Water Appropriation – Describe if the project proposes to appropriate surface or groundwater (including dewatering). Describe the source, quantity, duration, use, and purpose of the water use and if a DNR water appropriation permit is required. Describe any well abandonment. If connecting to an existing municipal water supply, identify the wells to be used as a water source and any effects on, or required expansion of, municipal water infrastructure. Discuss environmental effects from water appropriation, including an assessment of the water resources available for appropriation. Identify any measures to avoid, minimize, or mitigate environmental effects from the water appropriation.

AUAR Guidance: If the area requires new water supply wells, specific information about that appropriation and its potential impacts on groundwater levels should be given; if groundwater levels would be affected, any impacts resulting on other resources should be addressed.

Construction dewatering may be required for the development of the AUAR study area. Construction activities associated with dewatering will include discharging into temporary sedimentation basins to reduce the rate of water discharged from the site, as well as discharging to temporary stormwater BMPs. Any temporary dewatering will require a DNR Temporary Water Appropriations General Permit 1997-0005 if less than 50 million gallons per year and less than one year in duration. It is anticipated that the temporary dewatering would only occur during utility installation and potential construction of building footings.

The water supply will be obtained from the municipal groundwater wells and two surface water wells that currently supply the Burnsville water system. The groundwater wells draw water from the Jordan and Mount Simon-Hinckley aquifers. The capacity of the

groundwater wells varies from 800 to 1,500 gallons per minute (gpm). In addition, two raw water wells pump surface water from the Kraemer Quarry to a surface water treatment plant adjacent to the existing ground water treatment plant. The Kraemer Quarry pumps are designed to pump an average flow rate of 2,800 gpm or 4 million gallons per day (MGD). However, Kraemer Quarry is only able to provide a sustainable supply of 2,200 gpm (3.2 MGD). This results in a total supply capacity of approximately 22,200 gpm or 32.0 MGD. The firm capacity is 19,200 gpm (27.6 MGD).

The existing water system was analyzed for supply, treatment, storage, and distribution capacity to determine if additional water system capital improvements are necessary in order to continue to provide a safe and reliable water supply through 2040. It was determined that additional capacity for supply, treatment, and storage on the distribution system is not necessary to meet projected water demands through 2040 (see Appendix D for Water Supply Memo).

vi. Surface Waters

1) **Wetlands – Describe any anticipated physical effects or alterations to wetland features, such as draining, filling, permanent inundation, dredging, and vegetative removal. Discuss direct and indirect environmental effects from physical modification of wetlands, including the anticipated effects that any proposed wetland alterations may have to the host watershed. Identify measures to avoid (e.g., available alternatives that were considered), minimize, or mitigate environmental effects to wetlands. Discuss whether any required compensatory wetland mitigation for unavoidable wetland impacts will occur in the same minor or major watershed and identify those probable locations.**

   Approximately 2.63 acres of wetlands are located within the AUAR study area based on 2021 National Wetlands Inventory data from the DNR (see Table 7). These wetlands appear to be constructed stormwater ponds within the AUAR study area. It should be noted that wetlands and Earley Lake are adjacent to the AUAR study area; however, are not within the limits. No impacts to the existing stormwater pond wetlands are anticipated.

Table 7: Wetlands Identified on Site

Identifying Inventory	Wetland Type	Wetland Classification	Wetland Size	Aerial Identification
National Wetland Inventory	Freshwater Emergent Wetland	PEM1C	0.26 Acres	Stormwater Pond
National Wetland Inventory	Freshwater Emergent Wetland/ Freshwater Pond	PEM1C/ PUBHx	0.34 Acres	Stormwater Pond
National Wetland Inventory	Freshwater Pond	PUBHx	0 Acres	Stormwater Pond, installed in 2008 and removed in 2010
National Wetland Inventory	Freshwater Pond	PUBFx	0.30 Acres	Stormwater Pond

Identifying Inventory	Wetland Type	Wetland Classification	Wetland Size	Aerial Identification
National Wetland Inventory	Freshwater Pond	PUBHx	0.27 Acres	Landscaping Pond
National Wetland Inventory	Freshwater Pond	PUBHx	0.80 Acres	Stormwater Pond
National Wetland Inventory	Freshwater Pond	PUBHx	0.30 Acres	Landscaping Pond
National Wetland Inventory	Freshwater Emergent Wetland/ Freshwater Pond	PEM1Cx/ PABHx	0.13 Acres	Stormwater Pond
National Wetland Inventory	Freshwater Pond	PUBHx	.07 Acres	Stormwater Pond
Total	**--**	**--**	**2.47 Acres**	**--**

2) **Other surface waters – Describe any anticipated physical effects or alterations to surface water features (lakes, streams, ponds, intermittent channels, county/judicial ditches) such as draining, filling, permanent inundation, dredging, diking, stream diversion, impoundment, aquatic plant removal, and riparian alteration. Discuss direct and indirect environmental effects from physical modification of water features. Identify measures to avoid, minimize, or mitigate environmental effects to surface water features, including in-water Best Management Practices that are proposed to avoid or minimize turbidity/sedimentation while physically altering the water features. Discuss how the project will change the number or type of watercraft on any water body, including current and projected watercraft usage.**

   AUAR Guidance: Water surface use need only be addressed if the AUAR area would include or adjoin recreational water bodies.

   No alternations to surface waters are anticipated as part of the development scenario.

3) **If the wastewater discharge is to surface water, identify the wastewater treatment methods, discharge points, and proposed effluent limitations to mitigation impacts. Discuss any effects to surface or groundwater from wastewater discharges.**

   No wastewater discharge to surface water is anticipated as part of the development.

4) **Stormwater – Describe the quantity and quality of stormwater runoff at the site prior to and post construction. Include the routes and receiving water bodies for runoff from the site (major downstream water bodies as well as the immediate receiving waters). Discuss any environmental effects from stormwater discharges. Describe stormwater pollution prevention plans**

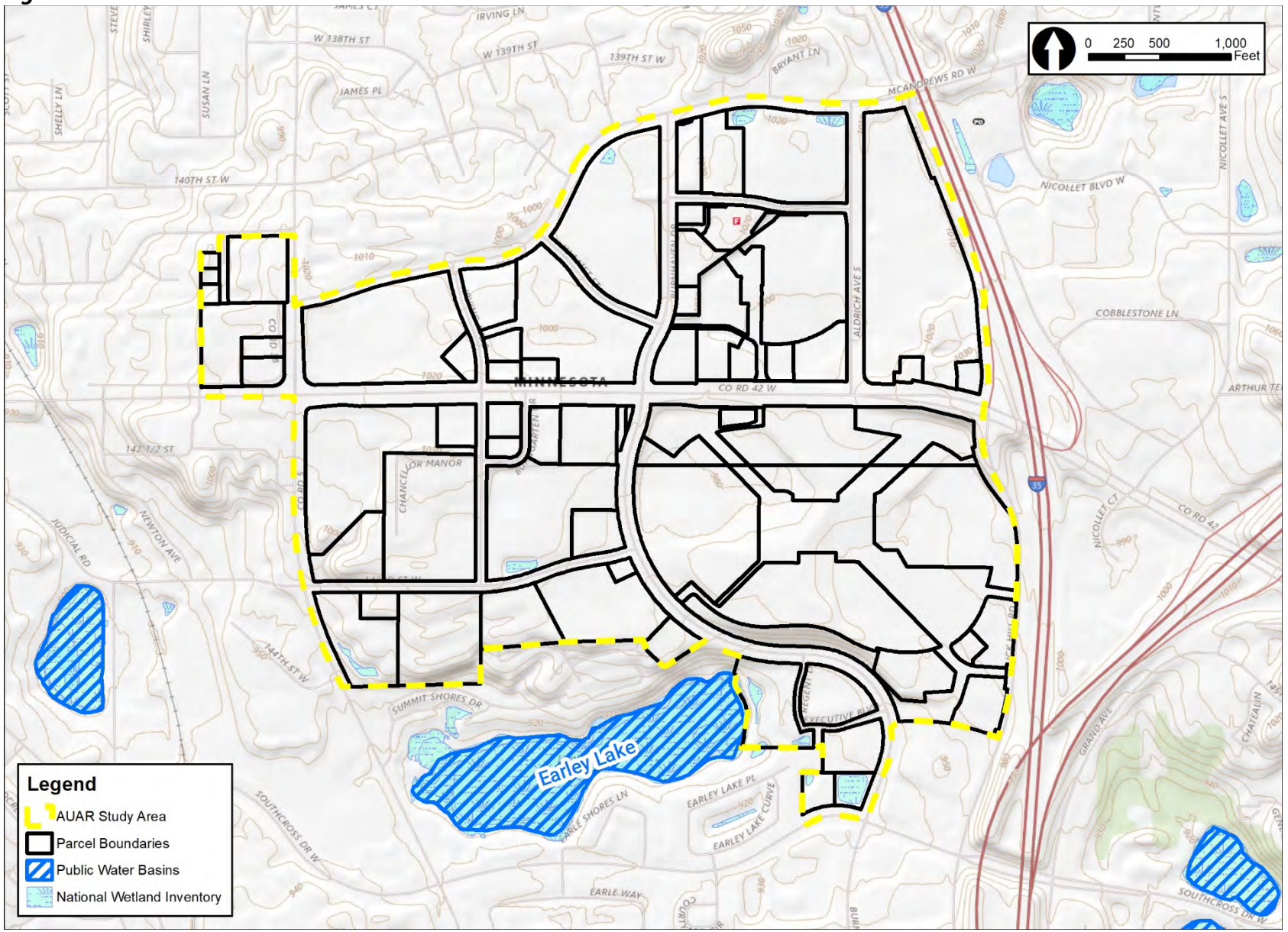
including temporary and permanent runoff controls and potential Best Management Practices site locations to manage or treat stormwater runoff. Identify specific erosion control, sedimentation control, or stabilization measures to address soil limitations during and after project construction.

The existing impervious surface area within the study area totals approximately 316 acres. It is anticipated that the area would retain similar impervious surface areas after redevelopment.

The following stormwater management requirements will be adhered to:

1. The Burnsville Development Standards in the Water Resources Management Plan, Appendix C – Engineering Standards.
2. National Pollution Discharge Elimination System permit requirements will be determined for each new development within the AUAR study area. This permit requires 80 percent TSS removal and meeting existing run-off rates for the 2, 10, and 100-year storm events.

Figure 8: Water Resources



12. Solid wastes, Hazardous Wastes, and Storage Tanks

a. Pre-project Site Conditions – Describe existing contamination or potential environmental hazards on or in close proximity to the project site, such as soil or groundwater contamination, abandoned dumps, closed landfills, existing or abandoned storage tanks, and hazardous liquid or gas pipelines. Discuss any potential environmental effects from pre-project site conditions that would be caused or exacerbated by project construction and operation. Identify measures to avoid, minimize, or mitigate adverse effects from existing contamination or potential environmental hazards. Include development of a Contingency Plan or Response Action Plan.

The Minnesota Pollution Control Agency's (MPCA) What's In My Neighborhood (WIMN) database and Dakota County's MPCA site inventory were reviewed to determine if any known contaminated properties or potential environmental hazards are located within the study area and 86 sites were identified (see Table 8 and Figure 9). Of the 86 sites, 67 have activities that are listed as active.

Using the following criteria established by the Minnesota Department of Transportation (MnDOT), the sites were classified into high, medium, and low risk sites:

- High risk: In general, sites with high environmental risks are properties that have documented releases of chemicals or hazardous or regulated substances (e.g., active and inactive state and federal cleanup sites, active and inactive dump sites, and active leaking underground storage tank sites), strong evidence of contamination (e.g., soil staining, stressed vegetation), or storage of large volumes of petroleum or other chemicals (e.g., bulk storage tank facilities).
- Medium risk: Sites of medium environmental risk are properties where smaller volumes of petroleum, chemicals, or hazardous materials are frequently stored and used (e.g., registered underground and aboveground storage tanks, vehicle repair facilities, metal working shops), but at which no evidence of spills or releases exists, or properties with documented releases that have been "closed" (signifying no further cleanup actions deemed necessary) by the MPCA. Closed sites, such as closed leaking underground storage tank sites, are considered medium risks because residual soil or groundwater contamination may exist.
- Low risk: Low environmental risk sites include properties where minor volumes of chemicals or hazardous materials have been used or stored (e.g., hazardous waste generators, and possibly some farmsteads and residences).

Table 8: MPCA What's in My Neighborhood Sites and Dakota County MPCA Site Inventory

Site ID	Site Name	Activity Status	Activity	Program	Risk Level
MPCA WIMN					
114819	Northwest Racquet Swim & Health Club (CLOSED)	Active	Aboveground Tanks; Petroleum Remediation, Leak Site; Underground Tanks	Multiple Programs	Medium
84904	United Properties - Burnsville	Active	Hazardous Waste	Hazardous Waste	Low
8622	WL Gore & Associates Inc	Active	Hazardous Waste, Very small quantity generator	Hazardous Waste	Low
105291	Transmission Shop Inc	Active	Aboveground Tanks; Underground Tanks	Tanks	Medium
116522	General Cinema Demo	Active	Hazardous Waste	Hazardous Waste	Low
90519	Regent at Burnsville Senior Housing Community	Inactive	Construction Stormwater	Stormwater	Low
137102	Augustana Regent	Active	Hazardous Waste, Minimal quantity generator	Hazardous Waste	Low
215203	2016 Pond Cleanout	Active	Construction Stormwater	Stormwater	Low
143480	Prestwick Place (Falmoor Glen) Future	Active	Construction Stormwater	Stormwater	Low
144430	Prestwick Place 10th	Active	Construction Stormwater	Stormwater	Low
148186	Prestwick Place 10th Addition	Active	Construction Stormwater	Stormwater	Low
22007	Metro DentalCare Children's Dentistry	Active	Hazardous Waste	Hazardous Waste	Low
20182	Metro DentalCare - Burnsville Specialty	Active	Hazardous Waste, Very small quantity generator	Hazardous Waste	Low
61900	Burnsville Center Dispersed Generation	Active	Air Quality; Underground Tanks	Multiple Programs	Medium
26172	Burnsville Family Dental - 1064	Inactive	Hazardous Waste	Hazardous Waste	Low
118802	Pearle Vision 6702	Active	Hazardous Waste, Minimal quantity generator	Hazardous Waste	Low
222781	Best Buy Mobile Store 1679	Active	Hazardous Waste	Hazardous Waste	Low

Site ID	Site Name	Activity Status	Activity	Program	Risk Level
28844	Blacks Photography (CLOSED)	Active	Hazardous Waste, Very small quantity generator	Hazardous Waste	Low
29554	Hirshfield's – Burnsville (CLOSED)	Active	Hazardous Waste	Hazardous Waste	Low
128979	National Camera Exchange (CLOSED)	Active	Hazardous Waste, Very small quantity generator	Hazardous Waste	Low
48678	Hollister Co – Burnsville (CLOSED)	Active	Hazardous Waste, Very small quantity generator	Hazardous Waste	Low
116229	Burnsville Shopping Center	Active	Petroleum Remediation, Leak Site; Underground Tanks	Multiple Programs	Medium
29580	Homart Development Company	Inactive	Hazardous Waste	Hazardous Waste	Low
30829	Savers Store 5107 (CLOSED)	Active	Hazardous Waste, Very small quantity generator	Hazardous Waste	Low
123464	JCPenney 30	Active	Hazardous Waste, Very small quantity generator; Underground Tanks	Multiple Programs	Medium
86024	RWS 2A & 2B	Inactive	Construction Stormwater	Stormwater	Low
38572	Sears 1132/6132 (CLOSED)	Active	Hazardous Waste, Very small quantity generator; Petroleum Remediation, Leak Site; Underground Tanks	Multiple Programs	Medium
90833	Macy's North - Burnsville	Active	Aboveground Tanks; Hazardous Waste, Very small quantity generator; Underground Tanks	Multiple Programs	Medium
106863	Sinclair Retail 22052	Inactive	Petroleum Remediation, Leak Site; Underground Tanks	Multiple Programs	Medium
129845	Chancellor Manor - Burnsville	Active	Construction Stormwater	Stormwater	Low
25446	Builders Square 1329	Active	Hazardous Waste, Minimal quantity generator	Hazardous Waste	Low

Site ID	Site Name	Activity Status	Activity	Program	Risk Level
119211	Kmart Store 9383 (CLOSED)	Active	Hazardous Waste, Large quantity generator	Hazardous Waste	Low
216505	Express 638 (CLOSED)	Active	Hazardous Waste, Very small quantity generator	Hazardous Waste	Low
26167	Burnhaven Chiropractic	Inactive	Hazardous Waste	Hazardous Waste	Low
24109	Lenscrafters	Active	Hazardous Waste, Very small quantity generator	Hazardous Waste	Low
223999	American Eagle Outfitters 131	Active	Hazardous Waste, Very small quantity generator	Hazardous Waste	Low
22124	Proex Photo & Portrait	Inactive	Hazardous Waste	Hazardous Waste	Low
104184	Burnhaven Library	Inactive	Underground Tanks	Tanks	Low
136691	Burnhaven Library Additions	Inactive	Construction Stormwater	Stormwater	Low
129798	Jared the Galleria of Jewelry - Burnsville	Active	Hazardous Waste, Minimal quantity generator	Hazardous Waste	Low
148617	Dick's Sporting Goods 265	Active	Hazardous Waste, Very small quantity generator	Hazardous Waste	Low
96599	Donaldson's/Carson Pirie Scott	Inactive	Petroleum Remediation, Leak Site; Underground Tanks	Multiple Programs	Medium
132251	Walgreen's Store 2510	Active	Hazardous Waste, Very small quantity generator	Hazardous Waste	Low
101513	US Coating	Active	Hazardous Waste	Hazardous Waste	Low
23385	Copy X Press	Inactive	Hazardous Waste	Hazardous Waste	Low
19727	Sherwin Williams Co	Active	Hazardous Waste, Very small quantity generator	Hazardous Waste	Low
25365	Jiffy Lube 108	Active	Aboveground Tanks; Hazardous Waste, Very small quantity generator; Underground Tanks	Multiple Programs	Medium

Site ID	Site Name	Activity Status	Activity	Program	Risk Level
93077	Certified Appliance Recycling	Active	Hazardous Waste, Very small quantity generator	Hazardous Waste	Low
28506	Now Sports Inc	Inactive	Hazardous Waste	Hazardous Waste	Low
30762	SuperAmerica 4201	Inactive	Hazardous Waste	Hazardous Waste	Low
24289	Photo Express	Inactive	Hazardous Waste	Hazardous Waste	Low
30440	Norwest Bank Burnsville Na	Active	Hazardous Waste, Very small quantity generator	Hazardous Waste	Low
27193	Shamrock Cleaners of Burnsville	Active	Hazardous Waste	Hazardous Waste	Low
108490	Cub Foods 1631	Active	Aboveground Tanks; Hazardous Waste, Very small quantity generator	Multiple Programs	Medium
212392	The Sports Authority (CLOSED)	Active	Hazardous Waste, Minimal quantity generator	Hazardous Waste	Low
19734	Mervyns Burnsville	Inactive	Hazardous Waste	Hazardous Waste	Low
30539	Honest-1 Auto Care	Active	Hazardous Waste, Minimal quantity generator	Hazardous Waste	Low
212336	Aldi Grocery	Active	Construction Stormwater	Stormwater	Low
150923	Starbucks	Active	Construction Stormwater	Stormwater	Low
149615	Starbucks	Active	Construction Stormwater	Stormwater	Low
149372	Chick-fil-A 3491	Active	Construction Stormwater	Stormwater	Low
29662	Northland Auto Care Inc	Active	Hazardous Waste, Very small quantity generator; Petroleum Remediation, Leak Site; Underground Tanks	Multiple Programs	Medium

Site ID	Site Name	Activity Status	Activity	Program	Risk Level
26181	Precision Tune - Burnsville	Active	Brownfields, Petroleum Brownfield and Voluntary Investigation and Cleanup; Hazardous Waste, Minimal quantity generator; Petroleum Remediation, Leak Site; Underground Tanks	Multiple Programs	High
107218	Speedway 4201	Active	Petroleum Remediation, Leak Site; Underground Tanks	Multiple Programs	Medium
126575	TCF Bank Burnsville	Inactive	Construction Stormwater	Stormwater	Low
120765	US Bank and Walgreens	Active	Construction Stormwater	Stormwater	Low
138549	Walgreen's Store 11419	Active	Hazardous Waste, Very small quantity generator	Hazardous Waste	Low
29574	Holiday Stationstore 213	Active	Hazardous Waste, Small quantity generator	Hazardous Waste	Low
77957	Holiday Stationstore 213	Active	Petroleum Remediation, Leak Site; Underground Tanks	Multiple Programs	Medium
53159	Cub Foods - Burnsville South	Active	Air Quality	Air Quality	Low
143632	Dollar Tree 03581	Active	Hazardous Waste, Very small quantity generator	Hazardous Waste	Low
143222	Petco Store 1613	Active	Hazardous Waste, Very small quantity generator	Hazardous Waste	Low
214594	Ulta Beauty 288	Active	Hazardous Waste, Very small quantity generator	Hazardous Waste	Low
222564	Sally Beauty Supply	Active	Hazardous Waste, Minimal quantity generator	Hazardous Waste	Low
28507	Now Sports Inc (CLOSED)	Active	Hazardous Waste, Very small quantity generator	Hazardous Waste	Low

Site ID	Site Name	Activity Status	Activity	Program	Risk Level
142319	Michael's Store 8608	Active	Hazardous Waste, Very small quantity generator	Hazardous Waste	Low
87448	Qualex Inc - Burnsville	Inactive	Hazardous Waste	Hazardous Waste	Low
42288	Target Store T2340	Active	Aboveground Tanks; Hazardous Waste, Very small quantity generator; Petroleum Remediation, Leak Site; Underground Tanks	Multiple Programs	Medium
101745	Grossman's Chevrolet/ Energy Alternatives (CLOSED)	Active	Aboveground Tanks; Petroleum Remediation, Leak Site; Underground Tanks	Multiple Programs	Medium
194889	Former Grossman Chevrolet (CLOSED)	Active	Brownfields, Petroleum Brownfield	Investigation and Cleanup	High
4296	Grossman Chevrolet Inc (CLOSED)	Active	Air Quality; Hazardous Waste, Small quantity generator	Multiple Programs	Medium
119965	Orthopedic Consultants	Active	Hazardous Waste, Very small quantity generator	Hazardous Waste	Low
121803	Minnesota Valley Surgery Center	Active	Hazardous Waste, Very small quantity generator	Hazardous Waste	Low
142485	Burnsville Surgical Addition	Inactive	Construction Stormwater	Stormwater	Low
110857	Kohl's Store 49	Active	Aboveground Tanks; Hazardous Waste, Minimal quantity generator	Multiple Programs	Medium
Dakota County MPCA Site Inventory					
3003	Grossman Chevrolet LUST	Open	Spill, Leak, Leach or Inject Release	N/A	High
3115	Holy Cross Church Disposals	Open	Industrial Waste Disposal	N/A	Low
3121	County Roads 42 & 5 Disposals	Open	Industrial Waste Disposal	N/A	Low
3999	SuperAmerica Store No 4201	Open	Spill, Leak, Leach or Inject Release	N/A	Medium

Site ID	Site Name	Activity Status	Activity	Program	Risk Level
3285	Carson Pirie Scott Dept Store	Open	Spill, Leak, Leach or Inject Release	N/A	Medium
3103	Sears Automotive Burnsville Center	Open	Spill, Leak, Leach or Inject Release	N/A	Medium
3531	Burnsville Center Mall	Open	Spill, Leak, Leach or Inject Release	N/A	Medium
3328	Burnsville Target Store	Open	Spill, Leak, Leach or Inject Release	N/A	Medium

17 of the 87 sites were categorized as medium risk that included several closed petroleum remediation leak sites and registered underground tanks. Two of the 87 sites are categorized as high and both include petroleum brownfield sites with several documented leaks.

A Response Action Plan will be developed that outlines the safe handling and disposal of any contamination and hazardous materials found on the site during construction. Any investigations and associated Response Action Plans will be completed and approved by the MPCA as deemed necessary by MPCA rules and guidance.

b. Project Related Generation/Storage of Solid Wastes – Describe solid wastes generated/stored during construction and/or operation of the project. Indicate method of disposal. Discuss potential environmental effects from solid waste handling, storage, and disposal. Identify measures to avoid, minimize, or mitigate adverse effects from the generation/storage of solid waste including source reduction and recycling.

AUAR Guidance: Generally, only the estimated total quantity of municipal solid waste generated and information about any recycling or source separation programs of the RGU need to be included

According to Dakota County Ordinances 110 and 111, Dakota County regulates the applicable laws, rules, and ordinances related to the management of solid and hazardous waste as required by Minnesota Statutes, section 473.811. It is the responsibility of the City, developers, property owners, and contractors to ensure compliance with these County ordinances.

Construction Generated Solid Waste

Construction of the proposed development would generate construction-related waste materials such as wood, packaging, excess materials, and other wastes, which would either be recycled or disposed of in the proper facilities in accordance with state regulations and guidelines.

Redevelopment of portions of the site may generate earth materials and debris during demolition activities. Demolition debris is inert material such as concrete, brick, bituminous, and rock. The solid wastes generated during demolition would be recycled or disposed of at a state-permitted landfill. For solid waste generated from the completed project, a source recycling/separation plan would be implemented, and wastes that cannot be recycled would be managed in accordance with state regulations and guidelines.

Operation Generated Solid Waste

Recycling for residential units and commercial buildings in the AUAR study area will be conducted in accordance with the 2016 Recycling Law (Minnesota Statutes Chapter 115A, Section 115A.151 and Section 115A.552). Furthermore, Dakota County Ordinance 15.08 requires all solid waste haulers to offer source separated recycling services and curbside pick-up within the county.

The proposed development would generate new demands on solid waste management and sanitation services provided in the project area. It is estimated that 4.9 pounds of municipal solid waste (MSW) will be generated per person per day. An average household occupancy of 2.62 was applied to the estimated residential units based on US Census Bureau 2014-2019 data. The resulting estimate of residential MSW generated per year based upon the proposed densities is 3,749 tons. It is estimated that the non-residential (commercial/industrial) waste stream be approximately 27,025 tons per year.

c. Project Related Use/Storage of Hazardous Materials – Describe chemicals/hazardous materials used/stored during construction and/or operation of the project including method of storage. Indicate the number, location, and size of any above or below ground tanks to store petroleum or other materials. Discuss potential environmental effects from accidental spills or releases of hazardous materials. Identify measures to avoid, minimize, or mitigate adverse effects from the use/storage of chemicals/hazardous materials including source reduction and recycling. Include development of a spill prevention plan.

AUAR Guidance: Not required for an AUAR. Potential locations of storage tanks associated with commercial uses in the AUAR should be identified (e.g., gasoline tanks at service stations).

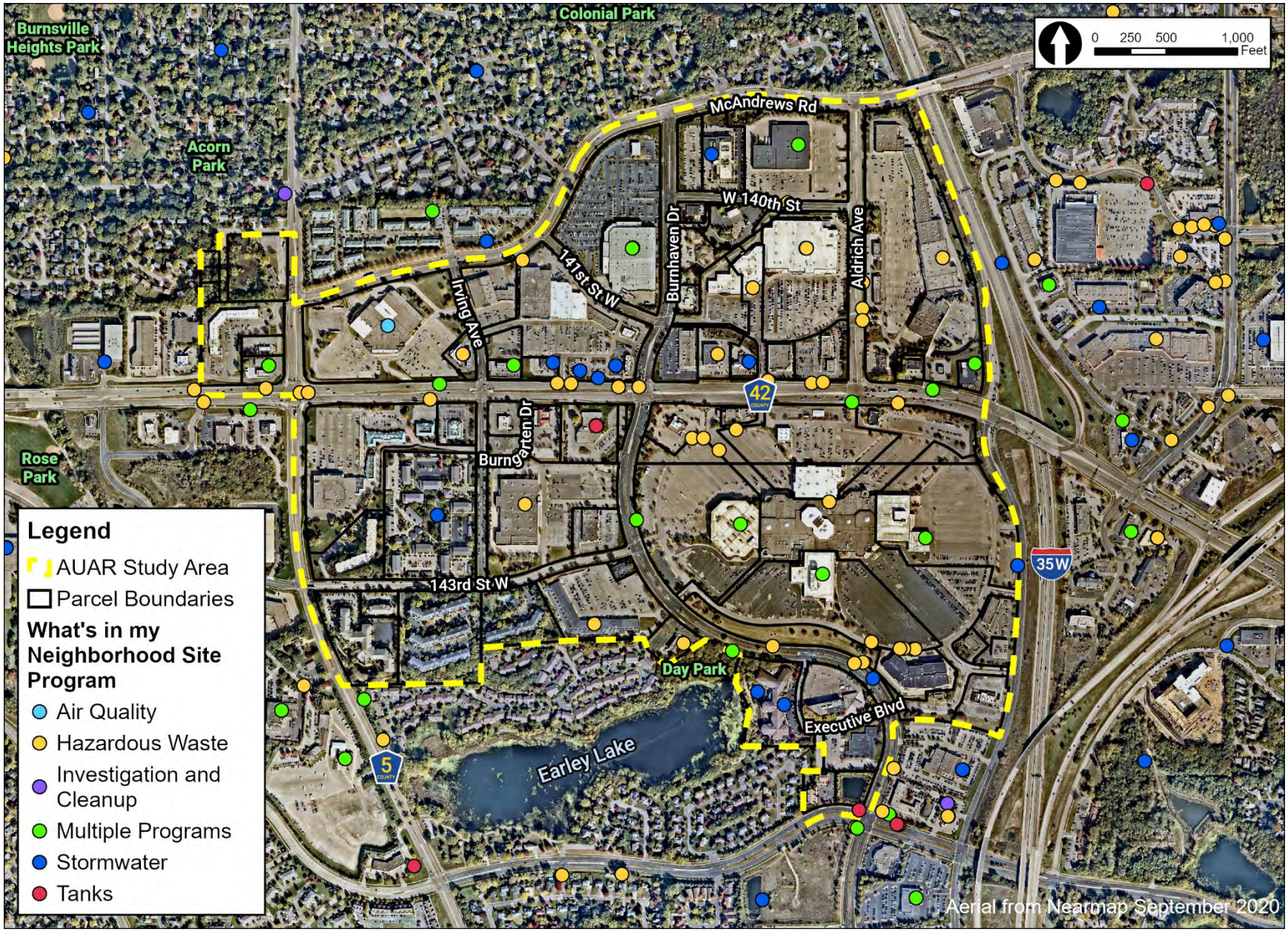
Not required for an AUAR.

d. Project Related Generation/Storage of Hazardous Wastes – Describe hazardous wastes generated/stored during construction and/or operation of the project. Indicate method of disposal. Discuss potential environmental effects from hazardous waste handling, storage, and disposal. Identify measures to avoid, minimize, or mitigate adverse effects from the generation/storage of hazardous wastes including source reduction and recycling.

AUAR Guidance: Not required for an AUAR.

Not required for an AUAR.

Figure 9: MPCA What's in my Neighborhood Sites



13. Fish, Wildlife, Plant Communities, and Sensitive Ecological Resources

a. Describe fish and wildlife resources as well as habitats and vegetation on or near the site.

AUAR Guidance: The description of fish and wildlife resources should be related to the habitat types depicted on the cover types map. Any differences in impacts between development scenarios should be highlighted in the discussion.

The AUAR study area provides limited and low-quality habitat and provides no fish habitat as there are no streams, rivers, lakes, or natural ponds located within the study area. Earley Lake is adjacent to the study area; however, there are no plans to encroach within the lake. Minimal wildlife habitat is located within the AUAR study area due to the prior extent of development and minimal natural vegetation. Wildlife that can be found within the study area include birds and small mammals that have adapted to the highly disturbed urban environment. There are two areas of Minnesota Biological Survey (MBS) Sites of Biodiversity Significance and one Regionally Significant Ecological Area (RSEA) located within one mile of the site. No native plant communities are within or adjacent to the study area. Existing and proposed cover types are shown in Figure 4.

b. Describe rare features such as state-listed (endangered, threatened, or special concern) species, native plant communities, Minnesota County Biological Survey Sites of Biodiversity Significance, and other sensitive ecological resources on or within close proximity to the site. Provide the license agreement number (LA-965) and/or correspondence number (ERDB) from which the data were obtained, and attach the Natural Heritage letter from the DNR. Indicate if any additional habitat or species survey work has been conducted within the site and describe results.

AUAR Guidance: For an AUAR, prior consultation with the DNR Division of Ecological Resources for information about reports of rare plant and animal species in the vicinity is required. Include the reference numbers called for on the EAW form in the AUAR and include the DNR's response letter. If such consultation indicates the need, an on-site habitat survey for rare species in the appropriate portions of the AUAR area is required. Areas of on-site surveys should be depicted on a map, as should any "protection zones" established as a result.

Based on a review of the state-listed threatened, endangered, and special concern species (per license agreement LA-965), there no records within the AUAR study area and but several records within one mile of the AUAR study area: Kitten-tails, rusty patched bumble bee, and Blanding's turtle.

Five records for the Rusty Patched Bumble Bee (*Bombus affinis*), a federally-listed endangered species, are located within one mile from the AUAR study area. The preferred habitat for this species includes dry prairies and tallgrass prairies. The site has been previously developed for commercial and residential uses and does not contain natural prairie vegetation, so no impacts to the rusty patched bumble bee are anticipated.

Five records for the Blanding's Turtle (*Emys blandingii*), a state-listed threatened species, are located within one mile from the AUAR study area. The preferred habitat for this species includes wetland complexes and adjacent sandy uplands.

A record for the Kitten-tails (*Besseya bullii*), a state-listed threatened species, is located within one mile from the AUAR study area. The preferred habitat for this species of plant includes dry prairies and oak woodlands. The site has been previously developed for commercial and residential uses and does not contain natural prairie or woodland vegetation, so no impacts to the Kitten-tails are anticipated. See Appendix A for the DNR's concurrence letter.

c. Discuss how the identified fish, wildlife, plant communities, rare features, and ecosystems may be affected by the project. Include a discussion on introduction and spread of invasive species from the project construction and operation. Separately discuss effects to known threatened and endangered species.

The AUAR study area is highly disturbed with a lack of bumble bee or other native wildlife habitat. Species currently using the AUAR study area are adapted to a highly disturbed urban environment, and minimal impacts are anticipated to those species. Therefore, no adverse impacts are anticipated to state-listed or federally-listed species. Considering none of the MCBS Sites of Biodiversity Significance or RSEAs are within the project limits, no adverse impacts in these areas are anticipated.

d. Identify measures that will be taken to avoid, minimize, or mitigate adverse effects to fish, wildlife, plant communities, and sensitive ecological resources.

It is unlikely that the Blanding's Turtle is present within the AUAR development limits; however, to minimize any potential impacts, measures identified in the Blanding's turtle fact sheet will be followed and wildlife friendly erosion control methods will be used during future construction (see Appendix A). Native plantings, greenroof systems, and increased green space are encouraged by the City to promote pollinator habitat within the AUAR study area. A goal of the Burnsville Center Village Redevelopment Vision is to increase green space within the AUAR study area to reduce the amount of impervious surfaces and reduce the potential for an urban heat island effect.

14. Historic Properties

Describe any historic structures, archeological sites, and/or traditional cultural properties on or in close proximity to the site. Include 1) historic designations; 2) known artifact areas; and 3) architectural features. Attach letter received from the Minnesota State Historic Preservation Office (SHPO). Discuss any anticipated effects to historic properties during project construction and operation. Identify measures that will be taken to avoid, minimize, or mitigate adverse effects to historic properties.

AUAR Guidance: If the area requires new water supply wells specific information about that appropriation and its potential impacts on groundwater levels should be given; if groundwater levels would be affected, any impacts resulting on other resources should be addressed.

A search of the Minnesota State Historic Preservation Office's Statewide Inventory Database was requested to identify known historic properties and archaeological sites in the project vicinity. Within Sections 23, 24, 25, 26, Township 115N, Range 21N, no archaeological records and three historic property records were identified. The names of the three historic properties are:

- Billy Goat Bridge
- Bridge #19863

- Bridge 19809

According to the City's 2040 Comprehensive Plan, seven mounds were discovered in 1888 on a property overlooking the east end of Earley Lake. An excavation of one of the mounds revealed four layers of ashes and indications of decomposing bones.

None of these bridges are listed in or determined eligible for the National Register of Historic Places. No changes are proposed to these bridges or the Earley Lake area as part of the AUAR development scenarios. No adverse impacts to historic properties are anticipated.

15. Visual

Scenic views or vistas may include spectacular viewing points along lakes, rivers or bluffs; virgin timber tracts; prairie remnants; geological features; waterfalls; specimen trees; or plots of wildflowers. Describe any project related visual effects such as vapor plumes or glare from intense lights. Discuss the potential visual effects from the project. Identify any measures to avoid, minimize, or mitigate visual effects.

AUAR Guidance: Any impacts on scenic views and vistas present in the AUAR should be addressed. This would include both direct physical impacts and impacts on visual quality or integrity. If any non-routine visual impacts would occur from the anticipated development, this should be discussed here along with appropriate mitigation.

The AUAR study area includes existing commercial and residential properties that are not near any unique designated scenic views or vistas. Future development would conform with the zoning regulations for building height and form and lighting would be in conformance with city ordinances. Views would be similar to those experienced currently, and no visual impacts are anticipated.

16. Air

a. **Stationary Source Emissions – Describe the type, sources, quantities, and compositions of any emissions from stationary sources such as boilers or exhaust stacks. Include any hazardous air pollutants, criteria pollutants, and any greenhouse gases. Discuss effects to air quality including any sensitive receptors, human health, or applicable regulatory criteria. Include a discussion of any methods used to assess the project's effect on air quality and the results of that assessment. Identify pollution control equipment and other measures that will be taken to avoid, minimize, or mitigate adverse effects from stationary source emissions.**

   AUAR Guidance: This item is not applicable to an AUAR. Any stationary air emissions source large enough to merit environmental review requires individual review.

   Stationary sources such as boilers or exhaust stacks are not proposed for the development scenario.

b. **Vehicle Emissions – Describe the effect of the project's traffic generation on air emissions. Discuss the project's vehicle-related emissions effect on air quality. Identify measures (e.g., traffic operational improvements, diesel idling minimization plan) that will be taken to minimize or mitigate vehicle-related emissions.**

AUAR Guidance: Although the MPCA no longer issues Indirect Source Permits, traffic-related air quality may still be an issue if the analysis in Item 18 indicates that development would cause or worsen traffic congestion. The general guidance from the EAW form should still be followed. Questions about the details of air quality analysis should be directed to MPCA staff.

The Minnesota Department of Transportation (MnDOT) has developed a screening method designed to identify intersections that will not cause a carbon monoxide (CO) impact above state standards. MnDOT has demonstrated that even the 10 highest traffic volume intersections in the Twin Cities do not experience CO impacts. Therefore, intersections with traffic volumes lower than these 10 highest intersections will not cause a CO impact above state standards. MnDOT's screening method demonstrates that intersections with total daily approaching traffic volumes below 82,300 vehicles per day will not have the potential for causing CO air pollution problems. None of the intersections in the study area exceed the criteria that would lead to a violation of the air quality standards.

c. Dust and Odors – Describe sources, characteristics, duration, quantities, and intensity of dust and odors generated during project construction and operation. (Fugitive dust may be discussed under Item 16a). Discuss the effect of dust and odors in the vicinity of the project including nearby sensitive receptors and quality of life. Identify measures that will be taken to minimize or mitigate the effects of dust and odors.

AUAR Guidance: Dust and odors need not be addressed in an AUAR, unless there is some unusual reason to do so. The RGU might want to discuss as part of the mitigation plan, however, any dust control ordinances in effect.

Not applicable.

17. Noise

Describe sources, characteristics, duration, quantities, and intensity of noise generated during project construction and operation. Discuss the effect of noise in the vicinity of the project including 1) existing noise levels/sources in the area; 2) nearby sensitive receptors; 3) conformance to state noise standards; and 4) quality of life. Identify measures that will be taken to minimize or mitigate the effects of noise.

AUAR Guidance: Construction noise need not be addressed in an AUAR, unless there is some unusual reason to do so. The RGU might want to discuss as part of the mitigation plan, however, any construction noise ordinances in effect. If the area will include or adjoin major noise sources, a noise analysis is needed to determine if any noise levels in excess of standards would occur, and if so, to identify appropriate mitigation measures. With respect to traffic-generated noise, the noise analysis should be based on the traffic analysis of Item 18.

Traffic Generated Noise
The project site is an existing retail center surrounded by state highways and county roads. The existing traffic noise sources at the site are the surrounding roadways.

Operational Noise
The Burnsville City Code and the MPCA regulate mechanical noise associated with building operation. All future development will be required to comply with these requirements.

Construction Noise

As stated in the AUAR guidelines, construction noise need not be addressed unless there is some unusual reason to do so. No unusual circumstances have been identified that would necessitate a detailed construction noise analysis. The Burnsville Code of Ordinances regulates both the hours of operation for construction equipment and allowable noise levels. Construction of the proposed project would comply with these requirements.

18. Transportation

AUAR Guidance: For AUAR reviews a detailed traffic analysis will be needed, conforming to the MnDOT guidance as listed on the EAW form.

a. Describe traffic-related aspects of project construction and operation. Include 1) existing and proposed additional parking spaces; 2) estimated total average daily traffic generated; 3) estimated maximum peak hour traffic generated and time of occurrence; 4) source of trip generation rates used in the estimates; and 5) availability of transit and/or other alternative transportation modes.

The redevelopment of the study area site is expected to be ongoing for the next several years, depending on market conditions. Kimley-Horn recently completed a traffic study of the area in March 2020 (Appendix E). For purposes of developing traffic forecasts and evaluating future conditions, a horizon year of 2040 was used. Traffic forecasts were developed for two future scenarios: the year 2040 no-build scenario and the year 2040 Comprehensive Plan Maximum Build scenario (AUAR development scenario). Due to the extended timeline of development, it is anticipated that traffic patterns and volume will incrementally change and be spread out over a number of years as development occurs, affording the ongoing opportunity for data collection and modification of the transportation networks over time.

Existing Traffic Volumes

To analyze the traffic operations at the study intersections, weekday peak period turning movement counts were collected in June 2019 at 36 intersections (Figure 10). For the Saturday peak hour, recent turning movement counts for the intersections along CR 42 were provided by Dakota County, while counts at the rest of the intersections were collected for the Saturday peak. A capacity analysis was performed to quantify the delay and level of service (LOS) at the study intersections during the weekday AM and PM peak hours and the Saturday peak hour.

Capacity Analysis

The redevelopment of the AUAR study area was assumed to be completed by 2040. The Dakota County Travel Demand Model was used to determine the growth rates throughout the network. Growth rates for major roadways were used to project background traffic growth as compared to applying an overall growth rate to the network. Kimley-Horn worked with Dakota County and SRF Consulting Group, who is updating the County's travel demand model, to estimate the travel demand model growth for the Burnsville Mall with the development. A capacity analysis was performed to quantify the delay and level of service at the study intersections during the weekday AM and PM peak hours and the Saturday peak hour. The capacity analysis was performed using Synchro/SimTraffic.

2040 No-Build Scenario

In the AM peak hour, all study intersections operated at LOS D or better. There are side street movements along CR 42 with undesirable LOS, but this is expected along an arterial like CR 42. The total network delay for the 2040 No-Build AM peak hour is 145.5 seconds per vehicle. Below is a list of queues that extend past their storage capacity.

- Eastbound through queues on CR 42 extend from Nicollet Avenue & CR 42 to Burnhaven Drive, a distance of 0.6 miles.
- Northbound right turn queues on Buck Hill Road at CR 42 extend 750 feet.

In the PM peak hour, all study intersections along CR 42 operate at LOS E or F, with the remaining intersections in the study area operating at LOS D or better. The majority of movements along the CR 42 corridor operate at an undesirable LOS. Side-street left turns at the unsignalized intersections along McAndrews Road also experience long delays in the PM peak hour. The total network delay for the 2040 No-Build PM peak hour is 235.4 seconds per vehicle. Below is a list of queues that extend past their storage capacity.

- Eastbound through queues on CR 42 extend from Nicollet Avenue & CR 42 beyond the west edge of the study area, a distance of 1.75 miles.
- Westbound through queues on CR 42 extend from Nicollet Avenue & CR 42 past Plymouth Avenue, a distance of 0.5 miles.
- Side street queues at all intersections along CR 42 between Burnhaven Drive and the Southbound I-35E Ramps are impacted by the through queues on CR 42.
- The queues for the I-35E Southbound Exit Ramp are expected to extend back to the gore with the mainline of the interstate.

In the Saturday peak hour, all study intersections along CR 42 operate at LOS E or F while the remaining intersections in the study area operate at LOS D or better. The majority of movements along the CR 42 corridor operate at an undesirable LOS and have excessive delays. Side-street left turns at the unsignalized intersections along McAndrews Road also experience long delays in the PM peak hour. The total network delay for the 2040 No-Build Saturday peak hour is 239.7 seconds per vehicle. Below is a list of queues that extend past their storage capacity.

- Eastbound through queues on CR 42 extend from Nicollet Avenue & CR 42 to the west edge of the study area, a distance of 1.6 miles.
- Westbound through queues on CR 42 extend from Nicollet Avenue & CR 42 past Portland Avenue, a distance of 1.0 miles.
- The queues for both the I-35W Southbound Exit Ramp and I-35E Southbound Exit Ramp are expected to extend back to the gore with the mainline of the interstate.
- Side street queues at all intersections along CR 42 between Burnhaven Drive and Portland Avenue are greatly impacted by the through queues on CR 42.

Based on the queuing analysis, the eastbound and westbound queues on CR 42 extend through the majority of the study area during the PM and Saturday peak hours. These queues extend beyond multiple intersections and result in unacceptable operations at the surrounding intersections.

2040 Build Scenario (AUAR Maximum Development)

Based on the results of the Horizon Year (2040) No-Build analysis, it was determined that significant mitigation along CR 42 would be required to accommodate the projected background growth and the complete redevelopment of the AUAR study area. The 2040 Build Scenario was only analyzed with mitigation. This mitigation included significant improvements along the CR 42 corridor, including improvements at both the I-35W and I-35E interchanges.

In the AM peak hour, all study intersections operated at LOS C or better. There are some side street movements along CR 42 with undesirable LOS, but this is expected along an arterial like CR 42. It should be noted that only intersection movements with undesirable LOS are shown in the exhibit, all other movements are provided in the SimTraffic reports. The total network delay for the Horizon Year 2040 Build AM peak hour is 59.7 seconds per vehicle which is better than the Existing AM peak hour network delay of 70.1 seconds per vehicle. There are no excessive queues during the AM peak hour.

In the PM peak hour, all study intersections operated at LOS D or better. Similar to the AM peak hour, side street and minor movements along the CR 42 corridor account for the majority of the undesirable LOS. Side-street left turns at the unsignalized intersections along McAndrews Road also experience long delays in the PM peak hour. Exhibit 29 shows the movements with LOS E or worse in the PM peak hour. The total network delay for the Horizon Year 2040 Build PM peak hour is 113.1 seconds per vehicle which is comparable to the Existing PM peak hour network delay of 111.6 seconds per vehicle. Below is a list of queues that extend past their storage capacity.

- Eastbound queues at I-35E Northbound Ramps & CR 42 extend back though the I-35E Southbound Ramps intersection, a distance of 0.2 miles.
- Northbound left turn at Irving Avenue & McAndrews Road
- Northbound left turn at 141st Street & McAndrews Road

Traffic operations under the Horizon Year 2040 Build Saturday peak hour conditions experience some operations and queuing issues. Similar issues also occur under existing Saturday peak hour conditions. In the Saturday peak hour, all study intersections operated at LOS D or better except for Aldrich Avenue & CR 42 and I-35W Southbound Ramp/Buck Hill Road & CR 42 which operates at LOS E. There are several side street and minor intersection movements along CR 42 near the Center Village Redevelopment that will operate at an undesirable level of service. Exhibit 30 shows the movements with LOS E or worse in the Saturday peak hour.

Trip Generation

Trip generation was calculated based on the latest edition of the Institute of Transportation Engineers (ITE) Trip Generation, 10th Edition. Standard ITE trip rates were used to calculate the total trips generated by each parcel based on each land use. As part of the data collection, all of the site accesses to the Burnsville Mall were counted, and from these counts a trip generation rate for the existing mall was determined. The rate was based on the amount of leased space in the mall at the time of the count (June 2019). Burnsville Mall has approximately 1,100,000 square feet of leasable space, however, one of the anchor tenant spaces was vacant so the trip generation rate was based off of 876,000 square feet. The observed rate is significantly lower than the ITE Trip Generations rate, but it would more accurately represent the existing and anticipated trips on site.

Transit

Currently, Minnesota Valley Transit routes 426, 442, 444, and 464 serve the traffic study area (Figure 11). Additionally, several bus stops are located within the study area serving both routes. After discussions with MVTA staff, it was determined that total daily ridership for these four routes is roughly 1,150 riders per day while the combined daily vehicle traffic in the traffic study area is 95,000 vehicles. This results in transit making up approximately 1.5% of mode share. It is anticipated that the Orange Line Bus Rapid Transit (BRT) line will be extended to a new Burnsville Transit Station. Metro Transit provided guidance when determining the projected ridership for the new BRT line. With that increase in ridership, the mode share for the site is anticipated to increase from 1.5% to 3%. Therefore, a 3% reduction to the trip generation was used to reflect the new transit ridership in the study area.

b. Discuss the effect on traffic congestion on affected roads and describe any traffic improvements necessary. The analysis must discuss the project's impact on the regional transportation system. *If the peak hour traffic generated exceeds 250 vehicles or the total daily trips exceeds 2,500, a traffic impact study must be prepared as part of the EAW.* Use the format and procedures described in the Minnesota Department of Transportation's Access Management Manual, Chapter 5 *(available at: http://www.dot.state.mn.us/accessmanagement/resources.html)* or a similar local guidance.

AUAR Guidance: For AUAR reviews, a detailed traffic analysis will be needed, conforming to the MnDOT guidance as listed on the EAW form. The results of the traffic analysis must be used in the response to Items 16 and 17.

Following the completion of the successful Center Village Redevelopment Vision Study in 2018, the City of Burnsville is moving forward to understand the transportation improvements needed to support the redevelopment of the Burnsville Center area. This study includes analysis on the most congested corridor in the area, CR 42.

c. Identify measures that will be taken to minimize or mitigate project related transportation effects.

The traffic study also explores innovative multimodal solutions needed to mitigate existing congestion on the roadway network as well as the anticipated traffic impacts of the redevelopment. Based on the results of the Horizon Year (2040) Build analysis it was determined that significant mitigation along CR 42 would be required to accommodate the projected background growth and the complete redevelopment of the AUAR study area. This mitigation could be split into separate phases depending on when development happens within the study area (See Mitigation Plan for full list of improvements):

- Area 1 – Improvements East of the I-35W bridge
- Area 2 – Improvements west of the Southbound I-35W Exit Ramp intersection
- Area 3 – I-35W Southbound Ramp modifications
- Area 4 – CR 42 Pedestrian improvements
- ITS System Modification

Figure 10: Traffic Study Intersections

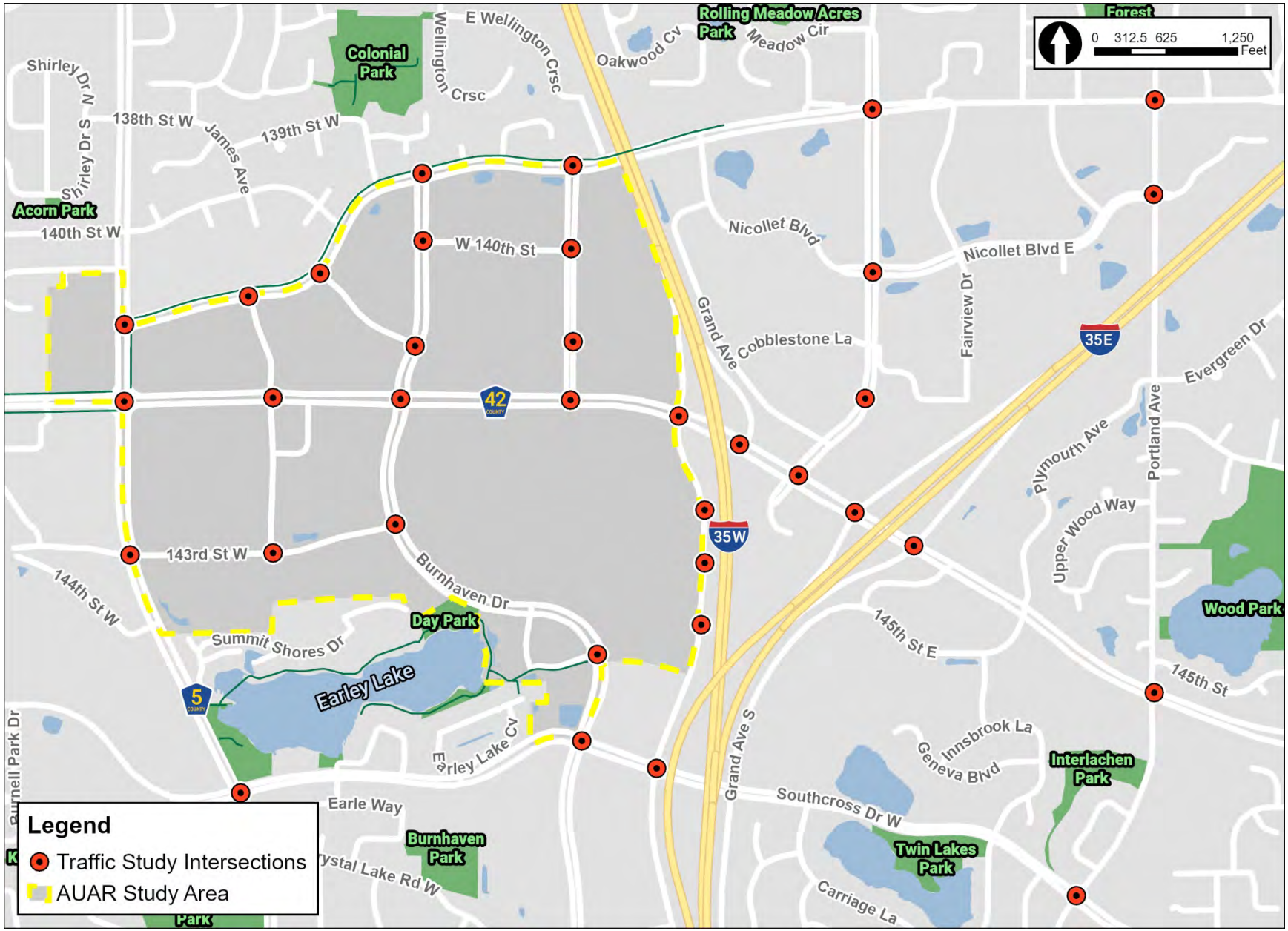
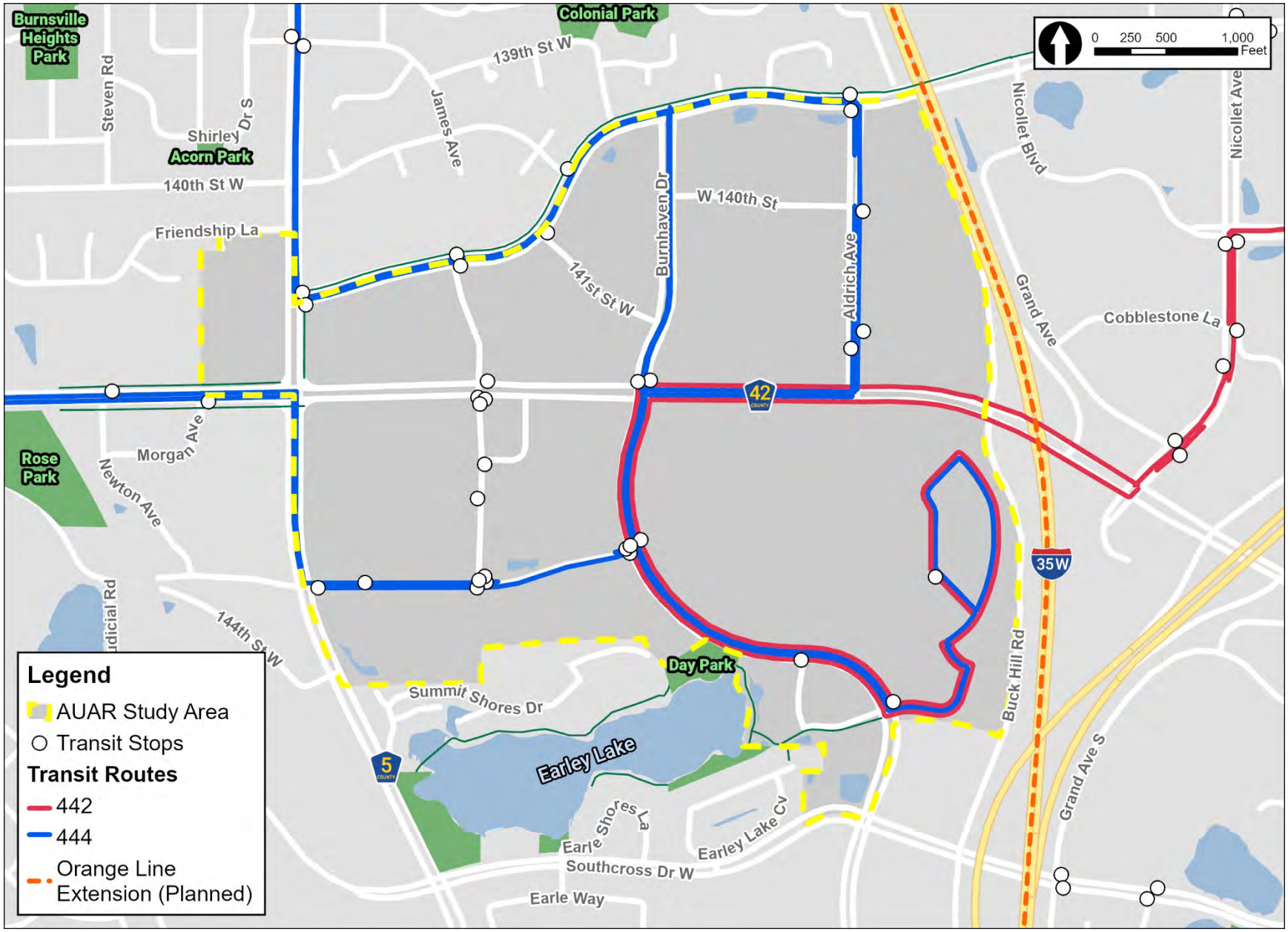


Figure 11: Transit Routes



19. Cumulative Potential Effects

AUAR Guidance: Because the AUAR process by its nature is intended to deal with cumulative potential effects from all future developments within the AUAR area, it is presumed that the responses to all items on the EAW form automatically encompass the impacts from all anticipated developments within the AUAR area.

However, the total impact on the environment with respect to any of the items on the EAW form may also be influenced by past, present, and reasonably foreseeable future projects outside of the AUAR area. The cumulative potential effect descriptions may be provided as part of the responses to other appropriate EAW items, or in response to this item.

a. Describe the geographic scales and timeframes of the project related environmental effects that could combine with other environmental effects resulting in cumulative potential effects.

Cumulative effects are defined as the "effect on the environment that results from the incremental effects of a project in addition to other projects in the environmentally relevant area that might reasonably be expected to affect the same environmental resources, including future projects actually planned or for which a basis of expectation has been laid, regardless of what person undertakes the other projects or what jurisdictions have authority over the projects."[1] The geographic areas considered for cumulative effects are those areas adjacent to the AUAR study area, and the timeframe considered includes projects that would be constructed in the reasonably foreseeable future.

b. Describe any reasonably foreseeable future projects (for which a basis of expectation has been laid) that may interact with environmental effects of the proposed project within the geographic scales and timeframes identified above.

There are three reasonably foreseeable future projects that may interact with environmental effects of the proposed project:

Dakota County: County Highway 42 Visioning Study
This study, led by Dakota County in partnership with the cities of Burnsville, Apple Valley, and Rosemont, includes the development of a long-term vision for County Highway 42 (CR 42). Concerns identified include safety, mobility, access, non-automobile transportation accommodations, and planning for future growth and development. The study will be complete in 2021.

Dakota County: County Highway 42 Signal Corridor Project
This project led by Dakota County proposed added fiber interconnect and an advanced traffic management system to improve the capabilities of the county's system to manage the signal system along this corridor. A project is also planned to incorporate the signals along McAndrews Road (County Highway 38) into the advanced traffic management system. This technology and updated signal timing look to assist with managing the mobility along CSAH 42 to extend the life of the existing system and defer more costly widening projects. However, as traffic increases

[1] Minnesota Rules, part 4410.0200, subpart 11a

within the corridor, the ability of signal timing or signal updates to significantly impact mobility decreases and additional delay for turning movements and road traffic will occur.

Dakota County: Orange Line Extension Study
This study was completed by Dakota County in December 2019 and included modifications to the Orange Line BRT line connecting Burnsville to downtown Minneapolis with stops in Minneapolis, Richfield, Bloomington, and Burnsville along I-35W. The current BRT route ends approximately 1.5 miles north of the AUAR study area at I-35W and Burnsville Parkway. The extension proposed by the study would provide BRT service directly within the AUAR study area. Planning of the extension of service to Burnsville Center will begin following the opening of the BRT route in Fall 2021.

CSAH 38 – TH 5 to Burnhaven Drive
This project was a small corridor safety assessment to identify the best approach to address safety and mobility needs along McAndrews road based on current conditions and in consideration of future development. This assessment is anticipated to begin in 2021 and any identified improvements will be covered under a separate environmental review (if needed).

CenterPoint Energy: Burnsville - Buck Hill Road Belt Line Project
This project includes the replacement of an existing natural gas main in the southeast extent of the AUAR study area, along Buck Hill Road. The project will require excavation along the Buck Hill Road right-of-way. The gas main replacement will allow for the modernization of related gas facilities.

c. Discuss the nature of the cumulative potential effects and summarize any other available information relevant to determining whether there is potential for significant environmental effects due to these cumulative effects.

Dakota County: County Highway 42 Visioning Study
The implementation of the County Highway 42 Visioning Study may have impacts on traffic and depending on the results of the study, may result in a cumulative benefit to traffic and pedestrian conditions within the AUAR study area.

Dakota County: Orange Line Extension Study
The completion of the Orange Line extension may have traffic impacts during construction; however, the proposed extension would create direct benefits to transportation access to and from the AUAR study area.

CenterPoint Energy: Burnsville - Buck Hill Road Belt Line Project
The Burnsville – Buck Hill Road Belt Line Project may create short term traffic impacts, but the project will provide a benefit for the study area as it will allow CenterPoint Energy to replace aging utility infrastructure within the area.

Impacts resulting from the development of the AUAR study area include water resources, fish/wildlife, and transportation. All other impacts from these future projects will be addressed via regulatory permitting and approval measures; therefore, they will be individually mitigated to ensure no cumulative impacts occur to environmental and community resources.

20. Other Potential Environmental Impacts

If the project may cause any additional environmental effects not addressed by Items 1 to 19, describe the effects here, discuss the how the environment will be affected, and identify measures that will be taken to minimize and mitigate these effects.

All known environmental effects are addressed in the preceding sections.

Mitigation Plan

This Mitigation Plan is submitted as part of the AUAR to provide reviewers and regulators with an understanding of the actions that are advisable, recommended, or necessary to protect the environment and minimize potential impacts by the proposed development scenarios. This Mitigation Plan has been revised and updated based on comments received during the AUAR comment period.

This Mitigation Plan is intended to satisfy the AUAR rules that require the preparation of a mitigation plan that specifies measures or procedures that will be used to avoid, minimize, or mitigate the potential impacts of development within the AUAR study area. Although mitigation strategies are discussed throughout the AUAR document, this plan will be formally adopted by the RGU as their action plan to prevent potentially significant environmental impacts.

The primary mechanism for mitigation of environmental impacts is the effective use of ordinances, rules, and regulations. The plan does not modify the regulatory agencies' responsibilities for implementing their respective regulatory programs nor create additional regulatory requirements. The plan specifies the legal and institutional arrangements that will assure that the adopted mitigation measures are implemented.

There were no impacts or mitigation strategies identified in Item 15; therefore, this area is not included in the Mitigation Plan. The remaining AUAR items have identified regulatory requirements and/or mitigation measures that reduce the level of potential impact of development within the study area. The plan is formatted consistent with the sections of the AUAR for ease of reference.

Table 9: Permits and Approvals Required

Unit of Government	Type of Application	Status
State		
Minnesota Pollution Control Agency	National Pollutant Discharge Elimination System Stormwater Permit for Construction Activities	To be applied for, if applicable
	Sanitary Sewer Extension Permit	To be applied for, if applicable
	Notice of Intent of Demolition	To be applied for, if applicable
	Construction Contingency Plan and Response Action Plan approval	To be applied for, if applicable
Minnesota Department of Natural Resources	Temporary Water Appropriation Permit for Construction Dewatering	To be applied for, if applicable
Regional		
Dakota County	Right-of-Way Permit	To be applied for, if applicable
Metropolitan Council	Sewer Extension Permit	To be applied for, if applicable
	Sewer Connection Permit to Connect	To be applied for, if applicable
	Direct Connection Permit	To be applied for, if applicable
Local		
City of Burnsville	Preliminary/Final Plat	To be applied for, if applicable
	Building Permit	To be applied for, if applicable
	Erosion Control, Grading, and Stormwater Permit	To be applied for, if applicable
	Demolition Permit	To be applied for, if applicable
	Right-of-Way Permit	To be applied for, if applicable
	Comprehensive Plan Amendment	In process
	Rezoning	In process

Table 10: Mitigation Summary

Resource Area	Mitigation
Land Use	Any zoning and/or land use inconsistencies will be addressed through a Comprehensive Plan amendment, rezoning, or the City's Planned Unit Development or conditional use permit process.
	The rules in all of the City's environmental overlay district will be adhered to in order to protect sensitive natural areas and wildlife habitats.
	Comprehensive Plan Amendment and rezoning (in process)

Resource Area	Mitigation
Geology, Soils, and Topography	Erosion prevention and sediment control practices will be implemented on-site per the NPDES General Stormwater Permit requirements.
Water Resources	Infrastructure will be built within the AUAR study area to convey stormwater to stormwater management areas to help achieve the appropriate water quality treatment.
	Stormwater will be conveyed by means of an underground storm sewer to constructed stormwater management areas. Conveyance systems will be designed in accordance with acceptable industry standards and in conformance with jurisdictional requirements.
	Maintenance and monitoring of the stormwater management areas will be performed to ensure long term effectiveness of the facilities.
Contamination/ Hazardous Waste	Development would both generate construction-related waste materials such as wood, packaging, excess materials, and other wastes, which would be either recycled or disposed in the proper facilities; Products will be kept in their original containers unless they cannot be resealed. Original labels and Material Safety Data Sheets will be made available. Surplus materials will be properly removed from the property upon completion of use.
	Ensure compliance with applicable laws, rules, and ordinances related to the management of solid and hazardous waste as required by Minnesota Statutes 2020, section 473.811, subdivision 5c.
	Coordinate with the MPCA regarding the required plans, material handling, and disposal. Any investigations and associated Response Action Plans will be completed and approved by the MPCA as deemed necessary by MPCA rules and guidance.
	All wells identified on site that will not be used will be sealed and abandoned following Minnesota Department of Health (MDH) and MPCA protocol.
Fish, Wildlife, Plant Communities, and Sensitive Ecological Resources	Wildlife friendly erosion control methods will be utilized within the study area to minimize impacts to wildlife using the site during construction.
	Native plantings and green space to be incorporated into the AUAR study area to promote pollinator species
Historic Properties	A Phase Ia literature review will be completed for site 21Dkaa to evaluate the potential for intact precontact and historical period archaeological or cemetery sties.
Air	Construction will generate temporary fugitive dust emissions during construction. These emissions will be controlled by sweeping, watering, sprinkling, or applying calcium chloride, as appropriate or as prevailing weather and soil conditions dictate. In accordance with Burnsville Ordinances (Section 10-8-8), contractors are responsible for dust control during construction of the proposed development and immediately address any dust problems as determined by the City.

Resource Area	Mitigation
Noise	Construction activities may result in temporarily elevated noise levels. To the extent possible, construction activities will be conducted to minimize noise levels and nighttime construction activities. Permits related to construction noise must be obtained from the City at least 14 days prior to the start of construction.
Transportation	**Area 1 – Improvements East of the I-35W bridge** - Add a fourth eastbound through lane on CR 42 between the east edge of the bridge deck over I-35W to the I-35E Northbound Ramp Intersection where the through lane will drop at the eastbound left turn lane to I-35E Northbound. - Add a fourth westbound through lane on CR 42 from east of the I-35E Northbound Ramp Intersection that drops at the westbound right turn lane onto the I-35W Northbound Ramp. **Area 2 – Improvements west of the Southbound I-35W Exit Ramp intersection** - At CR 5 & McAndrews Road expand the southbound left turn lane to dual lefts. - At CR 42 & Burnhaven Drive expand both the eastbound and westbound left turn lanes to dual lefts - At CR 42 & Aldrich Avenue expand the eastbound left turn lane to dual lefts. - At CR 42 & Aldrich Avenue reconstruct the northbound leg to provide dual northbound left turn lanes that are 300 feet long, two through lanes, and a northbound right turn lane that is 300 feet long. - Limit the existing ¾ access on CR 42 between Burnhaven Drive & Aldrich Avenue to right in/rightout. - Add a fourth eastbound through lane on CR 42 from the proposed right-in/right-out west of Aldrich Avenue to the I-35W Northbound Ramp where one eastbound through lane will drop at the eastbound left turn onto northbound I-35W. **Area 3 – I-35W Southbound Ramp modifications** - Improve the I-35W Southbound Ramp/Buck Hill Road & CR 42 intersection by providing an auxiliary lane that runs parallel to I-35W, under the CR 42 bridge, and connects to Buck Hill Road, limiting the northbound leg to right-out only, and reconfiguring the southbound leg to provide dual right turn lanes and triple left turn lanes. **Area 4 – CR 42 pedestrian improvements** - Improve pedestrian facilities on both sides of CR 42 to 10′ trails with 10′ boulevard and install a pedestrian underpass west of Aldrich Avenue & CR 42. **ITS System Modifications** - Optimize signal timings and remove the pedestrian walk phase on the east side of the Nicollet Avenue & CR 42 intersection. - Provide an ITS system that includes signal coordination and retiming, signal upgrades, fiber interconnect, and VMSs along the CR 42 corridor and the Southcross Drive corridor.

Appendix A

Correspondence

From:	Bump, Samantha (DNR)
To:	Bunge, Leila
Cc:	Payne, Ashley; Collins, Melissa (DNR)
Subject:	RE: NHIS Review Request for Burnsville Center Village Area, Burnsville, MN
Date:	Friday, April 30, 2021 3:43:25 PM
Attachments:	image003.png image004.png image005.png image002.png

Hi Leila,
I have reviewed the attached assessment of the potential for the above project to impact rare features and have the following additional comments:

Blanding's turtles (*Emydoidea blandingii*), a state-listed threatened species, have been documented in the direct vicinity of the proposed project. Blanding's turtles use upland areas up to and over a mile distant from wetlands, waterbodies, and watercourses. Uplands are used for nesting, basking, periods of dormancy, and traveling between wetlands. Factors believed to contribute to the decline of this species include collisions with vehicles, wetland drainage and degradation, and the development of upland habitat. Any added mortality can be detrimental to populations of Blanding's turtles, as these turtles have a low reproduction rate that depends upon a high survival rate to maintain population levels.

- Avoid Type 2 & 3 wetlands;
- To avoid any incidental take, avoid filling or dewatering wetlands from mid-October to mid-April when turtles may be hibernating;
- Implement stringent sediment and erosion control methods;
- Use of erosion control blanket shall be limited to 'bio-netting' or 'naturalnetting' types, and specifically not products containing plastic mesh netting or other plastic components. Also be aware that hydro-mulch products may contain small synthetic (plastic) fibers to aid in its matrix strength. These loose fibers could potentially re-suspend and make their way into Public Waters. As such, please review mulch products and not allow any materials with synthetic (plastic) fiber additives in areas that drain to Public Waters.
- Monitor for turtles during construction and report any sightings to the DNR;
- Follow **both lists** of recommendations in the enclosed Blanding's Turtle Fact Sheet.

The Blanding's turtle flyer should be given to all contractors working in the area. If Blanding's turtles are encountered on site, please remember that state law and rules prohibit the destruction of threatened or endangered species, except under certain prescribed conditions. If turtles are in imminent danger, they must be moved by hand out of harm's way, otherwise they are to be left undisturbed. If further assistance regarding the Blanding's turtle is needed, please contact the DNR Regional Nongame Specialist, Erica Hoaglund at 651-259-5772 or Erica.Hoaglund@state.mn.us.

A calcareous fen (Kelleher Park – ID# 86441) was documented in the vicinity of the proposed project. A calcareous fen is a rare and distinctive peat-accumulating wetland that is legally protected in Minnesota. The Wetlands Conservation Act, authorized by *Minnesota Statutes*,

section 103G.223, states that calcareous fens may not be filled, drained, or otherwise degraded, wholly or partially, by any activity, except as provided for in a management plan approved by the commissioner of the Department of Natural Resources. Many of the unique characteristics of calcareous fens result from the upwelling of groundwater through calcareous substrates. Because of this dependence on groundwater hydrology, calcareous fens can be affected by nearby activities or even those several miles away. For more information regarding calcareous fens, please see the Calcareous Fen Fact Sheet. The DNR would have concerns regarding any activities that might affect groundwater flows, including groundwater pumping or discharge. **Provided the proposed project will not alter the hydrological conditions in the surrounding area, we do not have any concerns.** If this is not the case, or if you have any questions regarding calcareous fen regulations, please contact Jennie Skancke, Wetlands Program Coordinator, at 651-259-5721 or Jennie.Skancke@state.mn.us.

Thank you for notifying us of this project, and for the opportunity to provide comments.

Have a great day,
Samantha Bump
NHIS Review Specialist | Ecological & Water Resources
Minnesota Department of Natural Resources
Samantha.Bump@state.mn.us

DEPARTMENT OF NATURAL RESOURCES

From: Bunge, Leila <Leila.Bunge@kimley-horn.com>
Sent: Friday, March 19, 2021 12:24 PM
To: MN_NHIS, Review (DNR) <Review.NHIS@state.mn.us>
Cc: Payne, Ashley <Ashley.Payne@kimley-horn.com>
Subject: NHIS Review Request for Burnsville Center Village Area, Burnsville, MN

Hello,

Kimley-Horn has been contracted to prepare an AUAR for the Burnsville Center Village Area located along County Road 42 between County Road 5 and I-35W on a 426-acre study area in Burnsville, Dakota County, Minnesota. A project location map is attached.

A review of the DNR Natural Heritage Inventory System (LA-965) database was conducted for the

AUAR study area and the area within one mile of the study area. This review identified no records within the project's study area and 11 records within one mile of the project site.

Five records for the Rusty Patch Bumble Bee (*Bombus affinis*), a federally-listed endangered species, were located within a one-mile radius of the study area. The preferred habitat for this species includes grasslands and tallgrass prairies. The site has been previously developed for commercial and residential uses and does not contain natural prairie vegetation, so no impacts to the Rusty Patch Bumble Bee are anticipated.

Five records for the Blanding's Turtle (*Emydoidea blandingii*), a state-listed threatened species, were located within a one-mile radius of the study area. It is unlikely that the species is present within the AUAR development limits; however, to minimize any potential impacts, measures identified in the Blanding's turtle fact sheet will be included in the AUAR and wildlife friendly erosion control methods will be used during future construction.

A record for the Kitten-tails (*Besseya bullii*), a state-listed threatened species, is located within one mile from the study area. The preferred habitat for this species of plant includes dry prairies and oak woodlands. The study area has been previously developed for commercial and residential uses and does not contain natural prairie or woodland vegetation, so no impacts to the Kitten-tails are anticipated.

There are two areas of MCBS Sites of Biodiversity Significance and one Regionally Significant Ecological Area (RSEA) located within one mile of the site. Considering none of the MCBS Sites of Biodiversity Significance or RSEAs are within the project limits, no adverse impacts in these areas are anticipated. No native plant communities are within or adjacent to the study area.

One Public Water Basin (Earley Lake) is adjacent to the project area. Any future development will be designed to avoid adverse impacts to the lake and will be consistent with the City's stormwater and floodplain requirements.

Based on the information listed above, no adverse impacts are anticipated to the species or the RSEA areas identified through the NHIS records search.

Please confirm our conclusions and let us know if you have any questions or need additional information.

Thank you,

Leila Bunge, AICP
Kimley-Horn | 767 Eustis Street, Suite 100, St. Paul, MN 55114
Direct: 763 251 1015
Connect with us: Twitter | LinkedIn | Facebook | Instagram

Simmons, Koehl

Attachments: History.xls

From: MN_MNIT_Data Request SHPO <DataRequestSHPO@state.mn.us>
Sent: Thursday, March 18, 2021 7:25 PM
To: Bunge, Leila <Leila.Bunge@kimley-horn.com>
Subject: RE: SHPO Database Search for AUAR in Burnsville, MN

Hello Leila,

Please see attached.

Jim

DEPARTMENT OF ADMINISTRATION
STATE HISTORIC PRESERVATION OFFICE

SHPO Data Requests
Minnesota State Historic Preservation Office
50 Sherburne Avenue, Suite 203
Saint Paul, MN 55155
(651) 201-3299
datarequestshpo@state.mn.us

If you require a comprehensive assessment of a project's potential to impact archaeological sites or historic/architectural properties, you may need to hire a qualified archaeologist and/or historian. If you need assistance with a project review, please contact Kelly Gragg-Johnson, Environmental Review Specialist @ 651-201-3285 or by email at kelly.graggjohnson@state.mn.us.
The Minnesota SHPO Archaeology and Historic/Architectural Survey Manuals can be found at https://mn.gov/admin/shpo/identification-evaluation/.

Given the Governor's implementation of Stay Safe MN, SHPO staff will continue to work remotely and be available via phone and email, and the SHPO office will be closed to visitors and unable to accommodate in-person research and deliveries. Mail is being delivered to the office via USPS, FedEx and UPS, however, staff have limited weekly access to sort and process mail. Our office will continue to take file search requests via DataRequestSHPO@state.mn.us. Check SHPO's webpage for the latest updates and we thank you for your continued patience.

From: Bunge, Leila <Leila.Bunge@kimley-horn.com>
Sent: Thursday, March 18, 2021 9:52 AM
To: MN_MNIT_Data Request SHPO <DataRequestSHPO@state.mn.us>
Subject: SHPO Database Search for AUAR in Burnsville, MN

Hello,

We are preparing an Alternative Urban Areawide Review (AUAR) for the Burnsville Center Village Area in Burnsville, Dakota County, Minnesota. I am writing to request a historic and architectural inventory database search for the site located in the following township, range, and section:

Township	Range	Section
115N	21W	23, 24, 25, 26

See the attached figure of the project location. The AUAR will examine the potential impacts for the maximum intensity of land use planned for the 426 acre study area.

Please let me know if you have any questions or need additional information.

Thank you,

Leila Bunge, AICP
Kimley-Horn | 767 Eustis Street, Suite 100, St. Paul, MN 55114
Direct: 763 251 1015
Connect with us: Twitter | LinkedIn | Facebook | Instagram

COUNTY	CITYTWP	PROPNAME	ADDRESS	TOWNSHIP	RANGE	SECTION	QUARTER	USGS
Dakota								
	Burnsville							
		Billy Goat Bridge (razed)	Burnsville Pkwy. & Judicial Rd. over RR	115	21	23	NW-NW-SW	Bloomington
		Bridge 19863	2.2 MI N of Jct TH 35E (carries Burnsville Parkway over I-35W)	115	21	25	SE-NW	Bloomington
		Bridge 19809	I 35E SB	115	21	25	SW-NE	Orchard Lake

REPORTNUM	NRHP	CEF	DOE	INVENTNUM
				DK-BVC-003
				DK-BVC-010
				DK-BVC-014

Appendix B

Sanitary Sewer Memo

TECHNICAL MEMORANDUM

To: Jen Desrude P.E., City Engineer
Linda Mullen, Utilities Superintendent
City of Burnsville

From: Jake Puffe, P.E.
Nancy Zeigler, P.E.
AE2S

Re: **Citywide Sanitary Sewer Model Development**

Date: February 24, 2020

Purpose

The purpose of this Technical Memorandum is to summarize the process by which a sanitary sewer collection system model was developed for the City of Burnsville (City), as well as a summary of a capacity analysis of the City's trunk sewer system.

Project Scope

A sanitary sewer collection system model will help provide a greater understanding of the City's utility and will provide a foundation for future collection system improvements. A hydraulic model can be used for identifying system deficiencies, designing proposed improvements for growth expansion through master planning, evaluating lift station capacity, and understanding impacts of inflow and infiltration (I&I).

Prior to developing a scope of work, AE2S met with City Staff to determine the level of model development and calibration desired for this model update. Two levels were discussed: Level One – Base GIS Based Model of the entire system and Level Two – Expanding Modeling to incorporate Flow Monitoring and Calibration. Based on the concept for the ability to expand from Level One to Level Two as needed or desired in the future, AE2S presented a project approach related to developing a Level One Model as described below.

Level One – Base GIS-based Model of the Entire System

1. Develop a simplified model containing all sewer piping within the City's GIS including lift stations and force main
2. Ensure that at a minimum the inverts are inputted for the trunk sewer
3. Work with City's GIS staff to incorporate inverts for other areas of the City
4. Flows allocated by winter demands from customer meter data with a percentage of I&I added across the system
5. Evaluate the system for remaining sewer capacity within each of the sewer pipelines and review of lift stations

A level one model will provide a great tool for development and re-development and general assessment of the system. AE2S used InfoSewer which is GIS-based sewer modeling which works well for simplified modeling of the system.

AE2S completed the professional services in four (4) phases: (1) Hydraulic Model Development, (2) Develop and Allocate Base Flow Information, (3) System Analysis and Summary Technical Memorandum, and (4) Future Growth Planning and Analysis. Each phase is described in the following sections.

Phase 1 - Hydraulic Model Development

This phase of the project included importing GIS data to create an "all pipes model" that includes every pipe within the GIS. The model development process included the review and verification of the existing system operations to develop an understanding of the existing wastewater collection system and ensure accuracy of the data obtained. Specific tasks completed with this task included:

- Acquire GIS data of the wastewater collection system from the City
- Acquire as-built data for pipe invert elevations from the City
- Verify lift station and forcemain setup and characteristics
- Verify gravity sewer data
- Communication with staff to confirm data

Burnsville provided shapefiles from the City's GIS database of the sanitary sewer system to develop the network of the collection system's pipes and appurtenances. The GIS database included records on the locations of gravity mains, forcemains, manholes, lift station wet wells and pumps, etc. as well as the type of material and sizes of sewer main.

In addition to the facility data incorporated, information for lift station pump flow rates, pump discharge heads, and wet well level setpoints were added to the model.

An elevation contour shapefile was used to extract rim elevations for manholes with unknown elevation.

InfoSewer® (version 7.6) hydraulic modeling software was used for development of the sanitary sewer system model. InfoSewer® allows the City to perform steady state evaluations of the sewer system.

Existing System Facilities

Data collected in Phase 1 confirmed the existing sanitary sewer infrastructure. The City currently owns approximately 200 miles of gravity sanitary sewer pipe. Table 1 provides a summary of the lengths of the various pipeline sizes and materials. This system evaluation focused only on the trunk sewer lines, which were generally defined as any pipe with a diameter of 10-inches or larger. There are also approximately 34 miles of privately-owned gravity sewer that is part of the collection system. Burnsville also collects flows from small areas the neighboring communities of Savage, Apple Valley, Eagan, and Lakeville.

The City also has 15 lift stations and 5 miles of forcemain in their system. Table 2 shows the design and remaining capacities of the lift stations based on the flows in the hydraulic model.

All the flow collected by the Burnsville sanitary sewer system is conveyed to the Metropolitan Council Environmental Services (MCES) interceptor system and ultimately exits the City at a single outfall point at meter M501 in the northeast part of the City.

A map of the City's existing sanitary sewer system showing lift stations, gravity mains and forcemain, and MCES interceptors and meter station is attached.

Pipe Size	Length of Gravity Pipe by Material (ft)						Total Pipe Length	Total Pipe Length
(in)	CIP	DIP	PVC	RCP	VCP	Other*	(ft)	(mi)
6	-	486	1,167	-	-	866	2,519	0.5
8	1,887	10,916	352,507	-	46,147	19,655	431,111	81.6
9	-	-	24,335	221	422,810	11,556	458,922	86.9
10	759	4,614	26,336	-	7,029	4,481	43,219	8.2
12	-	296	4,185	42,123	27,137	3,304	77,045	14.6
15	-	-	1,761	11,892	1,387	-	15,041	2.8
16	-	882	-	-	-	-	882	0.2
18	-	-	71	2,621	-	-	2,692	0.5
21	-	-	-	5,068	-	-	5,068	1.0
24	-	-	-	5,887	-	-	5,887	1.1
27	-	-	-	7,258	-	-	7,258	1.4
Total Pipe Length (ft)	2,646	17,194	410,362	75,072	504,510	39,862	974,573	-
Total Pipe Length (mi)	0.5	3.3	77.7	14.2	95.6	7.5	-	198.8

**HDPE, RMP, SF, or Unknown material*

Table 1: Gravity Sewer Lengths and Materials

Lift Station	Design Pumping Capacity	Hydraulic Model Peak Flow	Remaining Capacity	Remaining Percent
	(gpm)	(gpm)	(gpm)	
Blue Bill Bay	39	8	31	79%
Buck Hill	200	89	111	56%
Crystal Lake	39	13	26	67%
Echo Valley	606	182	424	70%
Keller Lake	128	26	102	80%
Maple Island A	1308	965	343	26%
Maple Island B	100	20	80	80%
McAndrews	806	445	361	45%
McCool	39	15	24	62%
Meadow Acres	787	216	571	73%
Savage	1200	239	961	80%
Sodomka	39	2	37	95%
Valley View	210	8	202	96%
Washburn	170	114	56	33%
Woods Trail	100	17	83	83%

Table 2: Lift Station Capacities

Phase 2 – Develop and Allocate Base Flow Information

This phase included the development of base flow information based on water customer meter data determined from meter readings taken during the winter months. An accurate allocation of wastewater flows was performed using water customer meter data that is mapped throughout the system. A crucial element of wastewater collection system modeling is determining accurate, representative wastewater flows and the spatial distribution of these flows throughout the collection system. Specific tasks completed with this phase included:

- Flow Allocation within Hydraulic Model
  - Obtained billing record information from the City for individual meters
  - Linked billing records with GIS based addresses to mapped meters
  - Verified large flow users are properly located within model
  - Allocated demands from mapped billing record information to nodes within hydraulic model
- Develop a flow percentage to represent inflow and infiltration (I&I)
  - Reviewed and compared customer meter data and system flow meters
  - Allocated flow based on I&I

Burnsville provided the data for 16,327 water meters billing records in their distribution system analyzed over the months of January 2018 through December 2018. Only the winter flow data was used for load allocation so that no irrigation would be accounted for. The monthly usage data was converted to average consumption rate in gallons per minute (gpm) and then scaled to match the total average daily flow rate obtained from the MCES meter data.

The flow rates were then spatially distributed as loads in the system using the software InfoSewer Load Allocator®. This software uses GIS technology to assign geocoded consumption data to their designated location within the collection system. For each meter record, advanced search algorithms in the load allocation software were used to distribute the loads to the closest pipe. The loads were then allocated to the upstream manhole at the end of the pipe. For each manhole within the model, all the contributing loads were summed to represent the total load imposed on that particular manhole.

Phase 3 - System Analysis and Technical Memorandum

The third phase included the analysis of the collections system using the hydraulic model to determine available system capacity under dry weather flow conditions including an estimate for I&I. Specific tasks completed with this phase included:

- Capacity analysis (percent remaining) of the existing system to determine remaining capacity and areas with capacity issues
- Review of lift station capacity and determining remaining capacity
- Providing a summary technical memorandum based on analysis

With the load data allocated in the model, a steady state simulation was performed using the MCES peaking curve shown in Table 3. This simulation revealed the remaining capacity of each pipe segment in the trunk sewer system, as well as the remaining capacities of each lift station. The trunk sewer remaining capacity is shown in the attached Existing System Trunk Capacity Map.

Average Flow Rate (gpm)	Peak Flow Rate (gpm)
1	4
76	306
125	488
160	607
201	745
271	975
340	1,191
444	1,511
549	1,810
688	2,200
826	2,562
1,035	3,104
1,313	3,806
1,590	4,453
2,007	5,419
2,424	6,301
2,910	7,274
3,604	8,650
4,438	10,206
5,549	12,207
7,215	15,152
9,368	18,736
12,493	23,737
20,826	37,488
34,722	59,028

Table 3: MCES Peaking Curve

The City had several developments that were either approved for construction or constructed since the water meter data was collected be added to the model. The City requested that these developments be added to the model and considered part of the existing system. Since no meter data was available, projected loads were calculated for these developments. The new developments are listed in Table 4.

Development	Residential	Apartment	Commercial	Office/ Warehouse
	units	units	sf	sf
Bubble Barn Car Wash	-	-	3,776	-
Burnsville Industrial	-	-	-	96,200
Burnsville Senior Living	-	134	-	-
Caribou Coffee	-	-	531	-
Chase Nicollet Plaza	-	172	8,000	-
Gallery on Parkway	-	109	-	-
Healey-Ramme	52	405	-	-
Industrial Equities	-	-	-	81,000
Maven	-	137	1,500	-
Park Nicollet Expansion	-	-	-	169,000
Park Nicollet PT Clinic	-	-	-	18,550
Suite Living	-	32	-	-

Table 4: Approved Development/Under Construction

Phase 4 – Future Growth Planning and Analysis

This phase included the analysis of future development and growth scenarios and their impact on the collections system.

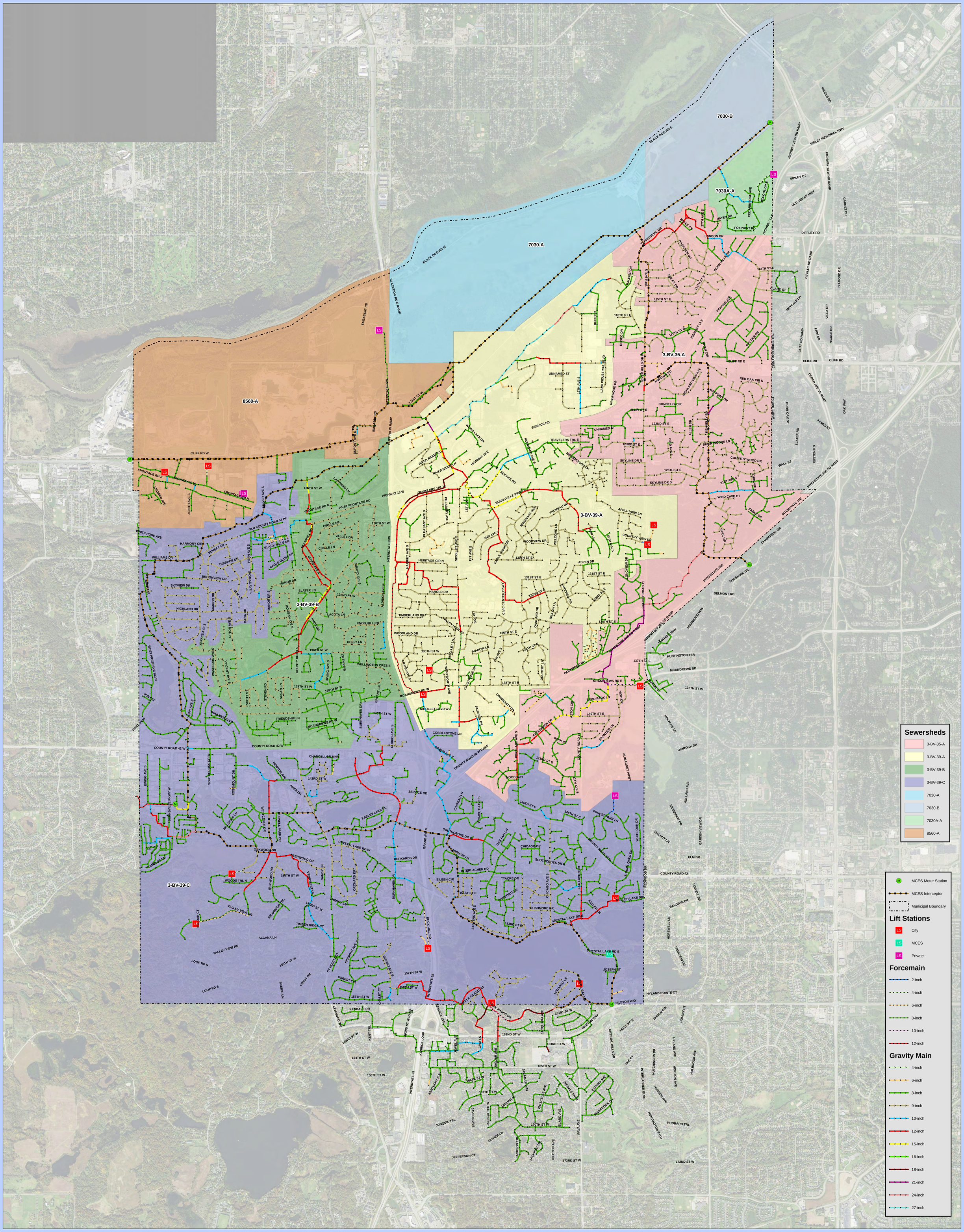
The hydraulic model can be used to determine whether the existing collections system has the available capacity to accommodate development scenarios and what capacity upgrades may be necessary. The buildout through the year 2040 for the Burnsville Center Village Redevelopment was added to the model as a future scenario and it was determined that the existing 12-inch pipe on Burnhaven Drive should have enough capacity to accommodate the development shown in Table 5.

Development	Residential	Apartment	Commercial	Office/ Warehouse
	units	units	sf	sf
Burnsville Center Village Redevelopment	1,600	200	1,100,000	705,000

Table 5: Future Development

Recommendations

The City's sanitary sewer system will change over time due to new construction, capital improvement projects, changes in water use, inflow and infiltration remediation efforts, and other possible factors. Therefore, it is recommended that the hydraulic model be updated with current pipe network, water use, and flow meter data approximately every 5 years. Ideally the timing of the model update should concur with sanitary sewer comprehensive planning so that the City can have the highest confidence in the pertinent data generated from the model.



Sewersheds

- 3-BV-35-A
- 3-BV-39-A
- 3-BV-39-B
- 3-BV-39-C
- 7030-A
- 7030-B
- 7030A-A
- 8560-A

- M — MCES Meter Station
- MCES Interceptor
- Municipal Boundary

Lift Stations

- LS — City
- LS — MCES
- LS — Private

Forcemain

- 2-inch
- 4-inch
- 6-inch
- 8-inch
- 10-inch
- 12-inch

Gravity Main

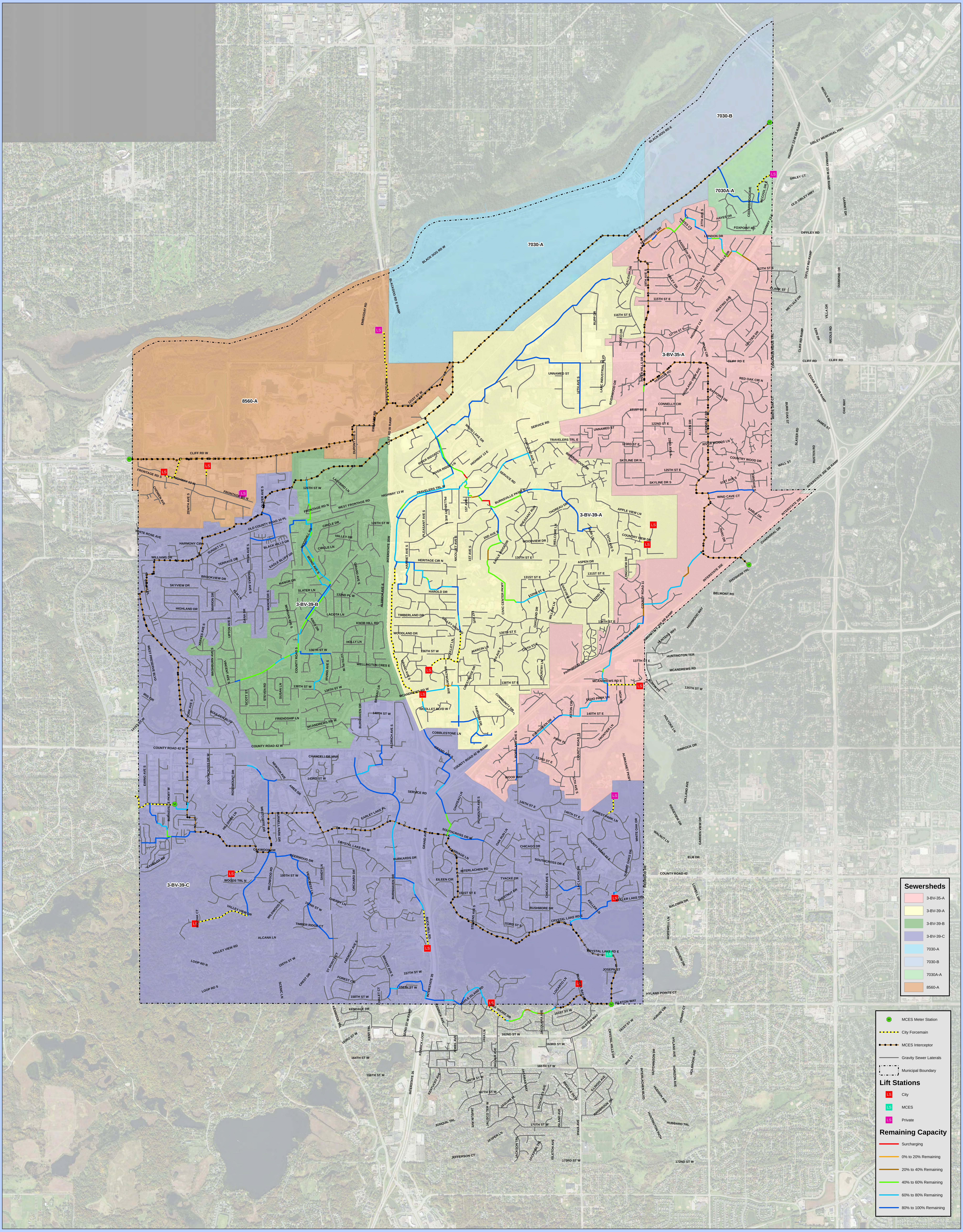
- 4-inch
- 6-inch
- 8-inch
- 9-inch
- 10-inch
- 12-inch
- 15-inch
- 16-inch
- 18-inch
- 21-inch
- 24-inch
- 27-inch

N

0 1,000 2,000 3,000 4,000 Feet

City of Burnsville
Sanitary Sewer System
Existing System - Diameter

Advanced Engineering and Environmental Services, Inc.



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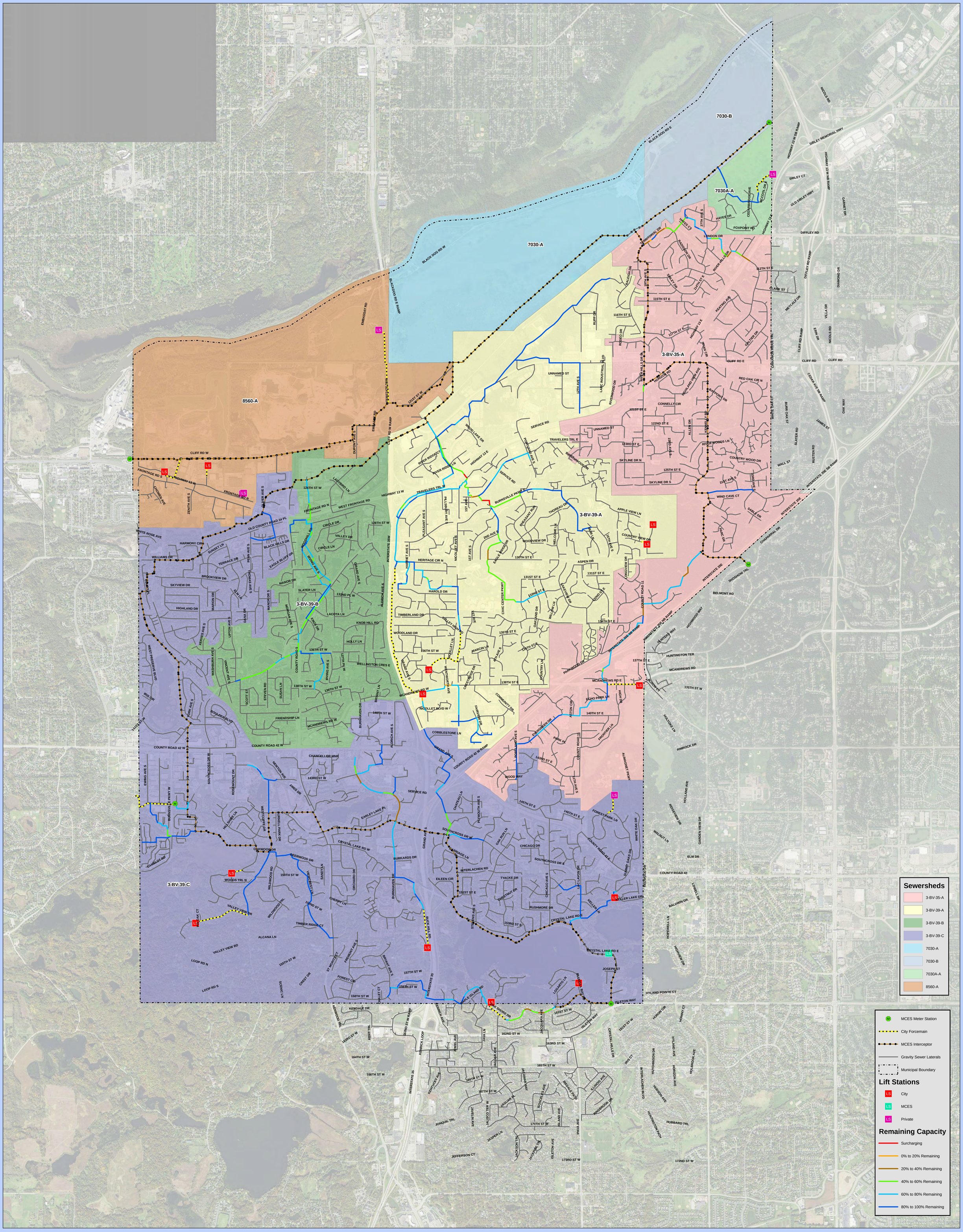
City of Burnsville
Sanitary Sewer System
Existing Trunk Sewer - Available Capacity

AES2 Advanced Engineering and Environmental Services, Inc.

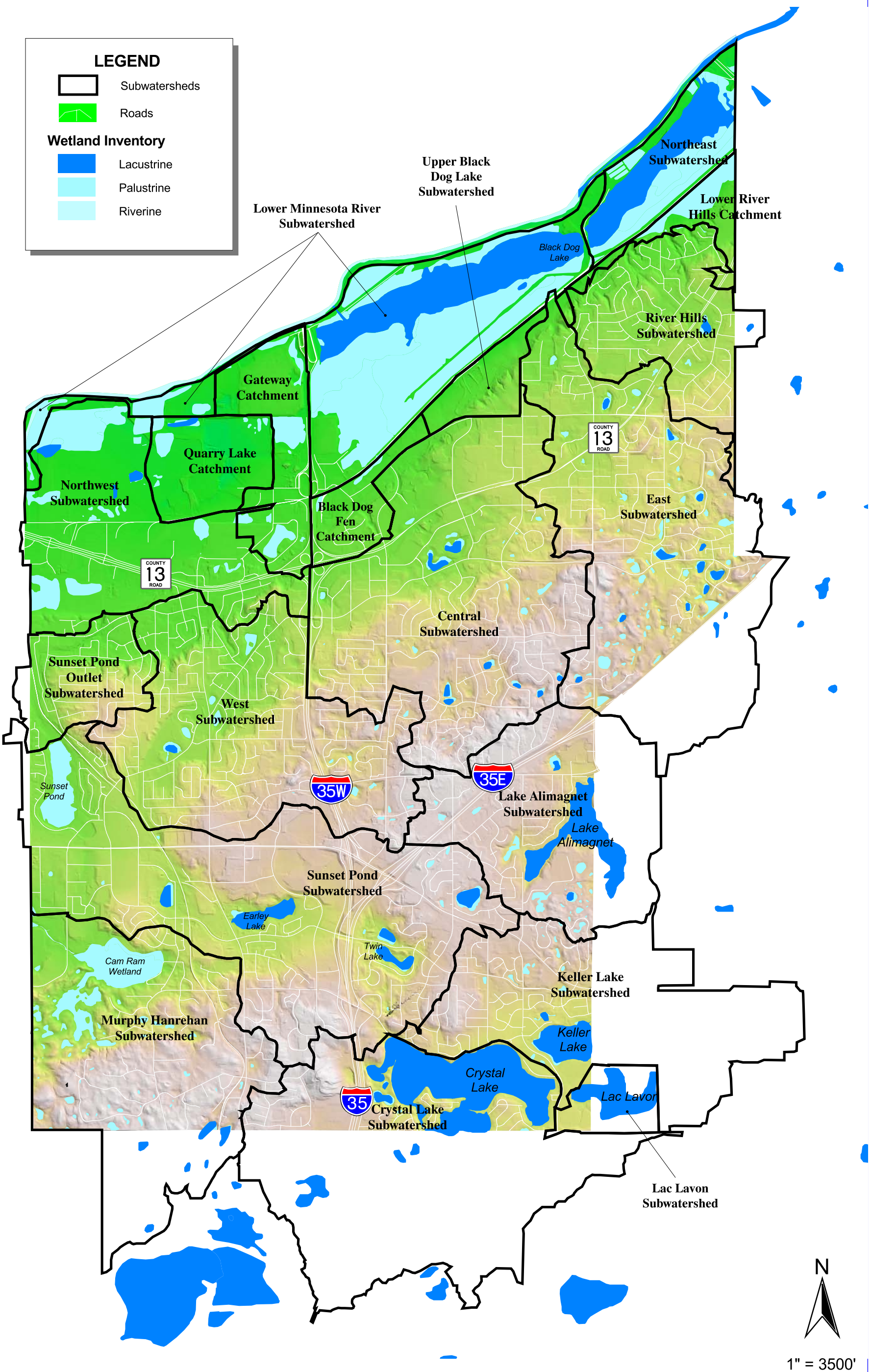


City of Burnsville
Sanitary Sewer System
FutureTrunk Sewer - Available Capacity
with Burnsville Center Village Redevelopment

Advanced Engineering and Environmental Services, Inc.

Appendix C

Existing Drainage Areas



SEH	9/10/02 watershed.apr naf	BURNSVILLE MAJOR SUBWATERSHEDS WITH ELEVATION MODEL BACKDROP	FILE NO. ABURNS9904.00 FIG NO. 11	

Appendix D

Water Supply Memo

Technical Memorandum

To: Jen Desrude, PE, City Engineer
Tony White, Utilities Superintendent

From: Brian Weiss, PE
AE2S

Re: Burnsville Center Village Redevelopment Analysis

Date: March 31, 2021

Water distribution system analysis was requested to determine the impacts of demand changes related to the Burnsville Center Village vision/redevelopment. This memorandum provides documentation of the results of the water system analysis.

Proposed Water Demands

Existing water demand for the Burnsville Center area is currently about 111,225 gpd based on maximum day demands. Based on the information provided on the redevelopment shown in Table 1, maximum day water demands were calculated and presented in Table 2. The proposed redevelopment would increase the water demand from 111,225 gpd to 883,350 gpd.

Table 1: Development Information

	Proposed			
LAND USE	UNITS	RESIDENT POPULATION**	BUILDING SF	EMPLOYEES***
MEDIUM DENSITY RESIDENTIAL	1,600	3,840	N/A	N/A
HIGH DENSITY RESIDENTIAL	200	280	N/A	N/A
COMMERCIAL	N/A	N/A	1,100,000	2,444
OFFICE	N/A	N/A	705,000	2,350
TOTAL	**1,800**	**4,120**	**1,805,000**	**4,794**

Table 2: Water Demands for Proposed Redevelopment

	Water System			
	Proposed			
LAND USE	Usage per Unit (gpcd)	Average Day Demand (ADD) (gpd)	Peaking Factor (ADD to MDD)	Maximum Day Demand (MDD) (gpd)
MEDIUM DENSITY RESIDENTIAL	80	307,200	2.20	675,840
HIGH DENSITY RESIDENTIAL	80	22,400	2.20	49,280
COMMERCIAL	15	36,667	2.20	80,667
OFFICE	15	35,250	2.20	77,550
TOTAL		**401,517**		**883,337**

NOTES / ASSUMPTIONS:

Medium Density Residential: 2.4 persons per household
High Density Residential: 1.4 persons per household

***Average Employee assumptions:

Commercial: 1 employee per 450 sq. ft. floor area
Industrial: 1 employee per 1,100 sq. ft. floor area
Office: 1 employee per 300 sq. ft. floor area

Water System Analysis

Alternative 1: Existing System – No Demand Changes:

- Pressure Analysis – Average Pressures (Figure 1A).
- Fire Flow Analysis – Available fire flow at 20 psi residual (Figure 1B)

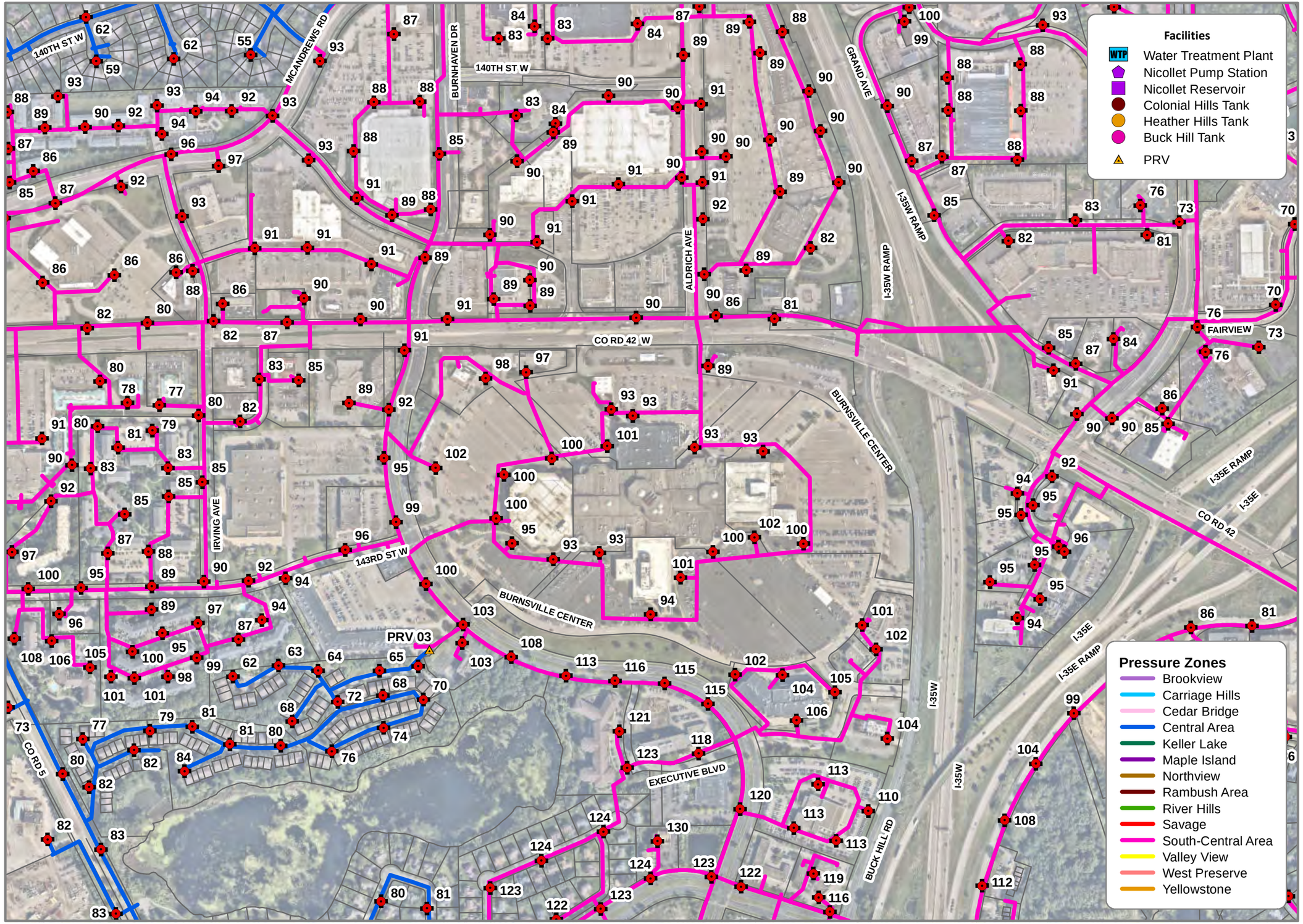
Alternative 2: Existing System – With increased demand related to redevelopment:

- Pressure Analysis – Average Pressures (Figure 2A).
- Fire Flow Analysis – Available fire flow at 20 psi residual (Figure 2B)

Conclusions

The water system analysis shows that the overall the water system has adequate capacity for this area to meet the increased system demands related to the proposed redevelopment. System pressures decreased by about 1 psi in areas and there is sufficient remaining pressure. In reviewing available fire flows, the system has the ability to provide a minimum of 3,500 gpm of fire flow and more is some cases throughout the area. The increased demands show a small reduction in available fire flow ranging from 100 to 200 gpm based on proposed increased demands related to development. There are no recommendations for changes to the water system.

www.ae2s.com | Advanced Engineering and Environmental Services, Inc.



N

0 250 500

Feet

1 inch = 500 feet

Exhibit 1A

AVERAGE PRESSURE (PSI)

EXISTING SYSTEM - NO DEMAND CHANGES

MAXIMUM DAY DEMAND

Date: 3/30/2021

Coordinate System: NAD 1983 HARN Adj MN Dakota Feet | Edited by: BWeiss | E:\Projects\Burnsville\Miscellaneous Modeling\2021\Burnsville Center Analysis\Exhibit 1A - Existing System - No Demand Changes - Ave Pressure.mxd

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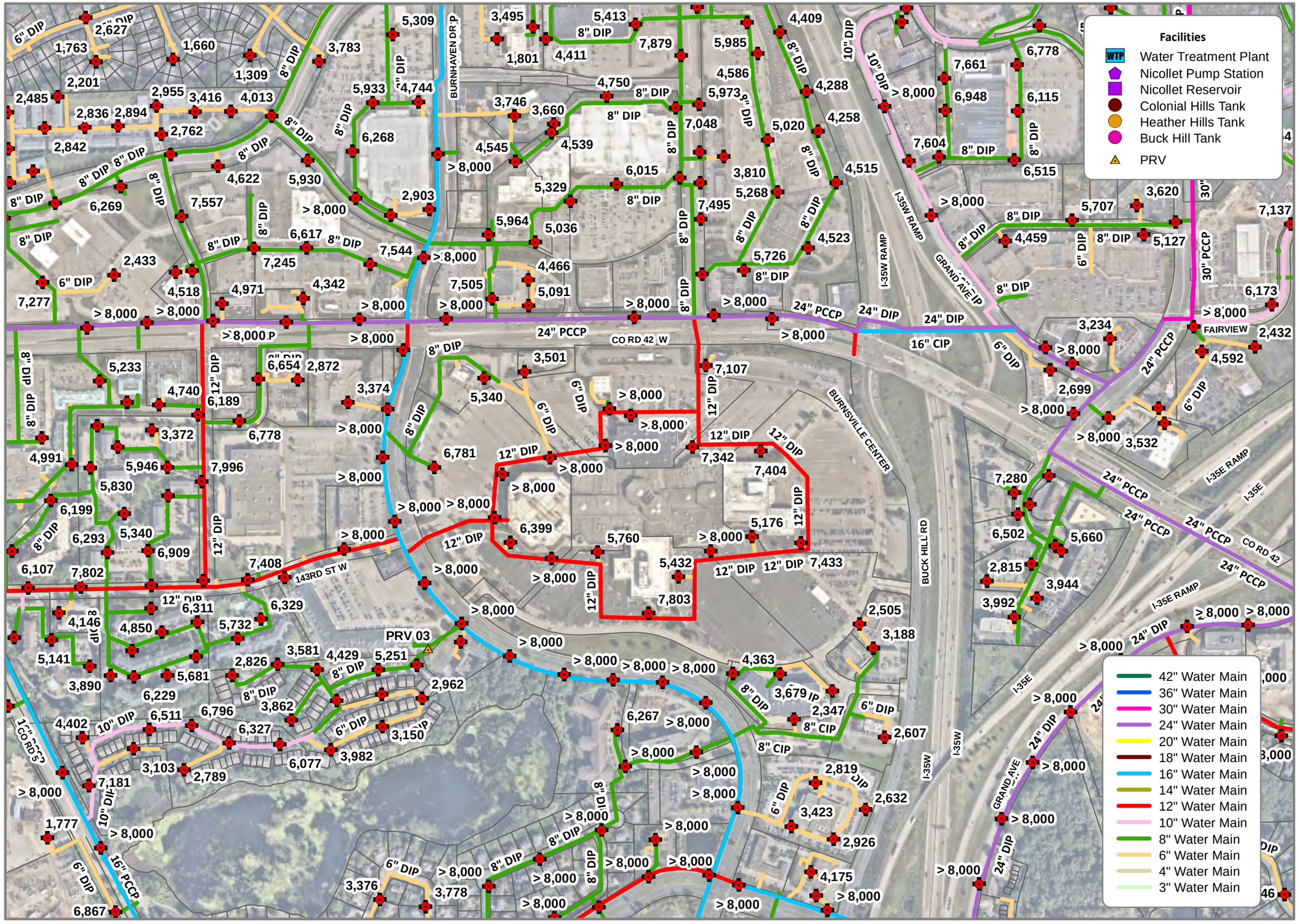

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0 250 500
Feet
1 inch = 500 feet

Exhibit 1B

AVAILABLE FIRE FLOW (GPM) AT RESIDUAL PRESSURE OF 20 PSI

EXISTING SYSTEM - NO DEMAND CHANGES

MAXIMUM DAY DEMAND

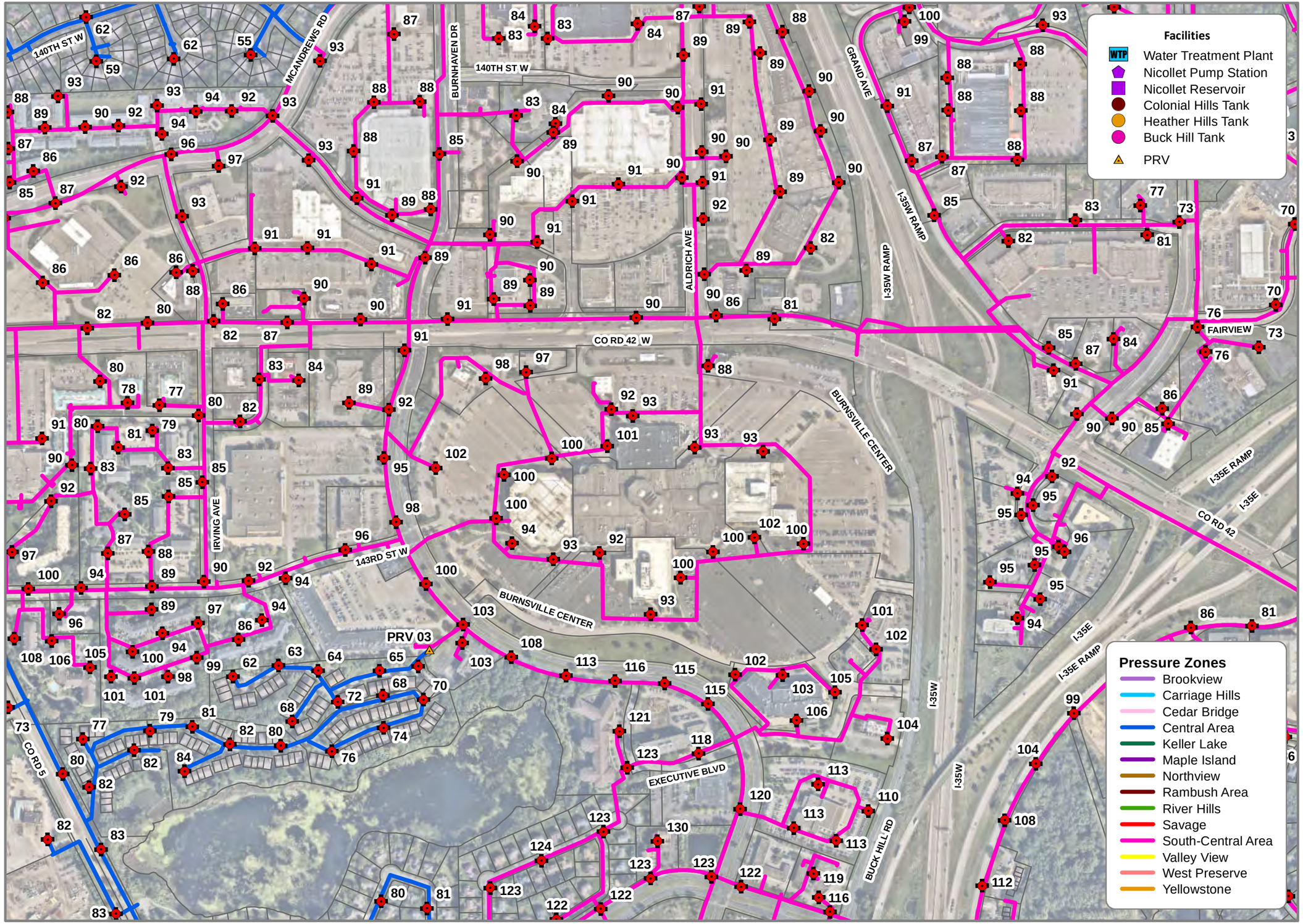
Date: 3/30/2021

AE2S

Information depicted may include data unverified by AE2S. Any reliance upon such data is at the user's own risk. AE2S does not warrant this map or its features are either spatially or temporally accurate.

Coordinate System: NAD 1983 HARN Adj MN Dakota Feet | Edited by: BWeiss | E:\Projects\Burnsville\Miscellaneous Modeling\2021\Burnsville Center Analysis\Exhibit 1B - Existing System - No Demand Changes - AFF.mxd

www.ae2s.com | Advanced Engineering and Environmental Services, Inc.



N

0 250 500

Feet

1 inch = 500 feet

Exhibit 2A

AVAILABLE FIRE FLOW (GPM) AT RESIDUAL PRESSURE OF 20 PSI

EXISTING SYSTEM - WITH PROPOSED REDEVELOPMENT DEMAND CHANGES

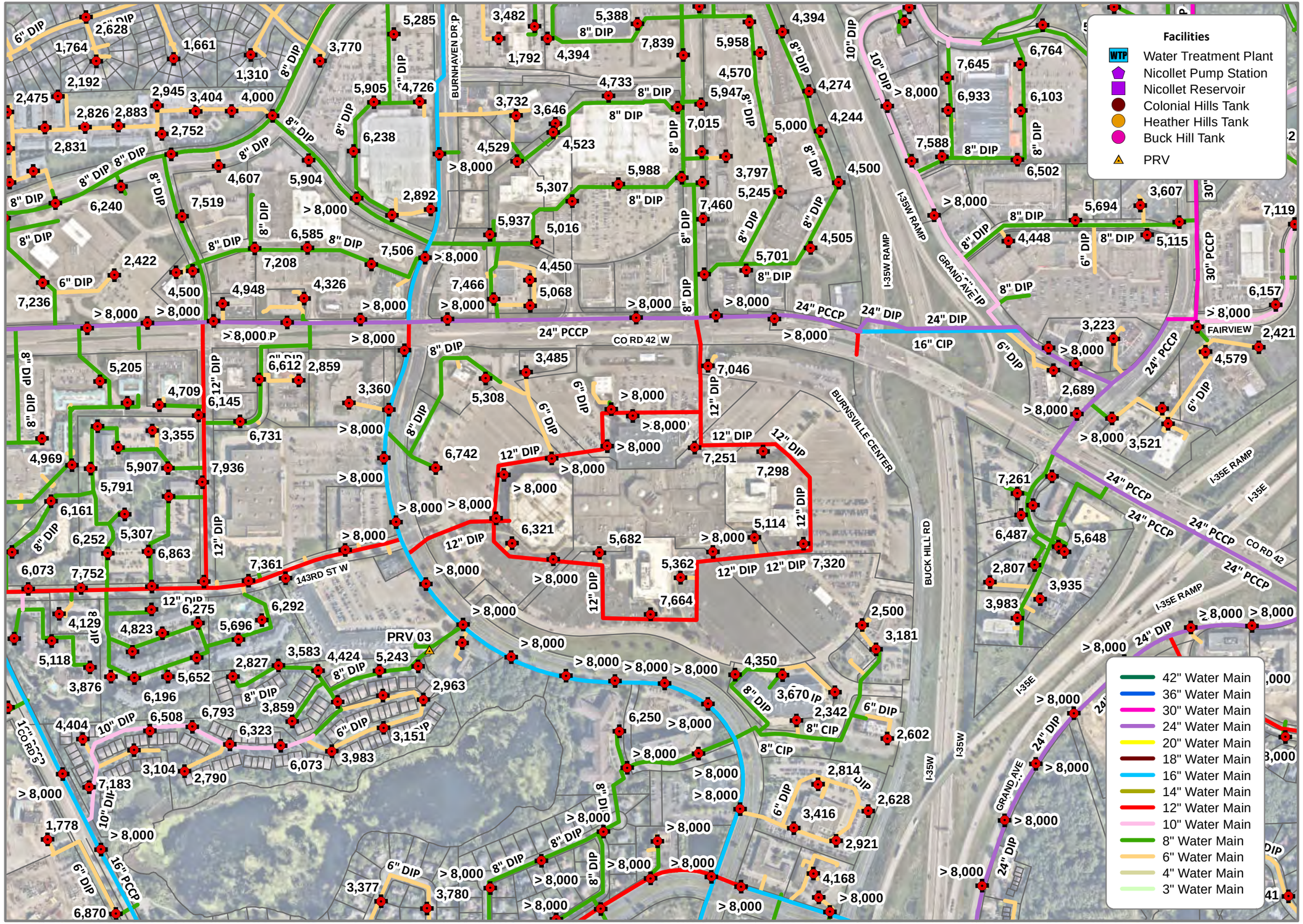
MAXIMUM DAY DEMAND

Date: 3/30/2021

Information depicted may include data unverified by AE2S. Any reliance upon such data is at the user's own risk. AE2S does not warrant this map or its features are either spatially or temporally accurate.

Coordinate System: NAD 1983 HARN Adj MN Dakota Feet | Edited by: BWeiss | E:\Projects\Burnsville\Miscellaneous Modeling\2021\Burnsville Center Analysis\Exhibit 2A - Existing System - With Proposed Redevelopment Demands - Ave Pressure.mxd

www.ae2s.com | Advanced Engineering and Environmental Services, Inc.



N

0 250 500

Feet

1 inch = 500 feet

Exhibit 2B

AVAILABLE FIRE FLOW (GPM) AT RESIDUAL PRESSURE OF 20 PSI

EXISTING SYSTEM - WITH PROPOSED REDEVELOPMENT DEMAND CHANGES

MAXIMUM DAY DEMAND

Date: 3/30/2021

Information depicted may include data unverified by AE2S. Any reliance upon such data is at the user's own risk. AE2S does not warrant this map or its features are either spatially or temporally accurate.

Coordinate System: NAD 1983 HARN Adj MN Dakota Feet | Edited by: BWeiss | E:\Projects\Burnsville\Miscellaneous Modeling\2021\Burnsville Center Analysis\Exhibit 2B - Existing System - With Proposed Redevelopment Demands - AFF.mxd

Appendix E

Burnsville Center Village Area Traffic Study

REPORT

MARCH 2020

CITY OF BURNSVILLE

Center Village Traffic Study

PREPARED FOR:

City Of Burnsville

PREPARED BY:

Kimley»Horn

CENTER VILLAGE TRAFFIC STUDY

BURNSVILLE, MINNESOTA

REPORT CERTIFICATION

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

Brandon J. Bourdon

Date: 03/06/2020

Brandon J. Bourdon

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APPENDIX

EXECUTIVE SUMMARY

Following the completion of the successful Center Village Redevelopment Vision in 2018, the City of Burnsville is moving forward to understand the transportation improvements needed to support the redevelopment of the Burnsville Center area. This study includes analysis on the most congested corridor in the area, County Road (CR) 42. This study also explores innovative multimodal solutions needed to mitigate existing congestion on the roadway network as well as the anticipated traffic impacts of the redevelopment.

Burnsville Center has unique transportation challenges compared to other malls in the Minneapolis-St. Paul metropolitan area. Burnsville Center does not have direct access from either the I-35W interchange or the I-35E interchange and its main connecting roadway is CR 42, which is an arterial with close to 50,000 vpd. All of the other regional malls in the area have considerably more balanced traffic volumes on the surrounding roadways.

In the Intermediate Year (2030) No Build scenarios, the PM and Saturday Peak Hours are projected to have poor operations along the CR 42 corridor and will require mitigation. By the Horizon Year (2040) No Build, all scenarios will require mitigation and the PM and Saturday Peak Hours will have excessive delays and queues throughout the study area. Significant mitigation will be required along the CR 42 corridor without the anticipated Center Village Redevelopment.

The existing Burnsville Mall generates 18,400 trips per day and the Center Village Redevelopment is anticipated to generate 38,975 trips per day. This is an increase of 20,575 daily trips. The Center Village Redevelopment will focus on providing multimodal options such as enhanced pedestrian facilities and a transit station for the Orange Line BRT extension.

Based on the results of the Horizon Year (2040) Build analysis it was determined that significant mitigation along CR 42 would be required to accommodate the projected background growth and the complete redevelopment of the Center Village site. The concept layout showing the recommended mitigation measures is shown in **Appendix B**.

For the Intermediate Year (2030) Build analysis it was determined that less mitigation would be required than the Horizon Year (2040) Build analysis. However, because of the level of mitigation required for the Horizon Year (2040) Build analysis, it is recommended to complete the full mitigation to avoid multiple impacting CR 42 multiple times and to minimize throw away costs.

The mitigation could be split into three separate phases depending on when development happens on the Center Village site. The total concept level estimate of the improvements required along CR 42 is $36.6 million. The Aldrich Avenue extension through the Center Village Site is estimated to cost between $3.4 million and $4.2 million and it would likely be one of the first components of the redevelopment.

All of the concept development as part of this study are at a planning level and will require further refinement and approval from the FHWA, MnDOT, Dakota County, and the City of Burnsville.

PROJECT UNDERSTANDING

Following the completion of the successful Center Village Redevelopment Vision in 2018, the City of Burnsville is moving forward to understand the transportation improvements needed to support the redevelopment of the Burnsville Center area. This study named the Center Village Traffic Study, includes analysis on the most congested corridor in the area, County Road (CR) 42, in addition to analysis of CR 38 (McAndrews Road) to the north, Portland Avenue to the east, Southcross Drive to the south, and CR 5 to the west. This study also explores innovative multimodal solutions needed to mitigate existing congestion on the roadway network as well as the anticipated traffic impacts of the redevelopment.

CENTER VILLAGE REDEVELOPMENT VISION

The redevelopment vision for Center Village is focused into two sections. The north neighborhood which is bounded by CR 38 (McAndrews Road) to the north, Aldrich Avenue to the east, CR 42 to the south, and Burnhaven Drive to the west. The south neighborhood encompasses the existing Burnsville Mall area. The south neighborhood is anticipated to redevelop first with a refreshed mall and walkable mixed-use environment, and the north neighborhood developing with smaller blocks of mixed-use developments. One of the key components of the Center Village Redevelopment is improving connections between the Center Village Districts and the surrounding region for all modes of transportation including transit, bikes/pedestrians, and vehicles. The focus of this study will be on the south neighborhood as it is planned to be completed by 2040, while the north neighborhood is anticipated to redevelop after 2040.

TRAFFIC OPERATIONAL ANALYSIS

There is significant congestion and crash history along CR 42, as a result of heavy traffic volumes (nearly 50,000 vehicles per day west of I-35W), eleven signalized intersections in less than two miles, and two major interchanges (I-35W and I-35E) in close proximity to each other. It is critical to improve the CR 42 experience in order for the Center Village District to thrive in the future.

The traffic operations analysis will help guide the concept development, so it is critical that traffic operations build off the Center Village Redevelopment Vision and fit within the vision's parameters. This analysis builds off that vision and will help determine the extent of the roadway network improvements required to provide adequate capacity for the Center Village Redevelopment.

CONCEPT DEVELOPMENT

The outcome of the traffic analysis was a list of potential infrastructure improvements required to adequately serve the area after Center Village is redeveloped. Roadway concepts drawings were developed to show these improvements. These drawings were used to obtain input from the project management team (PMT) and other stakeholders. The concept drawings were then used to develop concept level cost estimates to help better inform future phases of project development.

STAKEHOLDER ENGAGEMENT

Stakeholder engagement was another element of this study as agency coordination was important given that the roadways in the study area are under the jurisdiction of the City of Burnsville, Dakota County, and MnDOT. The following is a summary of PMT members and stakeholder engagement activities that occurred.

PMT Members

City of Burnsville

- Jen Desrude
- Ryan Peterson
- Regina Dean

Dakota County

- Doug Abere
- Kristi Sebastian
- John Sass

Minnesota Department of Transportation

- Almin Ramic
- Molly Kline

Project Management Team (PMT) Meetings

A PMT was formed at the beginning of the study to assist in making decision and advancing the study. The team included representative from the City of Burnsville, Dakota County, and MnDOT.

Over the course of the study, PMT meetings were held on the following dates:

- June 6th, 2019
- June 27th, 2019
- August 1st, 2019
- September 17th, 2019
- October 29th, 2019
- November 15th, 2019
- December 18th, 2019
- January 22nd, 2020

Public Outreach

- December 14th & 16th, 2019: City and Dakota County representatives were at a booth in the Burnsville Center Mall to provide information, take feedback, and answer questions about the Center Village Traffic Study
- December 11th, 2019 – January 31st, 2020: The City website had an interactive map to obtain feedback on traffic concerns and potential transportation improvements
- Winter 2020 Burnsville Bulletin, Volume 30, No. 1: The City newsletter contained an article regarding the traffic study and directing feedback to the interactive website or City Engineer
- Social Media: City Communications staff posted links to the interactive website to attract the public to provide feedback

Joint Planning and Economic Development Commission Meeting

An update was provided to the City of Burnsville Joint Planning and Economic Development Commission Meeting on November 13th, 2019.

City Council Update

Updates were provided to the Burnsville City Council on the following dates:

- December 10th, 2019 (work session)
- February 11th, 2020 (work session)

EXISTING CONDITIONS

STUDY AREA

The study area for the Center Village Redevelopment is bounded by CR 38 (McAndrews Road) to the north, Portland Avenue to the east, Southcross Drive to the south, and CR 5 to the west. Within this area, 36 intersections were analyzed. The following intersections were studied as part of the traffic analysis.

- County Road 42 & County Road 5
- County Road 42 & Irving Avenue
- County Road 42 & Burnhaven Drive
- County Road 42 & ¾ Access between Burnhaven Drive & Aldrich Avenue
- County Road 42 & Aldrich Avenue
- County Road 42 & Buck Hill Road/I-35W Southbound Ramp
- County Road 42 & I-35W Northbound Ramp
- County Road 42 & Nicollet Avenue
- County Road 42 & I-35E Southbound Ramps
- County Road 42 & I-35E Northbound Ramps
- County Road 42 & Portland Avenue
- County Road 5 & County Road 38 (McAndrews Avenue)
- Irving Avenue & County Road 38 (McAndrews Avenue)
- 141st Street & County Road 38 (McAndrews Avenue)
- Burnhaven Drive & County Road 38 (McAndrews Avenue)
- Aldrich Avenue & County Road 38 (McAndrews Avenue)
- Nicollet Avenue & County Road 38 (McAndrews Avenue)
- Portland Avenue & County Road 38 (McAndrews Avenue)
- County Road 5 & Southcross Drive
- Burnhaven Drive & Southcross Drive
- Buck Hill Road & Southcross Drive
- Portland Avenue & Southcross Drive
- Burnhaven Drive & 140th Street
- Aldrich Avenue & 140th Street
- Burnhaven Drive & 141st Street
- Aldrich Avenue 141st Street
- County Road 5 & 143rd Street
- 143rd Street & Irving Avenue
- Burnhaven Drive & 143rd Street
- Nicollet Avenue & Nicollet Boulevard
- Portland Avenue & Nicollet Boulevard
- Nicollet Avenue & Cobblestone Court/ Fairview Drive
- Burnhaven Drive & Executive Boulevard
- Buck Hill Road & Mall North access
- Buck Hill Road & Mall Middle Access
- Buck Hill Road & Mall South Access

All the study intersections in the network are shown in **Exhibit 1** in **Appendix A**.

EXISTING ROADWAYS

The major roadway corridors within the study network are CR 42, CR 38, CR 5, Southcross Drive, Nicollet Avenue, Burnhaven Drive, Aldrich Avenue, and Buck Hill Road. Following provides a detailed description of these roadways.

County Road 42 is a six-lane, divided, east-west roadway with turn lanes at accesses and roadway connections. The Dakota County 2040 Comprehensive Plan classifies CR 42 as a Principal Arterial. The MnDOT Traffic Mapping Application reports an annual average daily traffic (AADT) range from 51,000 vehicles per day (vpd) between I-35W and I-35E to 28,500 vpd on the east side of the study area. The posted speed limit on CR 42 is 40 miles per hour (mph).

County Road 38 (McAndrews Avenue) is a four-lane, divided, east-west roadway with turn lanes at accesses and roadway connections. The Dakota County 2040 Comprehensive Plan classifies CR 38 as a Minor Expander. The MnDOT Traffic Mapping Application reports an AADT of 17,100 vpd in the study area. The posted speed limit on CR 38 is 40 mph.

County Road 5 is a four-lane, divided, north-south roadway with turn lanes at accesses and roadway connections. The Dakota County 2040 Comprehensive Plan classifies CR 5 as a Minor Expander. The MnDOT Traffic Mapping Application reports an AADT of 15,100 vpd in the study area. The posted speed limit on CR 5 is 45 mph.

Southcross Drive is a four-lane, divided and undivided, east-west roadway with turn lanes at accesses and roadway connections. The Dakota County 2040 Comprehensive Plan has Southcross Drive classified as a Major Collector to the east of Portland Avenue while the rest is classified as a local street. The MnDOT Traffic Mapping Application reports an AADT of 6,400 vpd in the study area. The posted speed limit on Southcross Drive is 35 mph.

Nicollet Avenue is a four-lane, divided, north-south roadway with turn lanes at accesses and roadway connections. The Dakota County 2040 Comprehensive Plan classifies Nicollet Avenue as a Minor Reliever. The MnDOT Traffic Mapping Application reports an AADT of 19,300 vpd in the study area. The posted speed limit on Nicollet Avenue is 40 mph.

Burnhaven Drive is a four-lane, divided, north-south roadway with turn lanes at accesses and roadway connections. The Dakota County 2040 Comprehensive Plan classifies Burnhaven Drive as a local street. The MnDOT Traffic Mapping Application reports an AADT between 10,100 vpd (at CR 42) and 5,500 vpd (at CR 38) in the study area. The posted speed limit on Burnhaven Drive is 35 mph.

Aldrich Avenue is a four-lane, divided, north-south roadway with turn lanes at accesses and roadway connections. The Dakota County 2040 Comprehensive Plan classifies Aldrich Avenue as a local street. The MnDOT Traffic Mapping Application reports an AADT of 11,900 vpd north of CR 42. The posted speed limit on Aldrich Avenue is 30 mph.

Buck Hill Road is a four-lane, undivided, north-south roadway with turn lanes at roadway connections. The Dakota County 2040 Comprehensive Plan classifies Buck Hill Road as a local street. The MnDOT Traffic Mapping Application reports an AADT of 9,800 vpd in the study area. The posted speed limit on Buck Hill Road is 45 mph.

EXISTING ROADWAY COMPARISONS TO OTHER REGIONAL MALLS

Burnsville Center has unique transportation challenges compared to other malls in the Minneapolis-St. Paul metropolitan area. Burnsville Center does not have direct access from either the I-35W interchange or the I-35E interchange and its main connecting roadway is CR 42, which is an arterial with close to 50,000 vpd. The other roadways surrounding the site: Burnhaven Drive, Buck Hill Road, and Southcross Drive, as described above, have around 10,000 vpd or less. There is a large imbalance of traffic volumes on the surrounding roadways, and the majority of traffic to/from Burnsville Center uses CR 42 in some capacity. This creates operational challenges at the intersections along CR 42.

Other regional malls of similar size in the Twin Cities include: Southdale Mall, Ridgedale Mall, Rosedale Mall, and Eden Prairie Center. To provide a comparison of the traffic levels at those facilities, the AADT volumes for the surrounding roadways at Burnsville Center and those other malls are listed below.

Burnsville Center (Burnsville, MN)

- County Road 42: 49,500 vpd
- Burnhaven Drive: 10,100 vpd
- Buck Hill Road: 9,800 vpd
- Southcross Drive: 6,400 vpd

Southdale Mall (Edina, MN)

- France Avenue: 23,700 vpd
- York Avenue: 21,700 vpd
- 66th Street: 15,100 vpd
- 69th Street: 10,100 vpd

Ridgedale Mall (Minnetonka, MN)

- Direct ramp access from I-394: not available
- Plymouth Road: 21,500 vpd
- Ridgedale Drive: 11,400 vpd

Rosedale Mall (Roseville, MN)

- Fairview Avenue: 24,500 vpd
- County Road B2: 14,200 vpd
- Snelling Avenue: 38,000 vpd

Eden Prairie Center (Eden Prairie, MN)

- Flying Cloud Drive: 17,900 vpd
- Prairie Center Drive: 20,800 vpd

All of these malls have considerably more balanced traffic volumes on the surrounding roadways. One thing all the malls, including Burnsville Center, have in common is close proximity to at least two interchanges. However, all the regional malls have access to the interchanges from separate surrounding roadways except Burnsville Center. For example, at the Rosedale Mall, Fairview Avenue has an interchange with Highway 36 and County Road B2 has an interchange with Snelling Avenue. Burnsville Center has both interchanges located on CR 42 which results in the majority of traffic accessing the site from CR 42 rather than alternative surrounding roadways.

EXISTING TRAFFIC VOLUMES

To analyze the traffic operations at the study intersections, weekday peak period turning movement counts were collected in June 2019. Turning movements were collected for the AM and PM peak hours at all 36 intersections. **Exhibit 2** in **Appendix A** shows the study area and locations where traffic data was collected. For the Saturday peak hour, recent turning movement counts for the intersections along CR 42 were provided by Dakota County, while counts at the rest of the intersections were collected for the Saturday peak. **Exhibits 3A-3C** and **4A-4C** in **Appendix A** provides a summary of the weekday AM / PM and Saturday peak hour turning traffic volumes, respectively. The turning movement counts were collected on a typical weekday/weekend. In addition to the turning movement counts, 24 hour bi-direction counts were collected at the 10 locations shown in the exhibit. These counts were used to determine the peak periods throughout the study area. The turning movement count data is provided in **Appendix C**.

The network AM peak hour was determined to be 7:00 AM to 8:00 AM, the network PM peak hour was determined to be 4:30 PM to 5:30 PM, and the Saturday peak hour was determined to be 1:00 PM to 2:00 PM. The turning movement counts included crosswalk pedestrian counts at all the study intersections. The crosswalk volumes were included in the capacity analysis at the study intersections.

EXISTING CAPACITY ANALYSIS

A capacity analysis was performed to quantify the delay and level of service (LOS) at the study intersections during the weekday AM and PM peak hours and the Saturday peak hour. The capacity analysis was performed using Synchro/SimTraffic. Existing signal timings provided by Dakota County were used to complete the existing conditions analysis.

The capacity of an intersection quantifies its ability to accommodate traffic volumes and is measured in average delay per vehicle. It is expressed in terms of LOS which ranges from A to F, with LOS A as the highest (best traffic flow and least delay), LOS E as saturated or at-capacity conditions, and LOS F as the lowest (oversaturated conditions). The LOS grades shown below, which are provided in the Transportation Research Board's Highway Capacity Manual (HCM), quantify and categorize the driver's discomfort, frustration, fuel consumption, and travel times experienced as a result of intersection control and the resulting traffic queuing. A detailed description of each LOS rating can be found in **Table 1**. The range of control delay for each rating (as detailed in the HCM) is also shown in **Table 1**. Because signalized intersections are expected to carry a larger volume of vehicles and stopping is required during red time, higher delays are tolerated for the corresponding LOS ratings. For unsignalized intersections, the intersection LOS is reported as the worst side street movement.

Table 1 – Level of Service Information

Level of Service	Average Control Delay (seconds/vehicle)	Description
A	0-10 (Unsignalized); 0-10 (Signalized)	Minimal control delay; traffic operates at primarily free-flow conditions; unimpeded movement within traffic stream.
B	>10-15 (Unsignalized); >10-20 (Signalized)	Minor control delay at signalized intersections; traffic operates at a fairly unimpeded level with slightly restricted movement within traffic stream.
C	>15-25 (Unsignalized); >20-35 (Signalized)	Moderate control delay; movement within traffic stream more restricted than at LOS B; formation of queues contributes to lower average travel speeds.
D	>25-35 (Unsignalized); >35-55 (Signalized)	Considerable control delay that may be substantially increased by small increases in flow; average travel speeds continue to decrease.
E	>35-50 (Unsignalized); >55-80 (Signalized)	High control delay; average travel speed no more than 33 percent of free flow speed.
F	>50 (Unsignalized); >80 (Signalized)	Extremely high control delay; extensive queuing and high volumes create exceedingly restricted traffic flow.

The traffic volumes shown in **Exhibits 3A-3C** and **4A-4C** in **Appendix A** were used in the Existing Year (2019) analysis.

In the AM peak hour, all study intersections operated at LOS C or better. There are some side street movements along CR 42 with undesirable LOS, but this is expected along an arterial like CR 42. **Exhibit 5** show the movements that operate at LOS E or worse in the AM peak hour. It should be noted that only intersection movements with undesirable LOS are shown in the exhibit, all other movements are provided in the SimTraffic reports in **Appendix F**. The total network delay for the existing AM peak hour is 70.1 seconds per vehicle. There are no excessive queues during the AM peak hour.

In the PM peak hour, all study intersections operated at LOS D or better. Similar to the AM peak hour, side street and minor movements along the CR 42 corridor account for the majority of the undesirable LOS. Side-street left turns at the unsignalized intersections along CR 38 (McAndrews Road) also experience excessive delays in the PM peak hour. **Exhibit 6** shows the movements with LOS E or worse in the PM peak hour. The total network delay for the existing PM peak hour is 111.6 seconds per vehicle. Below is a list of queues that extend past their storage capacity.

- Westbound through movement at Nicollet Avenue & CR 42
- Southbound right turn at I-35E Southbound Ramps & CR 42 (the result of the westbound through queues at Nicollet Avenue & CR 42)
- Eastbound left turn at I-35E Northbound Ramps & CR 42
- Southbound left turn at CR 5 & CR 38 (McAndrews Road)

In the Saturday peak hour, all study intersections operated at LOS D or better. The intersection delay only considers vehicles once they've passed through adjacent intersections and does not add delays that extend through multiple intersections. Therefore, the intersection delay appears better than actual conditions. Side

street and minor movement operations along the CR 42 corridor are poor and queues along CR 42 are excessive. **Exhibit 7** shows the movements with LOS E or worse in the Saturday peak hour. The total network delay for the existing Saturday peak hour is 128.1 seconds per vehicle. Below is a list of queues that extend past their storage capacity.

- Southbound movements at Burnhaven Drive & CR 42
- Eastbound through movement at Aldrich Avenue & CR 42 (extend beyond the existing ¾ access)
- Westbound through movement at Aldrich Avenue & CR 42 (extend beyond the I-35W Southbound Ramp Exit/Buck Hill Road)
- Southbound left turn at Aldrich Avenue & CR 42
- Eastbound through movement at I-35W Southbound Ramp/Buck Hill Road & CR 42 (continuation of the eastbound queuing)
- Eastbound left turn at I-35W Northbound Ramp & CR 42
- Westbound through movement at Nicollet Avenue & CR 42
- Southbound right turn at I-35E Southbound Ramps & CR 42 (the result of the westbound through queues on CR 42 resulting in queues that extend back to I-35E mainline gore)
- Westbound through movement at I-35E Southbound Ramps & CR 42
- Westbound through movement at I-35E Northbound Ramps & CR 42

Based on the queuing analysis, the westbound queues on CR 42 are approximately 0.6 miles long from Nicollet Avenue & CR 42, and the eastbound queues are approximately 0.5 miles long from the I-35W northbound Ramp & CR 42. These queues extend beyond multiple intersections and result in poor operations at the surrounding intersections.

The results of the existing conditions operations were consistent with what was observed in the field review of the network. The SimTraffic reports are provided in **Appendix F**.

EXISTING CRASH ANALYSIS

A review of the crash data at all the intersections in the study area between 2011 and 2015 showed that there are 7 intersections that have a crash rate (CR) or fatal & serious injury rate (FAR) index greater than 1.0. The crash rate index is determined by using MnDOT's most current statewide averages provided in the 2015 "Green Sheets." Intersection crash rates were calculated and compared against statewide average values to develop a critical index value. This value is used to evaluated how an intersection's crash history compares to the statewide average for similar intersections. A critical index value over 1.0 means the intersection is outside of the normal range for comparable intersections. The main factors in calculating the crash rate is: the severity of the crash, the volume on the roadway, type of traffic control, and the speed limit.

Below is a list of intersections that have a CR index over 1.0 along with current CR index:

- County Road 42 & Aldrich Avenue – 1.13
- County Road 42 & Nicollet Avenue – 1.06
- County Road 38 & Irving Avenue – 1.00
- Burnhaven Drive & 140th Street – 1.38
- Aldrich Avenue & 140th Street – 1.25
- Nicollet Avenue & Nicollet Boulevard – 1.07

The intersection of Southcross Drive and Portland Avenue had a FAR index of 1.04, although the CR index was at 0.42.

Exhibit 8 summarizes the number of crashes, crash rate, critical rate, CR index, and FAR index for the 7 intersections that have a critical index over 1.0. The “Green Sheets” for all the study area intersections are shown in **Appendix D**.

BACKGROUND GROWTH

The south neighborhood of the Center Village Redevelopment was assumed to be completed by 2040. The Dakota County Travel Demand Model was used to determine the growth rates throughout the network. Growth rates for major roadways were used to more accurately project background traffic growth as compared to applying an overall growth rate to the network. Kimley-Horn worked with Dakota County and SRF Consulting Group, who is updating the County's travel demand model, to estimate the travel demand model growth for the Burnsville Mall (TAZ 575) with the development. Trip distribution patterns for these site trips were estimated using a select link analysis and then the anticipated growth in TAZ 575 trips were removed from the network. It was determined that the ITE Trip Generation estimates were more accurate based on a comparison of the actual existing trips that were generated by TAZ 575 and the volumes from the Travel Demand model associated with TAZ 575. The existing daily trip generation for TAZ 575 is approximately 18,400 vpd while the Travel Demand Modal showed a trip generation rate of 10,800 vehicles. The 2040 Travel Demand Model showed TAZ 575 generation 20,000 trips per day. Therefore, 9,200 trips were removed from the background traffic. These trips were removed to avoid double counting the growth from TAZ 575 in the background growth since were also adding in the Center Village Redevelopment traffic calculated using trip generation rates. Removing the Travel Demand Model trips for TAZ 575 allowed for consistency prior to adding in the ITE Trip Generation projections.

Table 2 provides a summary of the 2016 and 2040 AADTs and calculated growth from the travel demand model without the traffic from TAZ 575. The growth along each segment of the roadway was then used to calculate a linear compound growth rate for each corridor. These growth rates were applied to the existing traffic counts to determine the background growth for the interim build-out year (2030) and the horizon build-out year (2040).

Table 2 – Annual Growth Rate Calculation

COMPREHENSIVE PLAN GROWTH		DAKOTA COUNTY			PROPOSED GROWTH RATE
ROADWAY	ROADWAY SEGMENT	AADT		ANNUAL GROWTH %	
		2016	2040		
CR 42	West of CR 5	39,000	45,700	0.66%	**0.50%**
	CR 5 to Burnhaven Drive	35,500	39,800	0.48%	
	Burnhaven Drive to I-35W	49,500	53,400	0.32%	
	I-35W to I-35E	51,000	56,700	0.44%	
	East of I-35E	26,000	32,100	0.88%	
	AVERAGE	*40,200*	*45,540*	*0.52%*	
CR 5	North of McAndrews Road	14,400	17,800	*0.89%*	**1.00%**
	McAndrews Road to CR 42	17,200	21,100	*0.86%*	
	CR 42 to Southcross Drive	15,100	18,500	*0.85%*	
	South of Southcross Drive	13,700	17,450	*1.01%*	
	AVERAGE	*15,100*	*18,713*	*0.90%*	
CR 38 (McAndrews Road)	CR 5 to Aldrich Avenue	16,000	17,300	*0.33%*	**0.50%**
	East of Portland Avenue	19,400	21,000	*0.33%*	
	AVERAGE	*17,700*	*19,150*	*0.33%*	

Southcross Drive	West of CR 5 CR 5 to Burnhaven Drive Burnhaven Drive to Buck Hill Road Buck Hill Road to Portland Avenue East of Portland Avenue *AVERAGE*	6,700 *6,700*	9,600 *9,600*	*1.51%* *1.51%*	**1.50%**
Burnhaven Drive	McAndrews Road to CR 42 CR 42 to Southcross Drive South of Southcross Drive *AVERAGE*	9,100 9,500 *9,300*	9,200 11,900 *10,550*	*0.05%* *0.94%* *0.53%*	**0.50%**
Buck Hill Road	CR 42 to Southcross Drive	10,300	12,600	*0.84%*	**0.75%**
Aldrich Avenue	Between McAndrews Road and CR 42	11,300	10,300	*-0.39%*	**0.25%**
Nicollet Avenue	CR 42 to Nicollet Boulevard Nicollet Boulevard to McAndrews Road North of McAndrews Road *AVERAGE*	22,800 8,100 15,500 *15,467*	24,300 8,600 17,000 *16,633*	*0.27%* *0.25%* *0.39%* *0.30%*	**0.25%**
Portland Avenue	McAndrews Road to CR 42 CR 42 to Southcross Drive South of Southcross Drive *AVERAGE*	7,500 *7,500*	8,500 *8,500*	*0.52%* *0.52%*	**0.50%**

In addition to the generic background growth in the area, developments in the study area that are planned or in the process of being built were added to the background growth that include:

- Silverstone Development (+/- 150 senior housing units and 20,000 SF medical office)
- Park Nicollet Expansion (85,000 SF medical office space)
- Prince of Peace (+/- 200 multi-family dwelling units)
- Twin Lakes Development (+/- 460 multi-family dwelling units)

Exhibits 9A-12C show the traffic volumes for the Intermediate Year No-Build (2030) and the Horizon Year No-Build (2040).

NO-BUILD CAPACITY ANALYSIS

INTERMEDIATE YEAR NO-BUILD (2030) CONDITIONS

A capacity analysis was performed to quantify the delay and level of service at the study intersections during the weekday AM and PM peak hours and the Saturday peak hour. The capacity analysis was performed using Synchro/SimTraffic. No geometric changes were assumed for the no-build scenario. Signal timings were optimized, although CR 42 was still the prioritized corridor.

In the AM peak hour, all study intersections operated at LOS C or better. There are more side street movements along CR 42 with undesirable LOS than under existing conditions, but operations are still acceptable and the worse LOS for the side street movements are expected along an arterial like CR 42. **Exhibit 13** shows the movements that operate at LOS E or worse in the AM peak hour. It should be noted that only intersection movements with an undesirable LOS are shown in the exhibit, all other movements are provided in the SimTraffic reports. The total network delay for the 2030 No-Build AM peak hour is 82.8 seconds per vehicle. The eastbound left turn at I-35E Northbound Ramps & CR 42 queues extend beyond the storage capacity.

In the PM peak hour, all study intersections operated at LOS D or better. Similar to the AM peak hour, side street and minor movements along the CR 42 corridor account for the majority of the undesirable LOS. The intersection delay only considers vehicles once they've passed through adjacent intersections and does not add delays that extend through multiple intersections. Therefore, the intersections delay appears better than they actually are. Side-street left turns at the unsignalized intersections along CR 38 (McAndrews Road) also experience long delays in the PM peak hour. **Exhibit 14** shows the movements with LOS E or worse in the PM peak hour. The total network delay for the 2030 No-Build PM peak hour is 212.7 seconds per vehicle. Below is a list of queues that extend past their storage capacity.

- Eastbound through queues on CR 42 extend from Nicollet Avenue & CR 42 to the west edge of the study area, a distance of 1.4 miles.
- Westbound through queues on CR 42 extend from Nicollet Avenue & CR 42 to the I-35E Northbound Ramps, a distance of 0.25 miles.
- Side street queues at all intersections along CR 42 between Burnhaven Drive and the Southbound I-35E Ramps are impacted by the through queues on CR 42.
- The queues for both the I-35W Southbound Exit Ramp and the I-35E Southbound Exit Ramp are expected to extend back to the gore area of the interstate.

In the Saturday peak hour, all study intersections operated at LOS D or better. The intersection delay only considers vehicles once they've passed through adjacent intersections and does not add delays that extend through multiple intersections. Therefore, the intersections delay appears better than actual conditions. Side street and minor movement operations along the CR 42 corridor are poor and queues along CR 42 are excessive. **Exhibit 15** shows the movements with LOS E or worse during the Saturday peak hour. The total network delay for the 2030 No-Build Saturday peak hour is 239.3 seconds per vehicle. Below is a list of queues that extend past their storage capacity.

- Eastbound through queues on CR 42 extend from Nicollet Avenue & CR 42 to the west edge of the study area, a distance of 1.5 miles.

- Westbound through queues on CR 42 extend from Nicollet Avenue & CR 42 past Plymouth Avenue, a distance of 0.5 miles.
- The queues for both the I-35W Southbound Exit Ramp and the I-35E Southbound Exit Ramp are expected to extend back to the gore with the mainline of the interstate.
- Side street queues at all intersections along CR 42 between Burnhaven Drive and the Northbound I-35E Ramps are greatly impacted by the through queues on CR 42.

Based on the queuing analysis, in both the PM peak hour and the Saturday peak hour, westbound queues on CR 42 are approximately 1.5 miles long extending from Nicollet Avenue & CR 42. The eastbound queues are approximately 0.25 miles long in the PM peak and 0.5 miles long in the Saturday peak extending from I-35W Northbound Ramp & CR 42. These queues extend beyond multiple intersections and result in negative operations at the surrounding intersections.

The traffic volumes shown in **Exhibits 9A-9C** and **10A-10C** in **Appendix A** were used for the Intermediate Year No-Build (2030) analysis. The SimTraffic reports are provided in **Appendix F**.

HORIZON YEAR NO-BUILD (2040) CONDITIONS

A capacity analysis was performed to quantify the delay and level of service at the study intersections during the weekday AM and PM peak hours and the Saturday peak hour. The capacity analysis was performed using Synchro/SimTraffic. No geometric changes were assumed for the no-build scenario. Signal timings were optimized, although CR 42 was still the prioritized corridor.

In the AM peak hour, all study intersections operated at LOS D or better. There are side street movements along CR 42 with undesirable LOS, but this is expected along an arterial like CR 42. **Exhibit 16** shows the movements that operate at LOS E or worse in the AM peak hour. It should be noted that only intersections with undesirable LOS are shown in the exhibit, all other movements are provided in the SimTraffic reports. The total network delay for the 2040 No-Build AM peak hour is 145.5 seconds per vehicle. Below is a list of queues that extend past their storage capacity.

- Eastbound through queues on CR 42 extend from Nicollet Avenue & CR 42 to Burnhaven Drive, a distance of 0.6 miles.
- Northbound right turn queues on Buck Hill Road at CR 42 extend 750 feet.

In the PM peak hour, all study intersections along CR 42 operate at LOS E or F, with the remaining intersections in the study area operating at LOS D or better. The majority of movements along the CR 42 corridor operate at an undesirable LOS. Side-street left turns at the unsignalized intersections along CR 38 (McAndrews Road) also experience long delays in the PM peak hour. **Exhibit 17** shows the movements with LOS E or worse during the PM peak hour. The total network delay for the 2040 No-Build PM peak hour is 235.4 seconds per vehicle. Below is a list of queues that extend past their storage capacity.

- Eastbound through queues on CR 42 extend from Nicollet Avenue & CR 42 beyond the west edge of the study area, a distance of 1.75 miles.
- Westbound through queues on CR 42 extend from Nicollet Avenue & CR 42 past Plymouth Avenue, a distance of 0.5 miles.

- Side street queues at all intersections along CR 42 between Burnhaven Drive and the Southbound I-35E Ramps are impacted by the through queues on CR 42.
- The queues for the I-35E Southbound Exit Ramp are expected to extend back to the gore with the mainline of the interstate.

In the Saturday peak hour, all study intersections along CR 42 operate at LOS E or F while the remaining intersections in the study area operate at LOS D or better. The majority of movements along the CR 42 corridor operate at an undesirable LOS and have excessive delays. Side-street left turns at the unsignalized intersections along CR 38 (McAndrews Road) also experience long delays in the PM peak hour. **Exhibit 18** shows the movements with LOS E or worse during the Saturday peak hour. The total network delay for the 2040 No-Build Saturday peak hour is 239.7 seconds per vehicle. Below is a list of queues that extend past their storage capacity.

- Eastbound through queues on CR 42 extend from Nicollet Avenue & CR 42 to the west edge of the study area, a distance of 1.6 miles.
- Westbound through queues on CR 42 extend from Nicollet Avenue & CR 42 past Portland Avenue, a distance of 1.0 miles.
- The queues for both the I-35W Southbound Exit Ramp and I-35E Southbound Exit Ramp are expected to extend back to the gore with the mainline of the interstate.
- Side street queues at all intersections along CR 42 between Burnhaven Drive and Portland Avenue are greatly impacted by the through queues on CR 42.

Based on the queuing analysis, the eastbound and westbound queues on CR 42 extend through the majority of the study area during the PM and Saturday peak hours. These queues extend beyond multiple intersections and result in unacceptable operations at the surrounding intersections.

The traffic volumes shown in **Exhibits 11A-11C** and **12A-12C** in **Appendix A** were used for the Horizon Year No-Build (2040) analysis. The SimTraffic reports are provided in **Appendix F**.

PROPOSED DEVELOPMENT

SITE TRIP GENERATION

The trip-generating potential of the proposed development was calculated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual, Tenth Edition*. The land use density of the site determined in the Center Village Redevelopment Vision planning process was utilized. Standard ITE trip rates were used to develop the total trips generated by the site for all land uses except for the shopping center land use. As part of the data collection, all of the site accesses to the Burnsville Mall were counted, and from these counts a trip generation rate for the existing mall was determined. The rate was based on the amount of leased space in the mall at the time of the count (June 2019). Burnsville Mall has approximately 1,100,000 square feet of leasable space, however, one of the anchor tenant spaces was vacant so the trip generation rate was based off of 876,000 square feet. The observed rate is significantly lower than the ITE Trip Generations rate, but it would more accurately represent the existing and anticipated trips on site. The proposed land uses for the site are listed below.

- 1,600 apartment units
- 200 hotel rooms
- 315,000 square feet of general office
- 315,000 square feet of medical office
- 75,000 square feet of institutional
- 1,100,000 square feet of retail

It should be noted that the retail space is not all additional retail as it will include reconfiguring the mall spaces in addition to providing more retail spread throughout the site. The total square footage of existing retail is comparable to the Center Village Redevelopment Plan. The average rate for ITE land uses were used to calculate the trip generation potential of the site during the AM and PM peak hours.

For the Saturday peak hour, the ITE trip generation rates were adjusted for each land use. The ITE trip generation manual reports the peak hour for each individual land use and using these numbers results in an overly conservative trip generation numbers because not all the land uses will have the same peak hour on a Saturday. The ITE Trip Generation Manual has hourly trip generation percentages for all the land uses in the Center Village Redevelopment. These hourly breakdowns for trips generated were used to determine the percentage of their respective Saturday peak hour trips during the projected Center Village peak hour between 1:00 PM to 2:00 PM on Saturday. The breakdowns are listed below.

- Apartments would generate 60% of their Saturday peak hour
- Hotel would generate 43% of their Saturday peak hour
- General office would generate 28% of their Saturday peak hour
- Medical office would generate 42% of their Saturday peak hour
- Institutional would generate 66% of their Saturday peak hour
- Shopping center would generated 100% of their Saturday peak hour

Table 3 provides a summary of the trips anticipated to be generated during the weekday AM and PM peak hours and the Saturday peak hour. **Table 3** also shows the comparison to the existing trip generation and the net increase in trips to the area. Internal capture rates were determined based on the ITE Trip Generation Manual.

Center Village is anticipated to be built-out by the Horizon 2040 analysis year. It was assumed that development would happen linearly, and that half of the development would be completed by the Intermediate 2030 horizon year.

Table 3 – Site Trip Generation

Land Use	Intensity	Trip Gen Source	DAILY		AM Peak		PM Peak		SAT Peak[1]	
			Rate	Trips	Rate	Trips	Rate	Trips	Rate	Trips
Retail	1,100,000 SF	Local Rate	21.00[2]	23,100	0.41[2]	450	2.12[2]	2,350	3.32[2]	3,650
Residential	1,600 Units	ITE Rate	5.44	8,700	0.36	575	0.44	700	0.27	430
Hotel	200 Rooms	ITE Rate	8.36	1,675	0.47	100	0.60	125	0.31	60
General Office	315,000 SF	ITE Rate	9.74	3,075	1.16	375	1.15	325	0.15	50
Medical Office	315,000 SF	ITE Rate	34.80	10,950	2.78	875	3.46	1,100	1.30	410
Institutional	75,000 SF	ITE Rate	22.59	1,700	3.34	250	1.71	125	1.12	85
Subtotal			--	49,200	--	2,600	--	4,750	--	4,690
Internal Capture Reduction				-10,225		-350		-950		-610
Projected Center Village Trip Generation			**--**	**38,975**	**--**	**2,250**	**--**	**3,800**	**--**	**4,080**
Existing Burnsville Mall Trip Generation				**18,400**		**350**		**1,850**		**2,900**
Net Increase in Traffic			--	*20,575*	--	*1,900*	--	*1,950*	--	*1,180*

Note 1: The ITE trip generation Saturday peak hour rates were adjusted to reflect the 1PM – 2PM peak hour.
Note 2: The ITE trip generation rate for a shopping mall is 37.75 for Daily, 0.94 for AM, 3.81 for PM, and 4.5 for Saturday

TRANSIT

There are currently four Minnesota Valley Transit Authority (MVTA) routes in the study area.

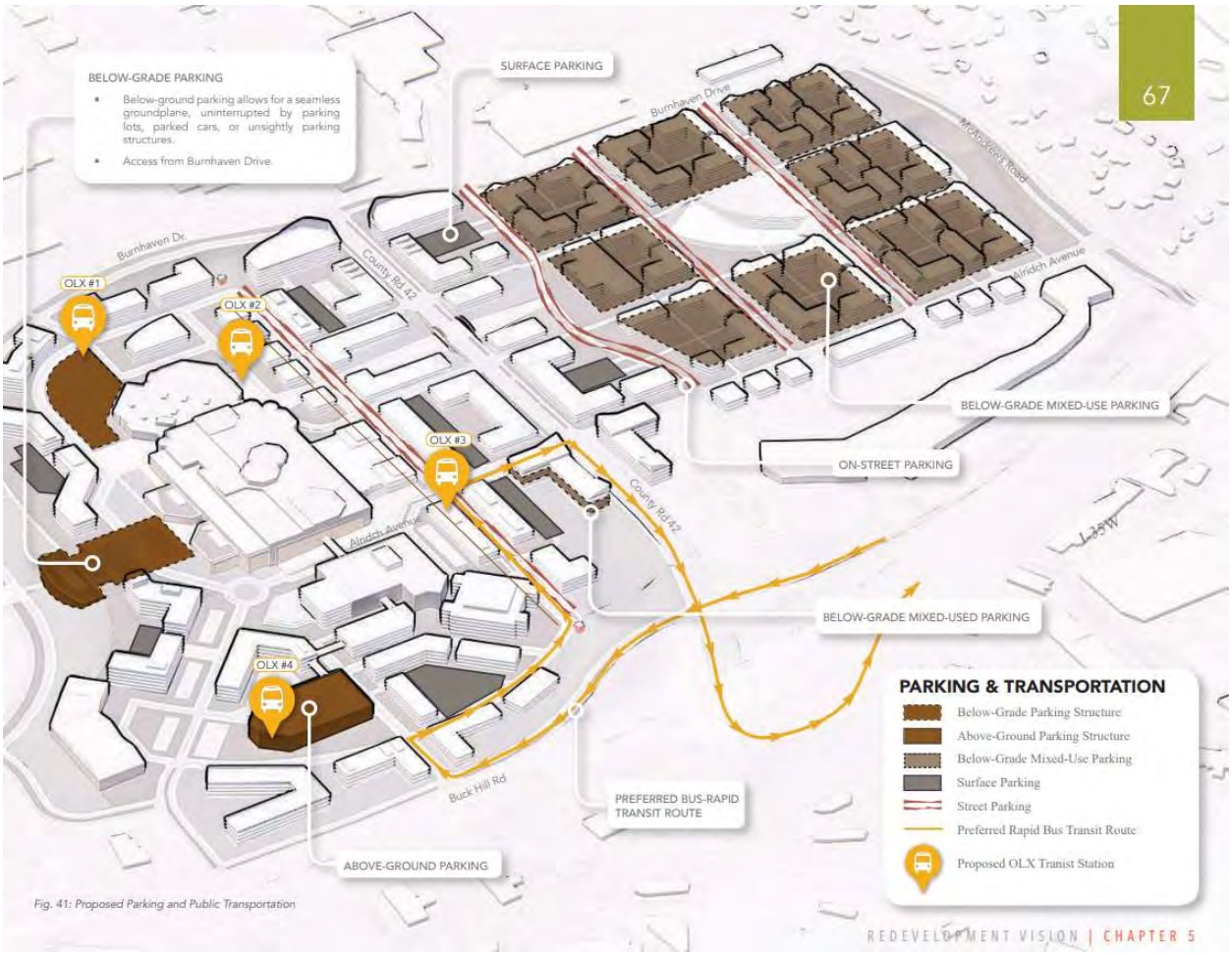
- Route 426: a shuttle route that has 3 stops in the study area and connects riders to the Burnsville Transit Station. In the morning and afternoon peak hours there is service every 30 minutes.
- Route 442: a local route that connects Burnsville Center and Apple Valley Transitway Station. There is service every 60 minutes throughout the day.
- Route 444: a local route that connects Burnsville Center, Burnsville Transit Station, and the Mall of America Transit Station. There is service every 30 minutes in the morning and afternoon peaks and service every 60 minutes throughout the day.

- Route 464: an express route that connects the south metro to downtown Minneapolis. Service is every 10 minutes to a half hour in the morning and afternoon peak hours.

After discussions with MVTA staff, it was determined that total daily ridership for these four routes is roughly 1,150 riders per day while the combined daily vehicle traffic in the area is 95,000 vehicles. This results in transit making up approximately 1.5% of mode share.

It is anticipated that the Orange Line Bus Rapid Transit (BRT) line will be extended to a new Burnsville Transit Station at Center Village. **Figure 1** below shows potential locations of the transit station based on the Center Village Redevelopment Vision. Metro Transit provided guidance when determining the projected ridership for the new BRT line. With that increase in ridership, the mode share for the site is anticipated to increase from 1.5% to 3%. Therefore, a 3% reduction to the trip generation was used to reflect the new transit ridership in the study area.

Figure 1 – METRO Orange Line Extension



SITE TRIP DISTRIBUTION AND ASSIGNMENT

The site trips were distributed to adjacent roadways based on a StreetLight data analysis and the current traffic patterns in the area. StreetLight Insight is a web-based tool that uses crowdsourced GPS navigation and location-based services data to provide transportation analytics. StreetLight was used for this project to investigate the characteristics of vehicles in the study area. As a part of this study, origin and destination studies for the Burnsville Mall were analyzed to determine the existing trip distribution. It was assumed that the future land uses would have a similar trip distribution. The StreetLight results can be found in **Appendix E**. Using the StreetLight results, the following global trip distribution was assumed for the development:

- 15% to/from the west on CR 42
- 7% to/from the north on CR 5
- 20% to/from the north on I-35W
- 8% to/from the north on CR 38 and Nicollet Avenue
- 20% to/from the north on I-35E
- 15% to/from the east on CR 42
- 12% to/from the south on I-35
- 3% to/from the south on CR 5

The trip distribution for the site-generated traffic is shown in **Exhibit 19** in **Appendix A.**

Based on the Center Village Vison concepts, it was assumed that access to the site would remain at the same locations as the existing Burnsville Center. Because the Center Village Vison is in the conceptual stage at this point, with no defined site plan, it was also assumed that the trip generation would be assigned to the site accesses similarly to existing conditions. As the development plan becomes more defined, additional traffic analysis will need to be complete because changes to the internal roadway network and the location and size of individual redeveloped parcels will impact these trip distributions. The site trips were assigned to the study intersections and added to the no-build scenarios to create the build volumes. The build volumes for the Intermediate Year (2030) Build Conditions and the Horizon Year (2040) Build Conditions are shown in **Exhibits 20A – 23C** in **Appendix A.**

POTENTIAL IMPROVEMENTS

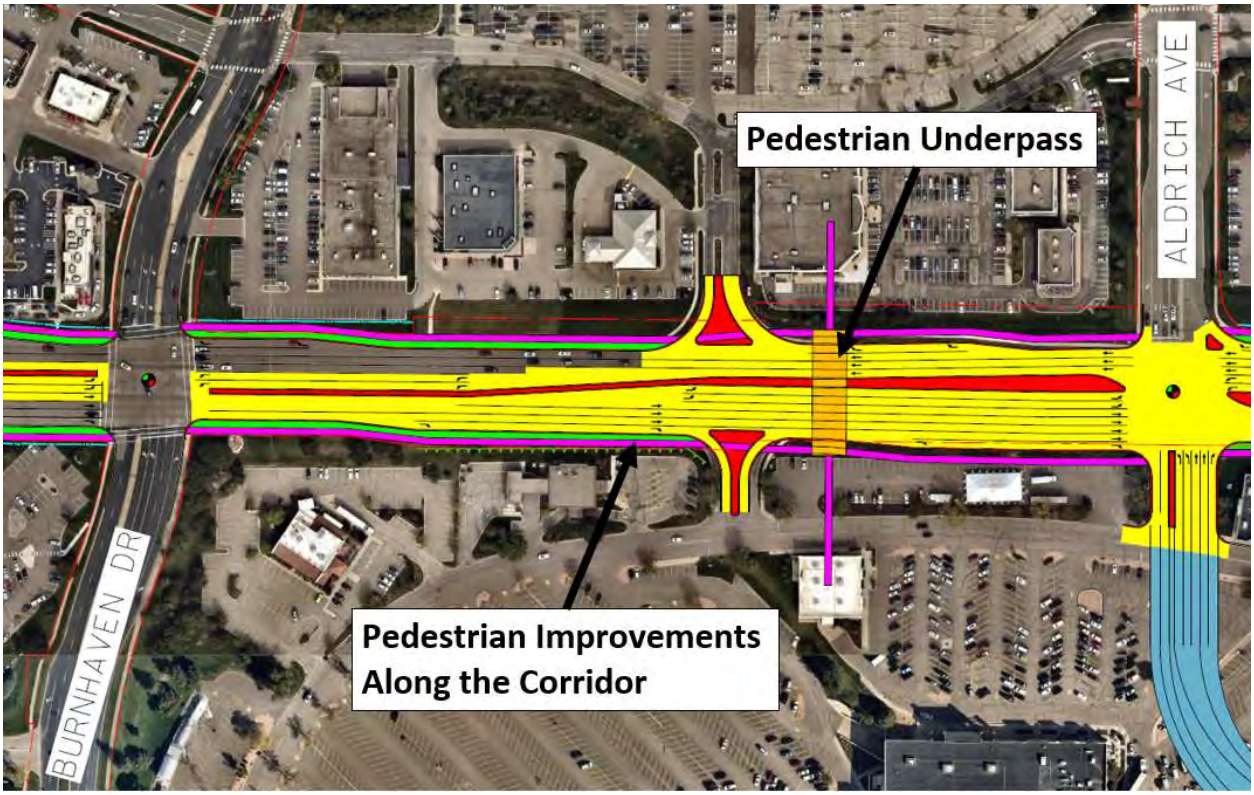
Based on the results of the no-build analysis, improvements have to be made to roadway network without the redevelopment. An increase in site trips from 18,400 vpd to 38,975 vpd under build conditions will also have a considerable impact on traffic operations. The majority of the operational issues occur along the County Road 42 corridor so that is the corridor where most mitigation is required. Typically, improvements are made based on the typical weekday analysis, although, consideration was given to the Saturday peak due to the heavy Saturday peaking characteristics under existing and build conditions. Although the goal is not to mitigate for every operational concern that exists for one peak hour on one day of the week, it was important to make sure the corridor included the required mitigation so there was not congestion at levels that would significantly impact I-35W or I-35E.

Pedestrian Improvements:

There are several mitigations measures that were assumed to be completed in the study area that were discussed in the Center Village Redevelopment Vision. The Vision determined the need for pedestrian improvements along CR 42. Pedestrian improvements running parallel with CR 42 don't have a large impact on the traffic operations along the corridor, however, improving pedestrian and bicycle facilities helps promote alternate modes of transportation, ultimately reducing vehicular trips that would create a more multimodal area. The implementation of a pedestrian underpass west of CR 42 & Aldrich Avenue will provide added connectivity between the proposed transit station on the Center Village site and the businesses on the north side of CR 42. Given the volume of traffic and the width of CR 42, it is not ideal for pedestrians to cross the roadway. The underpass would help increase the number of pedestrians in the area because of its ease of use, by creating a more enjoyable experience, and providing an additional and improved connection between transit, residential, and commercial land uses. **A pedestrian underpass is recommended and will be included in the future concepts developed. (Figure 2)**

Along both sides of CR 42 in the study area there are generally 6-foot-wide sidewalks with 10-foot boulevards between the roadway and sidewalks. While these sidewalks may be adequate for pedestrians, it limits the use of the facilities for both pedestrians and cyclist. **Widening existing sidewalks to 10-foot trails is recommended on both sides of CR 42 because they will improve the functionality and user experience.** These trail improvements are included in the future concepts developed.

Figure 2 – Pedestrian Improvements



Mitigation Methodology:

The no-build capacity analysis showed that the majority of the operational issues in the study area were located along CR 42 or were related to queuing and delays for minor approaches to CR 42 that negatively impacted adjacent intersections. The initial focus of the mitigation was to determine solutions that addressed the operations on CR 42 and then review the remaining areas that would require further mitigation. Determining the required mitigation at the study intersections along the CR 42 corridor was an iterative process. The following steps were taken to determine the recommended mitigation measures along CR 42:

1. Update and coordinate signal timings along the corridors.
2. Determine the intersections that have a significant impact on the surrounding intersections along CR 42.
3. Consider additional turn lanes for movements with poor levels of service.
4. Limit access at intersections.
5. Provide additional through lanes on CR 42.
6. Consider new interstate connections.
7. Other intersection improvements in the study area.
8. Provide dynamic message sign to encourage alternative routes.

Update Signal Timing:

Signal timings and offsets along the CR 42 corridor were updated when future build scenarios were analyzed. Updating the timings had a minimal impact on operations because they are optimized under existing conditions. **Signal optimization as traffic volumes change is recommended.** It was assumed in the analysis that signal timing will continue to prioritize through movements on CR 42.

Critical Intersection:

The intersection of Nicollet Avenue & CR 42 had the worst operations in the study area. This is due to the high through volume along CR 42 and the amount of turning traffic on and off Nicollet Avenue north of CR 42. With the existing geometry, Nicollet Avenue has to operate as split phase, which takes green time away from the movements on CR 42, causing queues along CR 42 up to 1 mile long in both the eastbound and westbound directions. This intersection was the top priority for mitigation, as it impacted operations at all the adjacent interchange intersections.

One way to resolve some of that congestion was remove the CR 42 crosswalk on the east side of the intersection. The reasoning behind removing that pedestrian crossing is that the minimum crossing time given to pedestrians approaches 40 seconds because the CR 42 crossing is approximately 130 feet long. The northbound leg does not need 40 seconds of green time to clear vehicular traffic so being able to reduce the minimum time for that approach allows more green time for the through movements on CR 42. Removing the east pedestrian crossing improved the queues along CR 42 significantly, however, the major movements are still over capacity and further mitigation is required. Maintaining at least one pedestrian crossing at the intersection is required because the adjacent interchange intersections do not provide crosswalks across CR 42. The nearest pedestrian crossing to the west is at Aldrich Avenue and the nearest pedestrian crossing to the east is at Plymouth Avenue. **Removing this pedestrian crossing is recommended as a solution to achieve better operations while still maintaining split phase timings which allows for the current lane configurations on Nicollet Avenue to remain inplace.**

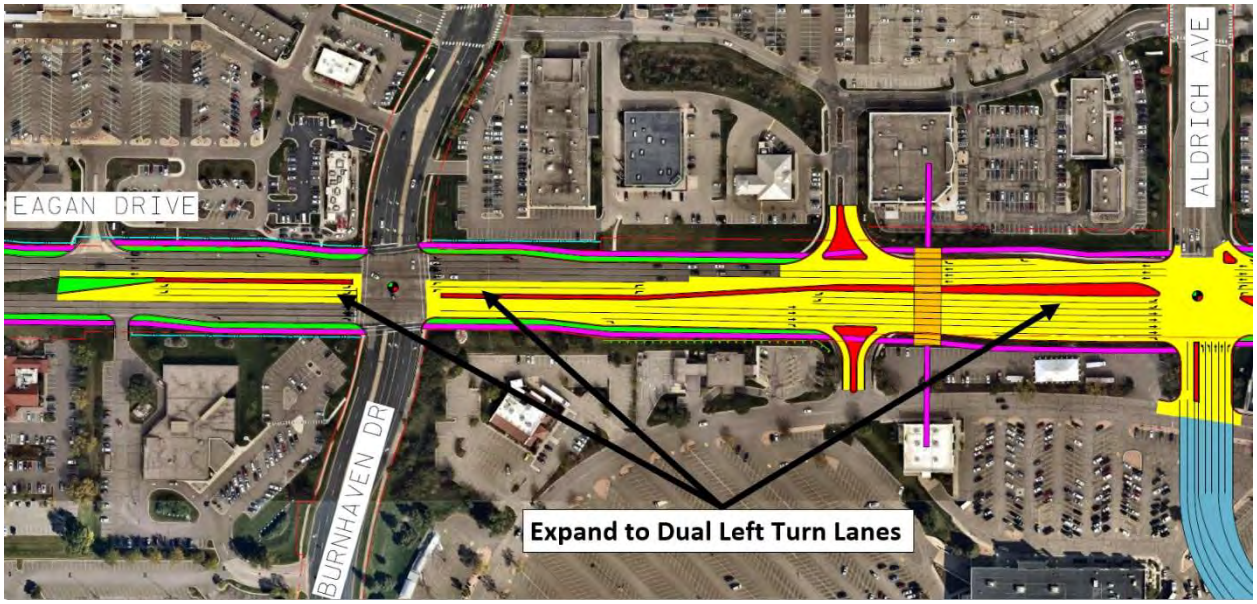
Additional Turn Lanes:

With limited green time for left turn movements at intersections along the CR 42 corridor, it is beneficial to have an additional left turn lane at locations having capacity challenges to allow more vehicles through the intersection in the same amount of time. There are multiple locations in the study area where expanding the left turn lane capacity is beneficial and would have minimal impact on the roadway geometry due to a wide existing median that could be modified. **Below is a list of recommended turn lane expansions:**

- CR 5 & CR 38 (McAndrews Road) – expand the southbound left turn lane to dual lefts (**Figure 3**)
- CR 42 & Burnhaven Drive – expand both the eastbound and westbound left turn lanes to dual lefts (**Figure 4**)
- CR 42 & Aldrich Avenue – expand the eastbound left turn lane to dual lefts and the northbound leg of Aldrich Avenue will be reconstructed to provide dual northbound left turn lanes that are 300 feet long, two through lanes, and a northbound right turn lane that is 300 feet long. (**Figure 4**)

Figure 3 – CR 5 & CR 38 Left Turn Lane Expansion Location

Figure 4 – CR 42 Left Turn Lane Expansion Locations



Limited Access:

Limiting access along the CR 42 corridor could provide operational benefits along the corridor. At CR 42 & Nicollet Avenue, reducing the northbound leg to a right-out approach was analyzed. This improved operations greatly because it allowed for the removal of one phase from the signal operations, ultimately allowing for more green time for the other movements. One obstacle with limiting access at this location is

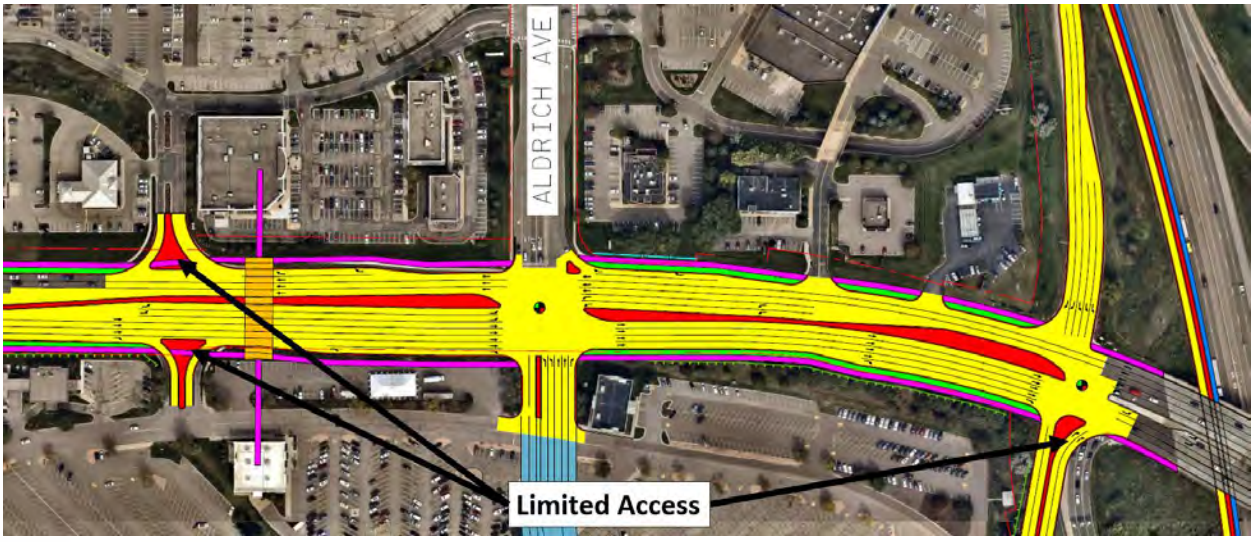
that this signal is the only access from the businesses on the south side of CR 42. This would also create a more circuitous route for vehicles heading westbound as they would have to head east and make a U-turn at the CR 42 & I-35E Northbound Ramp intersection. This option is not ideal and was not considered further as a part of this study.

The pedestrian underpass previously discussed (located west of CR 42 & Aldrich Avenue) is proposed to be a bridge structure to provide a more welcoming experience for pedestrians and bicyclist. The possibility of having the underpass open to vehicle traffic was also reviewed to determine if it could reduce some mitigation measures by allowing for less traffic at the CR 42 & Aldrich Avenue and CR 42 & Burnhaven Drive intersections. After comparing the northbound and southbound through volumes at Aldrich Avenue and Burnhaven Drive, it was determined that allowing traffic through the underpass would not provide a significant operational benefit to these intersections because there weren't that many northbound and southbound through trips that would want to use the underpass. Therefore, allowing vehicles to use this underpass is not recommended at this time.

Restricting access at the proposed reconfigured CR 42 & I-35W Southbound Exit Ramp/Buck Hill Road intersection (see Interchange Modifications and Connection on the next page) was also analyzed. With the addition of a bypass lane under CR 42 that connects to Buck Hill Road, there no longer needs to be a through lane at the intersection with CR 42. In addition, the northbound left turns were removed. Removing the northbound left turns from the intersections allows for the northbound signal phase to be removed. The northbound right turns would only get a green light as an overlap phase that run concurrently with the westbound left turn phase. The removal of this phase allows for more green time for the through movements along CR 42. **This is a recommended mitigation measure.** (**Figure 5**)

The existing ¾ Access on CR 42 between Burnhaven Drive and Aldrich Avenue could be restricted to right-in/right-out. During peak periods the high through volumes on CR 42 results in inadequate gaps for the left turning vehicles off of CR 42. Removing the ¾ Access left turn lanes has another benefit of providing additional space in the median for the dual left turn lane expansions at Aldrich Avenue and Burnhaven Drive. **This is a recommended mitigation measure.** (**Figure 5**)

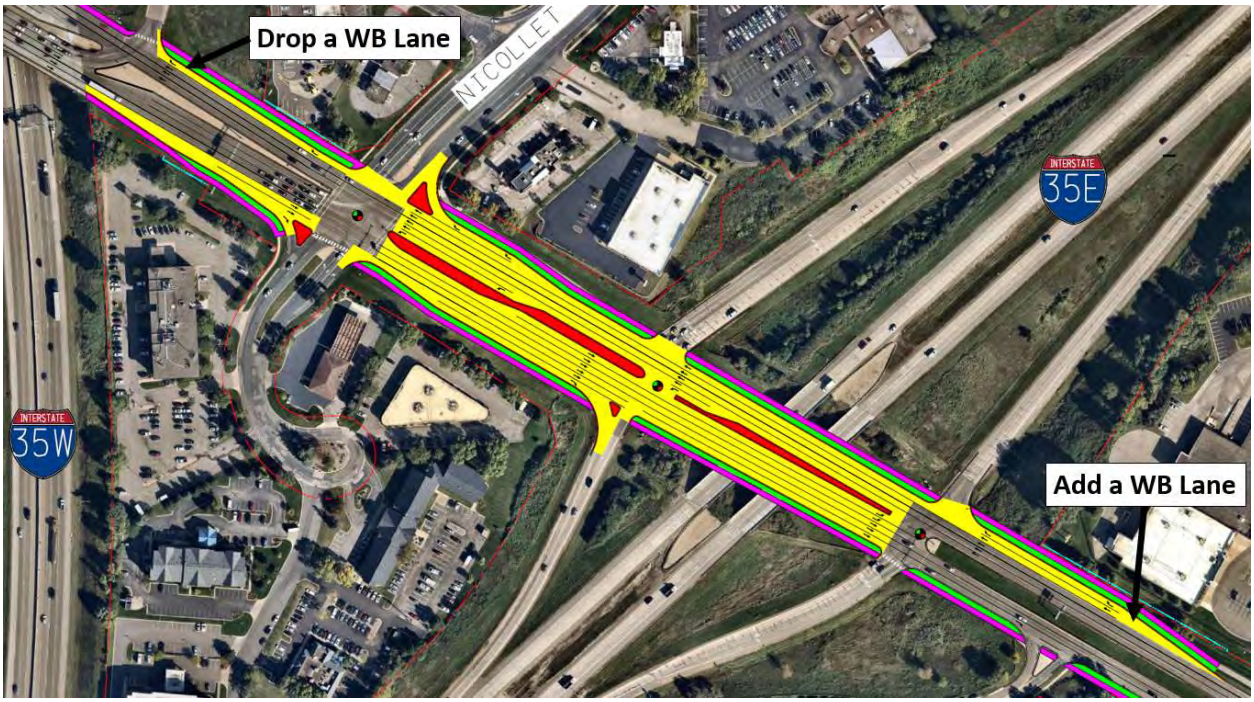
Figure 5 – CR 42 Limited Access Locations



Additional Through Lanes on CR 42:

Additional through lanes were considered on CR 42 for segments where intersection operations were still unacceptable after including the recommended mitigation options discussed above. Expanding CR 42 from three lanes in each direction to four lanes was analyzed between Burnhaven Drive and Plymouth Avenue. For both the PM and Saturday peak hour, the eastbound and westbound through lanes experience poor operations. The westbound through movements experience excessive queues between the I-35E Northbound Ramp to the I-35W Northbound Ramp. **A fourth westbound through lane on CR 42 was added east of the I-35E Northbound Ramp intersection. The additional lane then drops at the westbound right turn lane onto northbound I-35W. (Figure 6)**

Figure 6 – CR 42 Westbound Through Lane Expansion



The eastbound though movements on CR 42 between Aldrich Avenue and the I-35E Northbound Ramp experience excessive queues. **A fourth eastbound through lane on CR 42 was added from the northbound right at the former ¾ access west of Aldrich Avenue. The far-left lane drops into the eastbound left turn lane onto northbound I-35W. (Figure 7) A fourth eastbound through lane is then added after the bridge across I-35W and the far-left lane drops into the left turn lane to northbound I-35E. (Figure 8)**

Figure 7 – CR 42 Eastbound Through Lane Expansion west of I-35W

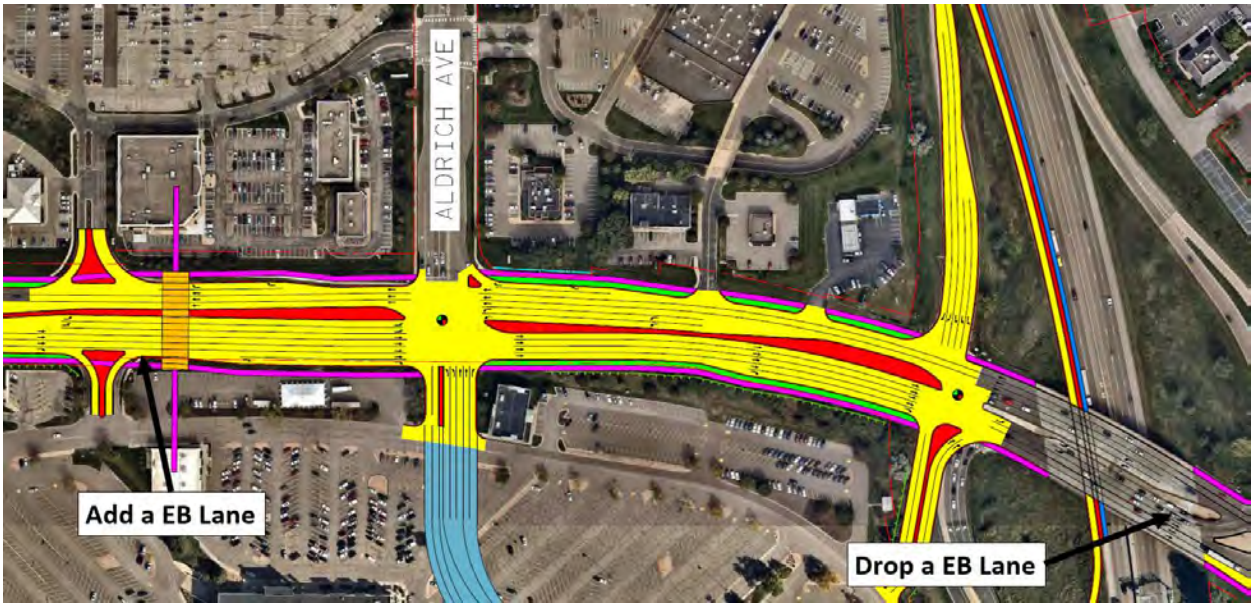
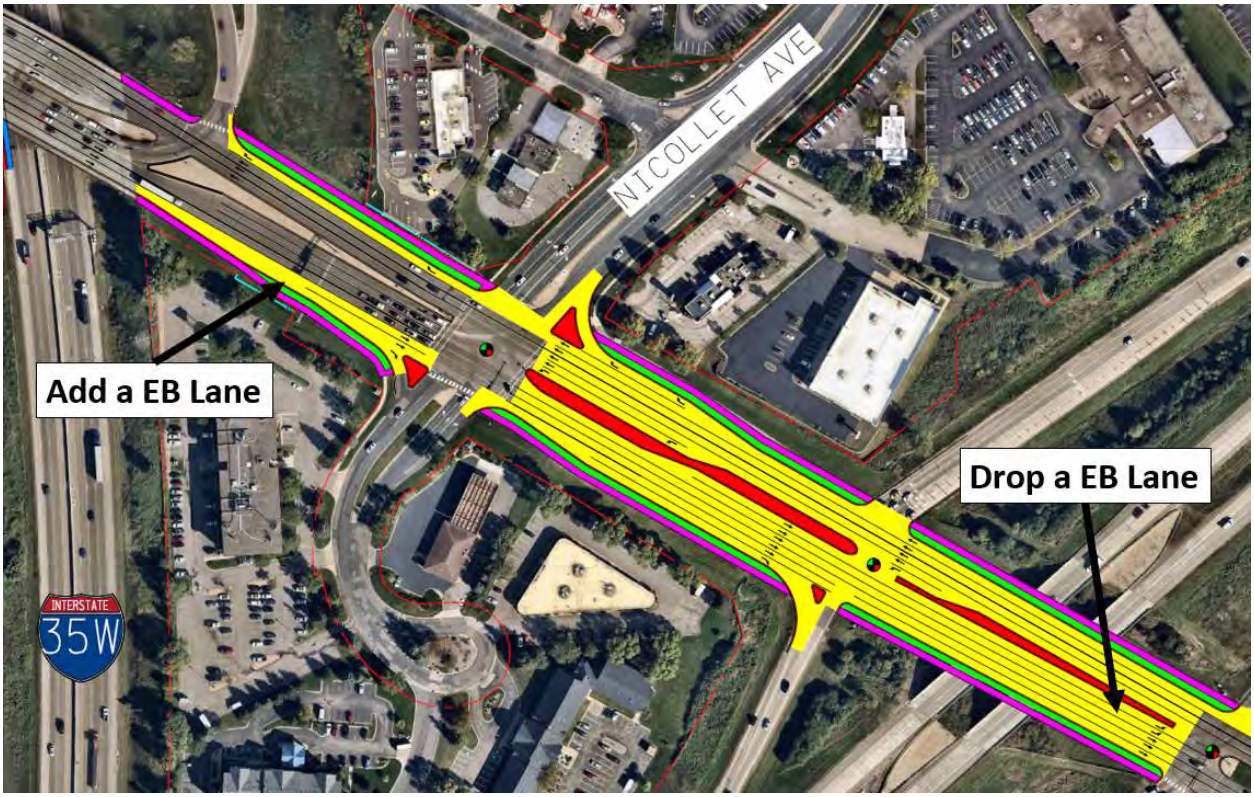


Figure 8 – CR 42 Eastbound Through Lane Expansion east of I-35W



Another factor that was considered was lane utilization. For the eastbound direction on CR 42, there are three high volume left turns in the span of 1/3 of a mile, they are the eastbound left onto I-35W, the

eastbound left onto Nicollet Avenue, and the eastbound left onto I-35E. Simply adding lanes does not solve the issues of vehicles wanting to be in the far-left lane. To address this issue, drop lanes were added for the eastbound left at I-35W and the eastbound left at I-35E as discussed above. Adding and dropping the lanes as stated, should help to more evenly disperse traffic across all the eastbound lanes.

Interchange Modifications and Connections:

With both the I-35E and I-35W interchanges in close proximity to each other there is a high concentration of vehicles trying to get to the same area. Additional interstate connections were investigated to reduce the amount of traffic on CR 42 at these interchanges. With the existing topography and the close proximity of the intersections along the corridor, there are few options that could feasibly be implemented without drastic changes to the study area. Options were investigated with the goal of improving the major movements that vehicles are trying to make through the network and ultimately minimizing the impact to the surrounding intersections and businesses. The options explored are discussed below and shown in **Figure 9**.

- An additional exit ramp from the I-35E Southbound Ramp to CR 42 that provides a direct connection to Fairview Drive. This option would remove approximately 3,000 vpd. However, the trips removed from CR 42 currently make a right turn onto CR 42 and then a right turn onto Nicollet Avenue, so it is anticipated that this option would have minimal impact on operations. This potential improvement is not recommended.

- An additional exit ramp from the I-35E Southbound Ramp that would run parallel to I-35E, cross over I-35W, and connect to Burnhaven Drive at Executive Boulevard. This option would remove approximately 3,150 vpd from the most congested stretch of CR 42 between the I-35E interchange and Burnhaven Drive. This option would provide convenient access to the Center Village development from I-35E without those vehicles having to utilize CR 42. However, this option would require almost half a mile of bridge to make the connection which would be a large investment for the low estimated number of vehicles using the connection. This potential improvement is not recommended.

- A new roadway extension from Nicollet Avenue & CR 42 to the south, bridging over I-35W, and connecting at Burnhaven Drive & Executive Boulevard. This connection would serve about 3,000 vpd. With this additional connection restricted access at the Nicollet Avenue & CR 42 intersection would be more feasible and would improve the operations at the intersection. However, this would not remove much traffic from CR 42, so this potential improvement is not recommended.

- A new partial diamond interchange at CR 38 (McAndrews Road) & I-35W. This would provide a southbound exit ramp and a Northbound Entrance Ramp onto I-35W. This connection would serve approximately 6,000 vpd based on the number of retail trips in the area. This connection could have more volume if commuters use it to bypass future congestion on CR 42. This option would provide the greatest improvement to operations along the CR 42 corridor since it would decrease the volume of southbound turning movements at most of the intersection along CR 42 in the study area. This option would have extensive impacts to the residential neighborhoods north of CR 38 (McAndrews Road). Due to the potential impacts to the residents adjacent to this proposed interchange, this option is not recommended for consideration at this time.

Figure 9 – Potential Interchange Modifications

Modifications to the existing interchanges were also evaluated. At CR 42 & I-35W, reconfiguring the Southbound I-35W Exit Ramp to include an auxiliary lane that runs parallel to I-35W, under the CR 42 bridge, and connects to Buck Hill Road was analyzed as discussed in the Limited Access section. This connection provides multiple benefits including that it allows for the Center Village development traffic to access the site without having to cross or turn onto CR 42, it would provide quicker access for the proposed Orange Line BRT, and it provides better connectivity to commercial and residential properties located south of the Center Village Redevelopment. This is because the next southbound exit off of I-35 is at the CR 46 interchange, located over 2 miles south of the CR 42 interchange. With this new connection, Buck Hill Road will be converted into a one-way southbound road between CR 42 and the North Mall Access. Vehicles traveling northbound on Buck Hill Road will either utilize Burnhaven Drive or the new Aldrich Avenue extension through the Center Village site to access CR 42. **This option is recommended.** (**Figure 10**) Interchange modifications will require the involvement of the Federal Highway Administration (FHWA) and MnDOT to determine the ultimate layout. Another potential option for the interchange connection could be a loop ramp for the southbound to eastbound movements at the I-35W Southbound Ramp & CR 42 interchange. **Figure 11** shows a potential configuration of a loop ramp at this location.

Figure 10 – Potential I-35W Southbound & CR 42 Interchange Modifications

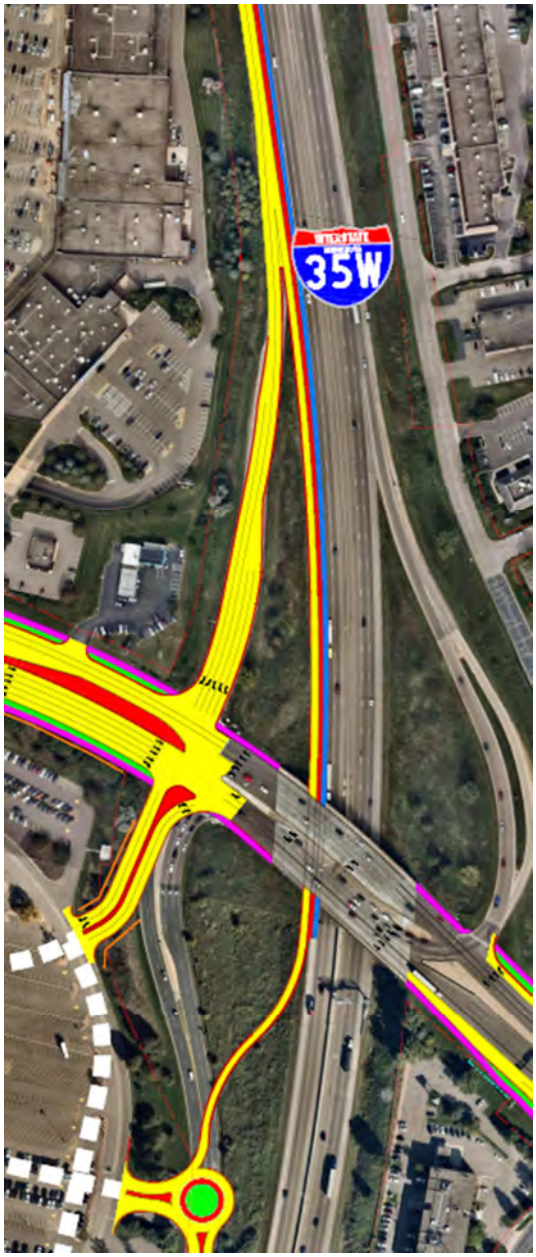


Figure 11 – Potential I-35W Southbound & CR 42 Interchange Loop Ramp

Another potential interchange modification reviewed was to convert the Northbound Entrance Ramp onto I-35E from a diamond configuration to a partial loop on ramp from CR 42 eastbound to I-35E northbound. This modification would move the high volume of left turns from eastbound CR 42 onto northbound I-35E into right turns. This modification would create better lane utilization for the eastbound direction of CR 42, however, it was determined that it would not decrease the number of eastbound through lanes on CR 42 and would have substantial right of way impacts on Grand Avenue and the newly constructed Burnsville Senior Living Facility. Therefore, this option is not recommended. **Figure 12** shows a potential configuration of a loop ramp at this location.

Figure 12 – I-35E Northbound & CR 42 Interchange Loop Ramp

Other Intersection Improvements:

Based on the results of the PM peak hour 2030 No-Build analysis, the unsignalized intersections along CR 38 (McAndrews Road) will require mitigation by 2030. These intersections are:

- CR 38 (McAndrews Road) & Irving Avenue
- CR 38 (McAndrews Road) & 141st Street
- CR 38 (McAndrews Road) & Burnhaven Drive

It is recommended that a corridor study be completed along CR 38 as all of the undesirable LOS movements are side-street stop controlled left turns. Potential improvement may include limiting access at intersections or installing an alternative form of intersection control such as a signal or roundabout. These improvements will need to be considered with or without the Center Village Redevelopment.

Variable Message Signing:

An intelligent transportation system (ITS) that includes variable message signs (VMS) could be used to provide information to motorists identifying the fastest way to reach the Center Village Redevelopment or for vehicles traveling along CR 42 trying to by-pass congestion near the I-35E and I-35W interchanges and Center Village Redevelopment area. A similar system is currently being used near the Mall of America in Bloomington. **Figure 13** is a photo of what was installed in Bloomington and is an example of what the VMS could look like. The VMS would be used to encourage traffic to use Southcross Drive rather than CR 42 to bypass CR 42 between Southcross Drive and CR 5. During the weekday PM and Saturday peak hour, the VMS system could also be used to encourage traffic on CR 42 to use Southcross Drive to enter the south neighborhood of the Center Village Redevelopment area from the south. This would be most beneficial for the traffic accessing the site from the east, as it would then decrease the amount of left turning traffic from CR 42 into the development. Eastbound CR 42 traffic destined for the Redevelopment area is not likely to divert because there is not as much delay to access the site given that they are turning right from CR 42 into the site. Using StreetLight data, it was determined that roughly 10% of traffic on CR 42 during the AM and PM peak hours uses CR 42 to travel the entire length of the study area. For this analysis it was assumed that 5% of the westbound through traffic on CR 42 would reroute to Southcross Drive to bypass CR 42 or to access the Center Village Redevelopment from the south. The signalized intersections that should be considered for VMS installation are shown in **Exhibit 24.**

The current signals along Southcross Drive are operating on a pretimed system and are not coordinated. To operate this type of VMS system, upgrades to the signals are required that would include fiber interconnect, signal cabinet replacement, and the variable message signs. The signals would also need to be retimed and coordinated. **This improvement is recommended to mitigate traffic operations during the peak periods.**

Figure 13 – Dynamic Signage near the Mall of America

Image from Google Maps

MITIGATION RECOMMENDATION

There were two goals that were considered when mitigation recommendations were developed: 1) limit impacts to the existing I-35W and I-35E interchanges and 2) do not significantly limit existing access serving the Center Village Redevelopment site along CR 42. The recommended mitigations to the transportation infrastructure will improve operations to a similar level as existing conditions. Although similar to existing conditions, there will still be some movements that will have longer delays along the CR 42 corridor. The recommended concept level mitigations are listed below and shown in **Appendix B**. All of the concepts developed as part of this study are at a planning level and will require further refinement and approval from the FHWA, MnDOT, Dakota County, and the City of Burnsville.

- Improve pedestrian facilities on both sides of CR 42 to 10' trails with 10' boulevard and install a pedestrian underpass west of Aldrich Avenue & CR 42
- Improve the I-35W Southbound Ramp/Buck Hill Road & CR 42 intersection by providing an auxiliary lane that runs parallel to I-35W, under the CR 42 bridge, and connects to Buck Hill Road, limiting the northbound leg to right-out only, and reconfiguring the southbound leg to provide dual right turn lanes and triple left turn lanes
- At CR 5 & CR 38 (McAndrews Road) expand the southbound left turn lane to dual lefts
- At CR 42 & Burnhaven Drive expand both the eastbound and westbound left turn lanes to dual lefts
- At CR 42 & Aldrich Avenue expand the eastbound left turn lane to dual lefts.
- At CR 42 & Aldrich Avenue reconstruct the northbound leg to provide dual northbound left turn lanes that are 300 feet long, two through lanes, and a northbound right turn lane that is 300 feet long.
- Limit the existing ¾ access on CR 42 between Burnhaven Drive & Aldrich Avenue to right-in/right-out.
- Add a fourth eastbound through lane on CR 42 from the proposed right-in/right-out west of Aldrich Avenue to the I-35W Northbound Ramp where one eastbound through lane will drop at the eastbound left turn onto northbound I-35W
- Add a fourth eastbound through lane on CR 42 between the east edge of the bridge deck over I-35W to the I-35E Northbound Ramp Intersection where the through lane will drop at the eastbound left turn lane to I-35E Northbound.
- Add a fourth westbound through lane on CR 42 from east of the I-35E Northbound Ramp Intersection that drops at the westbound right turn lane onto the I-35W Northbound Ramp.
- Optimize signal timings and remove the pedestrian walk phase on the east side of the Nicollet Avenue & CR 42 intersection.
- Provide an ITS system that includes signal coordination and retiming, signal upgrades, fiber interconnect, and VMSs along the CR 42 corridor and the Southcross Drive corridor.

CAPACITY ANALYSIS WITH IMPROVEMENTS

INTERMEDIATE YEAR BUILD (2030) CONDITIONS

In the Intermediate Year Build (2030) mitigation scenario that included fewer improvements than proposed for the full build-out was also considered. However, it was determined that partial improvements would result in considerable throw away costs since the ultimate build scenario would require that many of the interim improvements be removed to reconstruct the improvements in their ultimate configuration. Therefore, a scenario with fewer mitigation options is not recommended and the analysis for this scenario assumed all improvements required for the Horizon Year 2040 Build were completed by 2030. There is the potential to build the ultimate proposed improvements in several phases at different times to better accommodate available funding and increases in traffic as the Center Village site redevelops. A recommended phasing approach is discussed later in the report.

A capacity analysis was performed to quantify the delay and level of service at the study intersections during the weekday AM and PM peak hours and the Saturday peak hour. The capacity analysis was performed using Synchro/SimTraffic. The traffic volumes shown in **Exhibit 20A-20C** and **21A-21C** in **Appendix A** were used for the Intermediate Year Build (2030) analysis. The SimTraffic reports are provided in **Appendix F**. Signal timings were optimized, although CR 42 was still the prioritized corridor.

In the AM peak hour, all study intersections operated at LOS C or better. There are some side street movements along CR 42 with undesirable LOS, but this is expected along an arterial like CR 42. **Exhibit 25** show the movements that operate at LOS E or worse in the AM peak hour. It should be noted that only intersection movements with undesirable LOS are shown in the exhibit, all other movements are provided in the SimTraffic reports. The total network delay for the Intermediate Year 2030 Build AM peak hour is 73.8 seconds per vehicle which is comparable to the Existing AM peak hour network delay of 70.1 seconds per vehicle. There are no excessive queues during the AM peak hour.

In the PM peak hour, all study intersections operated at LOS D or better. Similar to the AM peak hour, side street and minor movements along the CR 42 corridor account for the majority of the undesirable LOS. Side-street left turns at the unsignalized intersections along CR 38 (McAndrews Road) also experience long delays in the PM peak hour, but queues are within their storage capacities. **Exhibit 26** shows the movements with LOS E or worse in the PM peak hour. The total network delay for the Intermediate Year 2030 Build PM peak hour is 105.5 seconds per vehicle which is better than the Existing PM peak hour network delay of 111.6 seconds per vehicle. Below is a list of queues that extend past their storage capacity.

- Eastbound queues at I-35E Northbound Ramps & CR 42 extend back though the I-35E Southbound Ramps intersection, a distance of 0.2 miles.

In the Saturday peak hour, all study intersections operated at LOS D or better. There are few side street and minor movement operations along the CR 42 corridor that are undesirable. **Exhibit 27** shows the movements with LOS E or worse in the Saturday peak hour. The total network delay for the Intermediate Year 2030 Saturday peak hour is 115.2 seconds per vehicle which is better than the Existing Saturday peak hour network delay of 128.1 seconds per vehicle. Below is a list of queues that extend past their storage capacity.

- Southbound left turn at Aldrich Avenue & CR 42
- Eastbound left turn at Nicollet Avenue & CR 42

- Westbound through movement at Nicollet Avenue & CR 42
- Westbound left turn at I-35E Southbound Ramps & CR 42

Operations during the Intermediate Year Build (2030) are acceptable with the mitigation shown in **Appendix B**. It is expected that all analysis scenarios will operate the same or better than existing conditions.

HORIZON YEAR BUILD (2040) CONDITIONS

A capacity analysis was performed to quantify the delay and level of service at the study intersections during the weekday AM and PM peak hours and the Saturday peak hour. Since all improvements required for the Horizon Year 2040 Build were included in the Intermediate Year 2030 Build scenario, the same geometry was used to complete the Horizon Year 2040 Build analysis. The capacity analysis was performed using Synchro/SimTraffic. The traffic volumes shown in **Exhibit 22A-22C** and **23A-23C** in **Appendix A** were used for the Horizon Year Build (2040) analysis. The SimTraffic reports are provided in **Appendix F**. Signal timings were optimized, although CR 42 was still the prioritized corridor.

In the AM peak hour, all study intersections operated at LOS C or better. There are some side street movements along CR 42 with undesirable LOS, but this is expected along an arterial like CR 42. **Exhibit 28** show the movements that operate at LOS E or worse in the AM peak hour. It should be noted that only intersection movements with undesirable LOS are shown in the exhibit, all other movements are provided in the SimTraffic reports. The total network delay for the Horizon Year 2040 Build AM peak hour is 59.7 seconds per vehicle which is better than the Existing AM peak hour network delay of 70.1 seconds per vehicle. There are no excessive queues during the AM peak hour.

In the PM peak hour, all study intersections operated at LOS D or better. Similar to the AM peak hour, side street and minor movements along the CR 42 corridor account for the majority of the undesirable LOS. Side-street left turns at the unsignalized intersections along CR 38 (McAndrews Road) also experience long delays in the PM peak hour. **Exhibit 29** shows the movements with LOS E or worse in the PM peak hour. The total network delay for the Horizon Year 2040 Build PM peak hour is 113.1 seconds per vehicle which is comparable to the Existing PM peak hour network delay of 111.6 seconds per vehicle. Below is a list of queues that extend past their storage capacity.

- Eastbound queues at I-35E Northbound Ramps & CR 42 extend back though the I-35E Southbound Ramps intersection, a distance of 0.2 miles.
- Northbound left turn at Irving Avenue & CR 38 (McAndrews Road)
- Northbound left turn at 141st Street & CR 38 (McAndrews Road)

Traffic operations under the Horizon Year 2040 Build Saturday peak hour conditions experience some operations and queuing issues. Similar issues also occur under existing Saturday peak hour conditions. In the Saturday peak hour, all study intersections operated at LOS D or better except for Aldrich Avenue & CR 42 and I-35W Southbound Ramp/Buck Hill Road & CR 42 which operates at LOS E. There are several side street and minor intersection movements along CR 42 near the Center Village Redevelopment that will operate at an undesirable level of service. **Exhibit 30** shows the movements with LOS E or worse in the Saturday peak hour.

As stated earlier, mitigation recommendations are usually based on the typical weekday peak hour analyses, although it is important to consider the Saturday peaking characteristics for this development. The goal is not to mitigate for every operational concern that is anticipated for one peak hour on one day of the week, but to assess whether the recommended mitigation will not result in significant impacts to I-35W or I-35E Ramps. The total network delay for the Horizon Year 2040 Saturday peak hour is 129.6 seconds per vehicle which is comparable to the Existing Saturday peak hour network delay of 128.1 seconds per vehicle. Below is a list of queues that extend past their storage capacity.

- Southbound left turn at Burnhaven Avenue & CR 42
- Eastbound through movement on CR 42 from Nicollet Avenue & CR 42, a distance of 0.5 miles
- Southbound left turn at Aldrich Avenue & CR 42
- Westbound left turn at I-35E Southbound Ramps & CR 42
- Northbound left turn at 141st Street & CR 38 (McAndrews Road)

The analysis shows that operations during the Horizon Year Build (2040) have similar operations to existing conditions the mitigation proposed in **Appendix B** provides for reasonable operation.

CONCEPTUAL COST ESTIMATES & PHASING

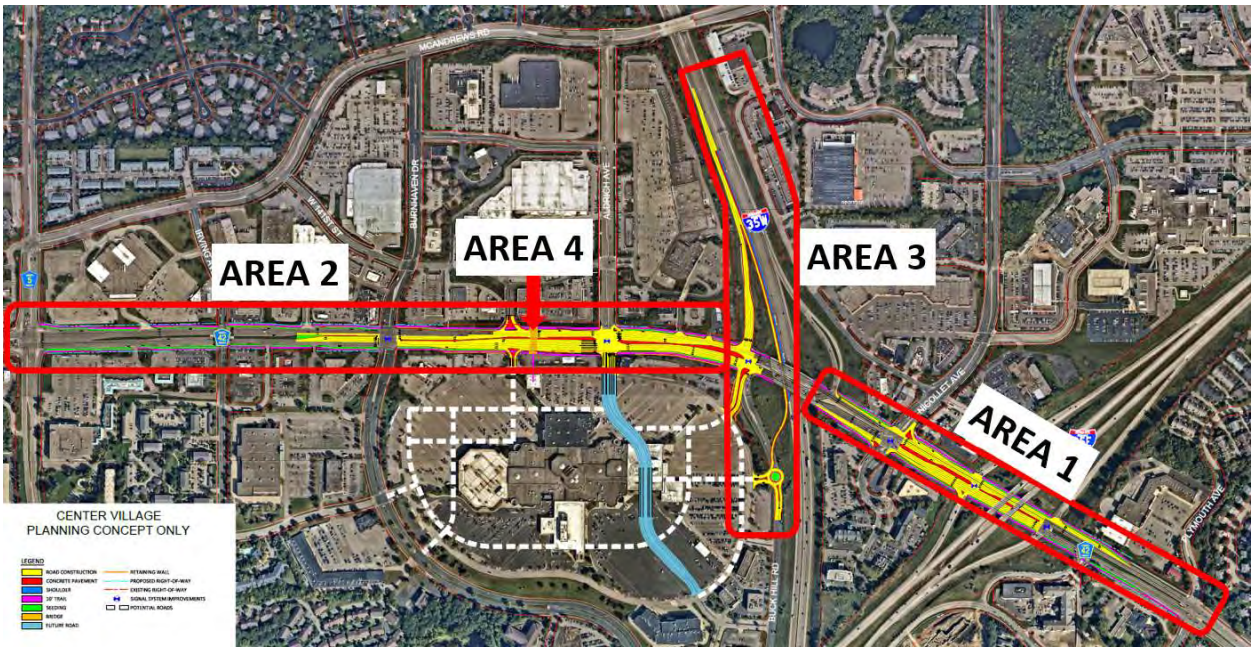
Preliminary cost estimates were prepared for the concept layout on and off the Center Village site. The cost estimates assumed complete reconstruction of CR 42 as shown in the concept layout. The infrastructure on site is also a critical part of the development, however, without a defined roadway layout on site, only a high-level estimate can be given for the Aldrich Avenue extension through the Center Village site.

The CR 42 improvements could be implemented in phases, so the cost estimates were split as follows:

- Area 1 – $8.4 million (Improvements East of the I-35W bridge)
- Area 2 – $14.8 million (Improvements west of the Southbound I-35W Exit Ramp intersection). The pedestrian underpass west of Aldrich Avenue is not included in this cost estimate (see Area 4 below).
- Area 3 – $5.0 million (I-35W Southbound Ramp modifications with a connection to Buck Hill Road, CR 42 intersection improvements, and the Buck Hill Road roundabout)
- Area 4 – $6.4 million (CR 42 pedestrian underpass west of Aldrich Avenue)
- ITS System - $2.0 million (signal coordination and retiming, signal upgrades, fiber interconnect, and VMSs along the CR 42 corridor and the Southcross Drive corridor).

The total estimated cost for all improvement areas is $36.6 million. The areas are shown in **Figure 14**.

Figure 14 – County Road 42 Concept Areas



Permanent right-of-way acquisition costs have been estimated based on the proposed right-of-way shown in the concept. The cost estimates assume that any right-of-way required from the Burnsville Center site would be dedicated at no cost as a part of the Center Village Redevelopment.

All cost estimates assume 2020 costs and include 20% contingency and 30% indirect costs for engineering, fiscal, administration and capitalized interest. The anticipated inflation per year is 3-5%. The conceptual cost estimates are provided in **Appendix G**.

The timing of the build-out for the four areas of the proposed improvements is largely dependent on how the Center Village Vision develops. However, based on the analysis in the 2030 No-Build and 2030 Build scenarios, Area 1 will have to be built first. This is because the poor operations at Nicollet Avenue & CR 42 will negatively impact the majority of the CR 42 corridor by 2030. After Area 1, it is likely that Area 3 would be built since the east side of the site is anticipated to be redeveloped first as part of the Center Village Vision Redevelopment. Areas 2 and 4 would be built at the same time and will be necessary by full build-out of the Center Village Redevelopment. As mentioned previously, the ITS system is recommended to mitigate traffic operations during the peak periods.

For the Aldrich Avenue extension south of CR 42 (light blue connection on **Figure 14**), an estimated cost per linear foot was determined based on a four-lane roadway section with a wide median and sidewalks on both sides of the roadway, and either a roundabout or signalized intersection on site. **Table 4** shows the projected range in price. The Aldrich Avenue extension estimates also assume 2020 costs and include 20% contingency and 30% indirect costs for engineering, fiscal, administration and capitalized interest. The Aldrich Avenue extension cost estimate does not include right of way acquisition costs.

Table 4 – Aldrich Avenue Extension Cost Estimate

Infrastructure	Units	Quantity	Unit Cost Range	Total Cost Range
Aldrich Avenue Extension	LIN FT	2000	$1,700 - $2,100	$3,400,000 - $4,200,000

CONCLUSIONS AND RECOMMENDATIONS

Following the completion of the successful Center Village Redevelopment Vision in 2018, the City of Burnsville is moving forward to understand the transportation improvements needed to support the redevelopment of the Burnsville Center area. This study includes analysis on the most congested corridor in the area, County Road (CR) 42. This study also explores innovative multimodal solutions needed to mitigate existing congestion on the roadway network as well as the anticipated traffic impacts of the redevelopment.

The redevelopment vision for Center Village is focused into two sections. The north neighborhood and the south neighborhood which encompass the existing Burnsville Mall area and the retail area to the north of Burnsville Mall. The focus of this study will be on the south neighborhood as it is planned to be completed by 2040, while the north neighborhood is anticipated to redevelop after 2040. The study area consists of 36 intersections that were analyzed during the AM, PM, and Saturday peak hours.

Burnsville Center has unique transportation challenges compared to other malls in the Minneapolis-St. Paul metropolitan area. Burnsville Center does not have direct access from either the I-35W interchange or the I-35E interchange and its main connecting roadway is CR 42, which is an arterial with close to 50,000 vpd. All of the other regional malls in the area have considerably more balanced traffic volumes on the surrounding roadways. One thing all the malls, including Burnsville Center, have in common is close proximity to at least two interchanges. However, all the regional malls have access to the interchanges from separate surrounding roadways except Burnsville Center. This creates a large imbalance in where traffic accesses the Burnsville Center Development.

In the Intermediate Year (2030) No Build scenarios, the PM and Saturday Peak Hours are projected to have poor operations along the CR 42 corridor and will require mitigation. By the Horizon Year (2040) No Build, all scenarios will require mitigation and the PM and Saturday Peak Hours will have excessive delays and queues throughout the study area. Significant mitigation will be required along the CR 42 corridor without the anticipated Center Village Redevelopment.

The existing Burnsville Mall generates 18,400 trips per day and the Center Village Redevelopment is anticipated to generate 38,975 trips per day. This is an increase of 20,575 daily trips. The Center Village Redevelopment will focus on providing multimodal options such as enhanced pedestrian facilities and a transit station for the Orange Line BRT extension. As part of the trip generation, a 3% reduction was included to account for the projected transit use in the Center Village site.

Based on the results of the Horizon Year (2040) Build analysis it was determined that significant mitigation along CR 42 would be required to accommodate the projected background growth and the complete redevelopment of the Center Village site. The concept layout showing the recommended mitigation measures is shown in **Appendix B**.

For the Intermediate Year (2030) Build analysis it was determined that less mitigation would be required than the Horizon Year (2040) Build analysis. However, because of the level of mitigation required for the Horizon Year (2040) Build analysis, it is recommended to complete the full mitigation to avoid multiple impacting CR 42 multiple times and to minimize throw away costs.

The mitigation could be split into three separate phases depending on when development happens on the Center Village site. Area 1 will need to be constructed first as a lot of the operational issues originated

between the I-35W and I-35E interchanges on CR 42. After Area 1, it is likely that Area 3 would be built since the east side of the site is anticipated to be redeveloped first as part of the Center Village Vision Redevelopment. Areas 2 and 4 would ideally be built at the same time and will be necessary by full build-out of the Center Village Redevelopment. The total concept level estimate of the improvements required along CR 42 is $36.6 million. The Aldrich Avenue extension through the Center Village Site is estimated to cost between $3.4 million and $4.2 million and it would likely be one of the first components of the redevelopment.

All of the concepts developed as part of this study are at a planning level and will require further refinement and approval from the FHWA, MnDOT, Dakota County, and the City of Burnsville.

APPENDIX

A. **Exhibits**

B. **Concept Layout**

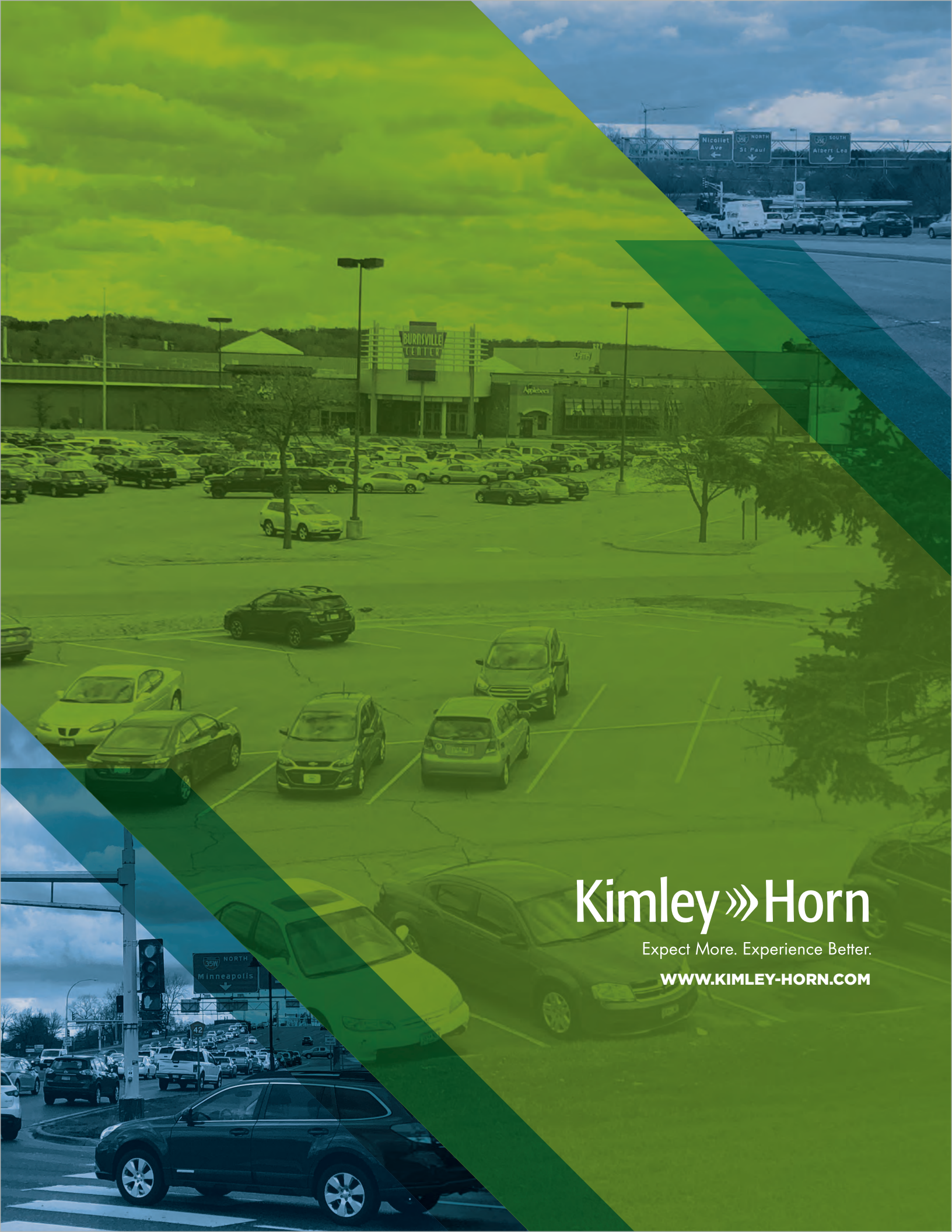
C. **Turning Movement Counts**

D. **Green Sheets – Crash Analysis**

E. **StreetLight Results**

F. **SimTraffic Analysis Results**

G. **Conceptual Cost Estimates**



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Appendix F

Responses to Agency Comments

1. Introduction

Pursuant to Minnesota Rules, part 4410.3610, subpart 5c, the Responsible Governmental Unit (RGU) shall revise the environmental analysis document based on comments received during the comment period. The RGU shall include in the document a section specifically responding to each timely, substantive comment received that indicates in what way the comment has been addressed.

The 30-day Alternative Urban Areawide Review (AUAR) comment period began May 18, 2021, and comments were accepted through June 17, 2021. Five comment letters were received from government agencies. Responses to those comments are included in the following sections, and copies of the comment letters are included in Appendix F.

2. Dakota County

Comment	Response
Land Use (Item 9)	
The report should include reference to the Lake Marion Regional Greenway which is located just to the west of the project area (through Rose Park). Providing enhanced pedestrian connections to/from the regional greenway will improve recreation and non-motorized transportation access to the area that is being studied in the AUAR.	Reference to the existing and planned portions of the Lake Marion Regional Greenway have been updated in the Final AUAR.
Water Resources (Item 11)	

Environmental Resources staff reviewed the historic plat maps, historic aerial photography, well construction, well sealing records and well disclosure statements that Dakota County possesses. There are at least 10 water supply wells that are not sealed and two sealed wells listed below: • PIN 022780003010 – 14020 Co Rd 5 One unsealed well MN Unique No. 206168, see attached record. • PIN 028385001010 – 1600 143rd St W One sealed environmental well: MN Unique No. 496480 Sealing Number H120570, see attached record. • PIN 021536901010 – 810 Co Rd 42W Habitation visible in 1970 air photo. There is likely an unsealed well that should be located and sealed. • PIN 027150001010 – 1000 Co Rd 42 Habitation visible in 1970 thru 1977 air photos. There is likely an unsealed well that should be located and sealed. • PIN 021537301020 900 Co Rd 42 Habitation visible in 1970 thru 1974 air photos. There is likely an unsealed well that should be located and sealed. • PIN 021570001010 400-410 Co Rd 42 Habitation visible in air photos at both the north and south end of the parcel. There are likely unsealed wells at both locations that should be located and sealed. • There is a Well and Boring sealing record for Jack's Restaurant at this location, see attached record sealing number H3292. This well seems to be associated with the restaurant, it's location is 8 to 10 feet from the building according to the sealing permit application. There would still be an unsealed well associated with the original farmstead just to the north of the restaurant that was visible in the 1937 air photo. • PIN 028351701010 400 Co Rd 42 Habitation visible (gas station) visible in 1970 air photo. There is likely an unsealed well that should be located and sealed. • PIN 021538001010 14250 Buck Hill Rd Habitation visible in 1937 air photo. There is likely an unsealed well that should be located and sealed.	Comment noted. Applicable updates have been made to the Final AUAR.

Comment	Response
• 021538001040 14301 Burnhaven Drive habitation visible in 1937 air photo. There is likely an unsealed well that should be located and sealed. • 027582502010 1401 143rd St W Habitation visible in 1964 air photo. There is likely an unsealed well that should be located and sealed.	
Solid Waste (Item 12)	
Environmental Resources staff conducted an Environmental Review of the subject area relating to the AUAR review request. Numerous known or suspected sites of environmental concern were identified on and adjacent to the AUAR area. A detailed review of the MPCA WIMN database is included in Section 12 of the AUAR. In comparing the MPCA database with Dakota County Site Inventory most of the sites overlap however, there are dump or disposal sites in the County inventory that are not identified in WIMN and these should be included and evaluated for the AUAR and eventual redevelopment. Refer to the attached Environmental Review Map and Report for additional information on County identified sites. Contact Environmental Resources at 952-891- 7000 or environ@co.dakota.mn.us for additional information or guidance on these issues.	Additional dump and disposal sites from the County's inventory were added to the Final AUAR.
As stated in the AUAR - According to Dakota County Ordinances 110 and 111, Dakota County will ensure compliance with applicable laws, rules, and ordinances related to the management of solid and hazardous waste as required by Minnesota Statutes, section 473.811. County staff recommend this statement be clarified or reworded. Ensuring compliance with County ordinances is the responsibility of the City, developers, property owners and contractors relating to redevelopment activities in the AUAR area. Dakota County regulates solid waste facilities and hazardous waste generators under MN Statute.	Comment noted. This sentence has been re-worded in the Final AUAR to clarify that the County regulates but is not responsible for complying with these ordinances.
Transportation (Item 18)	

Comment	Response
County Transportation staff offer the following comments regarding the AUAR. While the AUAR is assessing impacts from the potential highest use "worst-case" condition, development and mitigation measures also need to be planned in a manner that understands and recognizes planning efforts and the vision for the area. Dakota County has the following relevant projects, studies, and reviews underway or planned that identify changes to County Highways in this area which will likely impact plans for the Burnsville Village. These include: • CSAH 42 Corridor Study (1999) https://www.co.dakota.mn.us/Transportation/TransportationStudies/Past/Pages/csah-42.aspx - which outlines the recommended changes, primarily as intersections throughout County Highway 42. • CSAH 42 Signal Corridor Project – added fiber interconnect and an advanced traffic management system to improve the capabilities of the county's system to manage the signal system along this corridor. A project is also planned to incorporate the signals along McAndrews Road (County Highway 38) into the advanced traffic management system. This technology and updated signal timing look to assist with managing the mobility along CSAH 42 to extend the life of the existing system and defer more costly widening projects. However, as traffic increases within the corridor, the ability of signal timing or signal updates to significantly impact mobility decreases and additional delay for turning movements and road traffic will occur. • County Highway 42 Visioning Study - https://www.co.dakota.mn.us/Transportation/TransportationStudies/Current/Pages/county-highway-42-visioning-study.aspx - currently an update underway to the 1999 study above based on current transportation needs. • CSAH 38 – TH 5 to Burnhaven Drive – small corridor safety assessment to identify the best approach to address safety and mobility needs along McAndrews road based on current conditions and in consideration of future development. This assessment is anticipated to begin in 2021.	The CSAH 42 Signal Corridor Project and CSAH 38 – TH 5 to Burnhaven project have been added to Cumulative Potential Effects (Item 19). The AUAR includes a description of the County Highway 42 Visioning Study.

Comment	Response
Mitigation Plan	
Land Use - The area was developed beginning in the 1970s, however buildings and structures were present prior to the time of the current development indicating the potential presence of old wells, septic systems, foundations or other buried structures. These should be properly sealed, abandoned or removed and managed when encountered.	Added to Water Resources (Item 11) and mitigation plan in the Final AUAR that all wells will be sealed and abandoned following Minnesota Department of Health (MDH) and MPCA protocol.
Contamination/Hazardous Waste – The AUAR identifies numerous sites of environmental concern and states a Response Action Plan/Construction Contingency Plan will be developed. Environmental Investigations will be necessary at multiple sites and locations and for a variety of activities and timeframes throughout the redevelopment of the AUAR area. This section should clarify that investigations and associated RAP/CCPs should be completed and approved by the MPCA as deemed necessary by MPCA rules and guidance.	Clarified this statement in solid wastes, Hazardous Wastes section (Item 12) and mitigation plan.
Transportation - The AUAR notes several improvements including adding lanes and auxiliary lanes along County Highway 42. While this strategy may reduce delay for spot locations or movement, this approach of adding lanes along County Highway 42 will create additional decision points and weaving conflicts along with increasing the distance for pedestrian and bicycle travel to cross the corridor. A more comprehensive approach is needed to address both safety and overall mobility needs. This approach includes implementing several elements including: • Median modifications (some as noted in the AUAR but potentially additional actions) • Potential interchange updates at the I-35W and I-35E access to address the highest volume movements • Actions to improve North/South connectivity across County Highway 42, and an East/West collector system to address the long-term needs of the area to accommodate both highway traffic and the development vision as outlined	The City will continue to work with Dakota County to implement the mitigation strategies outlined in the Final AUAR and will work with Dakota County on implementing additional mitigation strategies as needed.

3. Minnesota Department of Natural Resources

Comment	Response
Water Resources (Item 11)	
Page 18, Groundwater - Wells that are identified on the site should either be sealed in accordance with the requirements of the Minnesota Department of Health, or they should be put to use. If the wells are used, then a DNR Water Appropriation Permit will be required if the volume of water that is pumped exceeds 10,000 gallons per day, or one million gallons per year.	Added to Water Resources (Item 11) and mitigation plan in the Final AUAR that all wells will be sealed and abandoned following Minnesota Department of Health (MDH) and MPCA protocol.
Page 21, Stormwater - The DNR recommends that water from the stormwater ponds for the development be used to irrigate landscaping in the AUAR area.	Comment noted. This approach will be evaluated as the AUAR study area redevelops.
Page 21, Stormwater - The high amount of impervious surfaces within the project area require the use of road salt for winter maintenance. Chloride released into local lakes and streams does not break down, and instead accumulates in the environment, potentially reaching levels that are toxic to aquatic wildlife and plants. Consider promoting local business and city staff participation in the Smart Salting Training offered through the Minnesota Pollution Control Agency. There are a variety of classes available for road applicators, sidewalk applicators, and property managers. More information and resources can be found at this website. Many winter maintenance staff who have attended the Smart Salting training — both from cities and counties and from private companies — have used their knowledge to reduce salt use and save money for their organizations. We also encourage cities to provide public outreach to reduce the overuse of chloride.	Comment noted.

Comment	Response
Page 22, Water Appropriation - Additional time may be needed to process applications for dewatering in this area due to the proximity of a calcareous fen to the AUAR site. The DNR recommends that the application be accompanied by a report by a professional geologist in which the possible impact to the nearby calcareous fen from the dewatering is examined. A DNR Groundwater Specialist will review the report as part of the approval process.	Comment noted.
Page 22, Water Appropriation - If it appears that the dewatering will impact the nearby calcareous fen, then the applicant will need to write a calcareous fen management plan for the dewatering.	Comment noted.

4. Metropolitan Council

Comment	Response
Land Use (Item 9)	
The Lebanon Hills – Lake Marion Regional Trail Search Corridor appears to traverse the north edge of the project area, generally following McAndrews Road / County Road 38. This regional trail search corridor is recognized in 2040 Regional Parks Policy Plan and the City of Burnsville's System Statement: https://metrocouncil.org/Communities/Planning/Local-Planning-Assistance/System-Statements/System-Statements/02393472_Burnsville_2015SS.aspx Dakota County is the Regional Park Implementing Agency for the Lebanon Hills – Lake Marion Regional Trail Search Corridor. The City of Burnsville should coordinate with Dakota County prior to any development activities that have the potential to impact the future Lebanon Hills –Lake Marion Regional Trail.	Reference to the existing and planned portions of the Lake Marion Regional Greenway has been updated in the Final AUAR.

Comment	Response
The AUAR discusses a maximum build-out (or "worst case" impacts) development scenario, Scenario 1. The scenario includes 1,600 housing units, 1,100,000 sq ft of commercial space, 705,000 sq ft of office/medical/institutional space, and a 200 rooms hotel (<200,000 sq ft). The AUAR study site includes all of Transportation Analysis Zones #573 and 574 (the northern half of the AUAR, business/office/retail land), all of TAZ 575 (southeast quarter of the AUAR, mostly mixed-use), and approximately half of TAZ 576 (southwest quarter of the AUAR, mostly mixed-use). TAZ allocations for 2040 have been prepared by City of Burnsville. The City's Plan expects the combined TAZs #573-576 will gain +1366 jobs, +226 households, and +474 population. These may be insufficient allocations considering the AUAR scenario. Should the Center Village Area be redeveloped as described in the AUAR, then Council staff would recommend increasing the TAZ allocations by +1400 households and +3500 population.	Comment noted. If this occurs, the City will coordinate with the Metropolitan Council to increase the TAZ allocations.
Water Resources (Item 11)	
Stormwater Management - The City's adopted 2040 Comprehensive Plan has a Natural Environment and Water Resources Management policy stating "Utilize more green infrastructure practices on public and private sites." In support of that policy, Council Staff recommends the development and inclusion of greenroof systems as integrated components of the AUAR area's stormwater management plan. Greenroof systems increase stormwater retention and detention capacity and performance, respectively. Greenroof systems also provide habitat to wildlife (over 30 species of birds and pollinating insects have made the 60,000+ square feet of greenroofs home at the "Dakotah! Sport and Fitness" facilities in Shakopee). Greenroofs also increase the energy efficiency of buildings and decrease the existing urban heat island effect generated by the AUAR area.	Comment noted. This has been added to the Final AUAR in the Fish, Wildlife, and Plant Communities section (Item 13) as one of the recommendations to meet the City's goals.
Fish, Wildlife, Plant Communities, and sensitive Ecological Resources.	

Comment	Response
"Native plantings and increased green space are encouraged by the City to promote pollinator habitat within the AUAR study area. A goal of the Burnsville Center Village Redevelopment Vision is to increase green space within the AUAR study area to reduce the amount of impervious surfaces and reduce the potential for an urban heat island effect." The recommendations for the development and inclusion of green roof systems as part of the development mentioned in response to Item 11.b (above) are suggested for use in this section as well to best meet the intention of the City's stated goals.	Comment noted. This was added as noted above in Item 13.
Air (Item 16)	
"Identify measures (e.g., traffic operational improvements, diesel idling minimization plan) that will be taken to minimize or mitigate vehicle-related emissions." There are over 1,000 parking stalls located at this site. Council Staff recommend city staff and the developer consider the integration of EV, or EV-ready, charging infrastructure at this proposed development to serve some portion of the parking spaces required to accommodate the proposed 1,600 residential apartment units, 200 hotel rooms, 1.1M square feet of commercial space, and 705,000 square feet of office, medical, and institutional square feet. Guidance can be found in the Great Plains Institute's "Becoming Electric Vehicle Ready" guideline document.	Comment noted. The City will encourage developers to consider EV or E-ready infrastructure as redevelopment occurs with the AUAR study area.

5. Minnesota State Historic Preservation Office

Comment	Response
Historic Resources (Item 14)	
Based on our review of the documentation, we conclude that there are no properties listed in the National or State Registers of Historic Places and no known or suspected archaeological properties in the area that will be affected by this project.	Comment noted.

Comment	Response
There are reported burial mounds in the vicinity of the proposed development area. Therefore, we recommend that you consult with the Minnesota Office of the State Archaeologist and the Minnesota Indian Affairs Council on the Draft AUAR.	Comment noted. The City will coordinate with Minnesota Office of the State Archaeologist and/or Minnesota Indian Affairs Council to understand the extents of the potential burial mounts in the vicinity.

6. Minnesota State Archaeologist

Comment	Response
Historic Resources (Item 14)	
Review of our files indicates that archaeological cemetery site lead 21DKaa, recorded as seven burial mounds, intersects the AUAR study area. Therefore, I recommend a qualified archaeologist conduct a comprehensive literature review to determine the potential for intact precontact and historical period archaeological or cemetery sites in the AUAR study area. The Minnesota Historical Society maintains a list of archaeologists at: http://www.mnhs.org/preservation/directory.	The City and/or developer will complete a Phase Ia literature review for site 21Dkaa to evaluate the potential for intact precontact and historical period archaeological or cemetery sties. This has been added to the mitigation plan as a mitigation measure.

Appendix G

Agency Comment Letters

June 15, 2021

Deb Garross
City of Burnsville
100 Civic Center Parkway
Burnsville, MN 55337

Thank you for the opportunity to review the Draft Alternative Urban Areawide Review (AUAR) identified in the Center Village Redevelopment Vision (January 2019). We understand the intent of the AUAR is to identify the worst-case potential impacts and the mitigation measures that may be taken to compensate for those impacts. County Physical Development Staff reviewed the document and offer the following comments for consideration.

Environmental Resources

Section 11. Water Resources a. ii., Page 18

Environmental Resources staff reviewed the historic plat maps, historic aerial photography, well construction, well sealing records and well disclosure statements that Dakota County possesses. There are at least 10 water supply wells that are not sealed and two sealed wells listed below:

- PIN 022780003010 – 14020 Co Rd 5 One unsealed well MN Unique No. 206168, see attached record.
- PIN 028385001010 – 1600 143rd St W One sealed environmental well: MN Unique No. 496480 Sealing Number H120570, see attached record.
- PIN 021536901010 – 810 Co Rd 42W Habitation visible in 1970 air photo. There is likely an unsealed well that should be located and sealed.
- PIN 027150001010 – 1000 Co Rd 42 Habitation visible in 1970 thru 1977 air photos. There is likely an unsealed well that should be located and sealed.
- PIN 021537301020 900 Co Rd 42 Habitation visible in 1970 thru 1974 air photos. There is likely an unsealed well that should be located and sealed.
- PIN 021570001010 400-410 Co Rd 42 Habitation visible in air photos at both the north and south end of the parcel. There are likely unsealed wells at both locations that should be located and sealed.
- There is a Well and Boring sealing record for Jack's Restaurant at this location, see attached record sealing number H3292. This well seems to be associated with the restaurant, it's location is 8 to 10 feet from the building according to the sealing permit application. There would still be an unsealed well associated with the original farmstead just to the north of the restaurant that was visible in the 1937 air photo.
- PIN 028351701010 400 Co Rd 42 Habitation visible (gas station) visible in 1970 air photo. There is likely an unsealed well that should be located and sealed.
- PIN 021538001010 14250 Buck Hill Rd Habitation visible in 1937 air photo. There is likely an unsealed well that should be located and sealed.
- 021538001040 14301 Burnhaven Drive Habitation visible in 1937 air photo. There is likely an unsealed well that should be located and sealed.

- 027582502010 1401 143rd St W Habitation visible in 1964 air photo. There is likely an unsealed well that should be located and sealed.

Section 12. a. Solid wastes, Hazardous Wastes and Storage Tanks, Pages 26-33

Environmental Resources staff conducted an Environmental Review of the subject area relating to the AUAR review request. Numerous known or suspected sites of environmental concern were identified on and adjacent to the AUAR area. A detailed review of the MPCA WIMN database is included in Section 12 of the AUAR. In comparing the MPCA database with Dakota County Site Inventory most of the sites overlap however, there are dump or disposal sites in the County inventory that are not identified in WIMN and these should be included and evaluated for the AUAR and eventual redevelopment. Refer to the attached Environmental Review Map and Report for additional information on County identified sites. Contact Environmental Resources at 952-891-7000 or environ@co.dakota.mn.us for additional information or guidance on these issues.

Section 12 b. Project Related Generation/Storage of Solid Wastes, Page 34

As stated in the AUAR - *According to Dakota County Ordinances 110 and 111, Dakota County will ensure compliance with applicable laws, rules, and ordinances related to the management of solid and hazardous waste as required by Minnesota Statutes, section 473.811.*

County staff recommend this statement be clarified or reworded. Ensuring compliance with County ordinances is the responsibility of the City, developers, property owners and contractors relating to redevelopment activities in the AUAR area. Dakota County regulates solid waste facilities and hazardous waste generators under MN Statute.

Mitigation Plan, Pages 49-52 Table 10

Land Use - The area was developed beginning in the 1970s, however buildings and structures were present prior to the time of the current development indicating the potential presence of old wells, septic systems, foundations or other buried structures. These should be properly sealed, abandoned or removed and managed when encountered.

Contamination/Hazardous Waste – The AUAR identifies numerous sites of environmental concern and states a Response Action Plan/Construction Contingency Plan will be developed. Environmental Investigations will be necessary at multiple sites and locations and for a variety of activities and timeframes throughout the redevelopment of the AUAR area. This section should clarify that investigations and associated RAP/CCPs should be completed and approved by the MPCA as deemed necessary by MPCA rules and guidance.

Parks and Greenways

The report should include reference to the Lake Marion Regional Greenway which is located just to the west of the project area (through Rose Park). Providing enhanced pedestrian connections to/from the regional greenway will improve recreation and non-motorized transportation access to the area that is being studied in the AUAR.

Transportation

County Transportation staff offer the following comments regarding the AUAR. While the AUAR is assessing impacts from the potential highest use "worst-case" condition, development and mitigation measures also need to be planned in a manner that understands and recognizes planning efforts and the vision for the area.

Dakota County has the following relevant projects, studies, and reviews underway or planned that identify changes to County Highways in this area which will likely impact plans for the Burnsville Village. These include:

- CSAH 42 Corridor Study (1999) -- https://www.co.dakota.mn.us/Transportation/TransportationStudies/Past/Pages/csah-42.aspx - which outlines the recommended changes, primarily as intersections throughout County Highway 42.
- CSAH 42 Signal Corridor Project – added fiber interconnect and an advanced traffic management system to improve the capabilities of the county's system to manage the signal system along this corridor. A project is also planned to incorporate the signals along McAndrews Road (County Highway 38) into the advanced traffic management system. This technology and updated signal timing look to assist with managing the mobility along CSAH 42 to extend the life of the existing system and defer more costly widening projects. However, as traffic increases within the corridor, the ability of signal timing or signal updates to significantly impact mobility decreases and additional delay for turning movements and road traffic will occur.
- County Highway 42 Visioning Study - https://www.co.dakota.mn.us/Transportation/TransportationStudies/Current/Pages/county-highway-42-visioning-study.aspx - currently an update underway to the 1999 study above based on current transportation needs.
- CSAH 38 – TH 5 to Burnhaven Drive – small corridor safety assessment to identify the best approach to address safety and mobility needs along McAndrews road based on current conditions and in consideration of future development. This assessment is anticipated to begin in 2021.

Traffic Capacity Analysis
Technology advancements and signal timing improvements have been employed to improve mobility along the corridor. Capacity summaries and queuing assessment was conducted through the visioning study – this data can be referenced in terms of current operation baseline.

Mitigation
The AUAR notes several improvements including adding lanes and auxiliary lanes along County Highway 42. While this strategy may reduce delay for spot locations or movement, this approach of adding lanes along County Highway 42 will create additional decision points and weaving conflicts along with increasing the distance for pedestrian and bicycle travel to cross the corridor. A more comprehensive approach is needed to address both safety and overall mobility needs. This approach includes implementing several elements including:

- Median modifications (some as noted in the AUAR but potentially additional actions)
- Potential interchange updates at the I-35W and I-35E access to address the highest volume movements
- Actions to improve North/South connectivity across County Highway 42, and
- An East/West collector system to address the long-term needs of the area to accommodate both highway traffic and the development vision as outlined

Physical Development Division

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Page-specific comments:

Please include a section describing County Road 42 Traffic Mitigation Options after the Trip Generation description on page 43 and before the Transit description on page 44. Dakota County staff suggest the following inclusion:

> CR 42 Traffic Mitigation Options
> The 2040 Build Scenario with the mitigation presented above provides opportunities to phase improvements and consider alternatives. Dakota County is now evaluating more options in its County Highway 42 Visioning Study. The mitigation considered above, from the March-2020 Center Village Traffic Study, often add auxiliary and turn-lane capacity along CR 42 and at intersection approaches. Options considered in the Visioning Study have been aimed at avoiding or limiting the expansion of CR 42. The Visioning Study ideas include a loop ramp from southbound I-35W to eastbound CR 42 and concepts for Aldrich Ave/alternate to cross under CR 42. Dakota County will also identify intersection access controls and possible investments along supporting and parallel roadways near CR 42. The combined transportation planning efforts by Burnsville and Dakota County provide a range of possible mitigation projects to be designed and developed in more detail as needs and opportunities present themselves.

Page 47 – Section 19.b. – Replace "project" with "study" in the sentence referencing the County Highway 42 Visioning Study. Amend the last sentence of the description as follows: "The study will be complete in 2021 and will expand the range of possible transportation projects to be developed in more detail as noted in Section 18 above."

Page 47 – Section 19.b. – Replace "project" with "study" in the sentence referencing the Orange Line Extension Study.

If you have any questions relating to our comments, please contact me at 952-891-7007 or Steven.Mielke@co.dakota.mn.us

Sincerely,

Steven C. Mielke, Director
Physical Development Division

cc: Commissioner Liz Workman, District 5
Matt Smith, County Manager

Physical Development Division

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Environmental Reveiw Report

Haz Waste Generators

ID	Generator	Address	City	Waste Name	Size	Status
41	Midas Muffler	14053 Grand AVE	Burnsville	Used Oil	MQG	Generator
41	Midas Muffler	14053 Grand AVE	Burnsville	Oil Filters	MQG	Generator
41	Midas Muffler	14053 Grand AVE	Burnsville	Fluorescent Lamps	MQG	Generator
41	Midas Muffler	14053 Grand AVE	Burnsville	Lead Acid Batteries	MQG	Generator
50	Grossman Chevrolet	1200 W 141st ST	Burnsville	Lead Acid Batteries	MQG	Out of Business
50	Grossman Chevrolet	1200 W 141st ST	Burnsville	Antifreeze	MQG	Out of Business
50	Grossman Chevrolet	1200 W 141st ST	Burnsville	Oil Filters	MQG	Out of Business
50	Grossman Chevrolet	1200 W 141st ST	Burnsville	Used Oil	MQG	Out of Business
50	Grossman Chevrolet	1200 W 141st ST	Burnsville	Fluorescent Lamps	MQG	Out of Business
50	Grossman Chevrolet	1200 W 141st ST	Burnsville	Parts Washer - Cuda	MQG	Out of Business
50	Grossman Chevrolet	1200 W 141st ST	Burnsville	Electronics	MQG	Out of Business
118	Jiffy Lube #108	550 W CR 42	Burnsville	Used Oil	MQG	Out of Business
118	Jiffy Lube #108	550 W CR 42	Burnsville	Oil Filters	MQG	Out of Business
118	Jiffy Lube #108	550 W CR 42	Burnsville	Fluorescent Lamps	MQG	Out of Business
118	Jiffy Lube #108	550 W CR 42	Burnsville	Antifreeze	MQG	Out of Business
139	Sears #1132/6132	14250 Buckhill RD	Burnsville	Lead Acid Batteries	VSQG	Out of Business
139	Sears #1132/6132	14250 Buckhill RD	Burnsville	Fluorescent Lamps	VSQG	Out of Business
139	Sears #1132/6132	14250 Buckhill RD	Burnsville	Used Oil	VSQG	Out of Business
139	Sears #1132/6132	14250 Buckhill RD	Burnsville	Gasoline	VSQG	Out of Business
139	Sears #1132/6132	14250 Buckhill RD	Burnsville	NiCad Batteries	VSQG	Out of Business
139	Sears #1132/6132	14250 Buckhill RD	Burnsville	Oil/Water Separator Waste	VSQG	Out of Business
139	Sears #1132/6132	14250 Buckhill RD	Burnsville	Parts Washer - Aqueous	VSQG	Out of Business
139	Sears #1132/6132	14250 Buckhill RD	Burnsville	Flammable Liquid/Solids	VSQG	Out of Business
139	Sears #1132/6132	14250 Buckhill RD	Burnsville	Corrosive - Acids	VSQG	Out of Business
139	Sears #1132/6132	14250 Buckhill RD	Burnsville	Flammable Aerosols	VSQG	Out of Business
139	Sears #1132/6132	14250 Buckhill RD	Burnsville	Oil Base Paint	VSQG	Out of Business
139	Sears #1132/6132	14250 Buckhill RD	Burnsville	Propane	VSQG	Out of Business
139	Sears #1132/6132	14250 Buckhill RD	Burnsville	Used Oil Filter	VSQG	Out of Business
139	Sears #1132/6132	14250 Buckhill RD	Burnsville	Waste Antifreeze	VSQG	Out of Business
139	Sears #1132/6132	14250 Buckhill RD	Burnsville	Mercury	VSQG	Out of Business
234	Ames Construction	14420 CR 5	Burnsville	Lead Acid Batteries	VSQG	Out of Business
234	Ames Construction	14420 CR 5	Burnsville	Used Oil	VSQG	Out of Business
234	Ames Construction	14420 CR 5	Burnsville	Paint Thinner	VSQG	Out of Business
234	Ames Construction	14420 CR 5	Burnsville	Paint Filters	VSQG	Out of Business
234	Ames Construction	14420 CR 5	Burnsville	Oil Filters	VSQG	Out of Business
234	Ames Construction	14420 CR 5	Burnsville	Fluorescent Lamps	VSQG	Out of Business
234	Ames Construction	14420 CR 5	Burnsville	Electronics	VSQG	Out of Business

234	Ames Construction	14420 CR 5	Burnsville	Aerosols	VSQG	Out of Business
234	Ames Construction	14420 CR 5	Burnsville	Antifreeze	VSQG	Out of Business
234	Ames Construction	14420 CR 5	Burnsville	Oil Sludge	VSQG	Out of Business
234	Ames Construction	14420 CR 5	Burnsville	Waste Paint	VSQG	Out of Business
234	Ames Construction	14420 CR 5	Burnsville	Oil Sludge	VSQG	Out of Business
248	Car-X Muffler Shop	1014 CR 42 W	Burnsville	Parts Washer Solvent	VSQG	Out of Business
248	Car-X Muffler Shop	1014 CR 42 W	Burnsville	Used Oil	VSQG	Out of Business
248	Car-X Muffler Shop	1014 CR 42 W	Burnsville	Fluorescent Lamps	VSQG	Out of Business
248	Car-X Muffler Shop	1014 CR 42 W	Burnsville	PCB Ballasts	VSQG	Out of Business
248	Car-X Muffler Shop	1014 CR 42 W	Burnsville	Lead Acid Batteries	VSQG	Out of Business
248	Car-X Muffler Shop	1014 CR 42 W	Burnsville	Oil Filters	VSQG	Out of Business
260	Burnsville Toyota	14730 Buckhill RD	Burnsville	Lead Acid Batteries	MQG	Non-Generator
260	Burnsville Toyota	14730 Buckhill RD	Burnsville	Used Oil	MQG	Non-Generator
260	Burnsville Toyota	14730 Buckhill RD	Burnsville	Oil Filters	MQG	Non-Generator
260	Burnsville Toyota	14730 Buckhill RD	Burnsville	Antifreeze	MQG	Non-Generator
260	Burnsville Toyota	14730 Buckhill RD	Burnsville	Fluorescent Lamps	MQG	Non-Generator
260	Burnsville Toyota	14730 Buckhill RD	Burnsville	Parts Washer - System 1	MQG	Non-Generator
262	Proex - Burnsville	2150 Burnsville CTR	Burnsville	Fixer Solution	MQG	Out of Business
262	Proex - Burnsville	2150 Burnsville CTR	Burnsville	Scrap Film	MQG	Out of Business
262	Proex - Burnsville	2150 Burnsville CTR	Burnsville	Fluorescent Lamps	MQG	Out of Business
268	Firestone - Burnsville	600 Southcross DR	Burnsville	Used Oil	MQG	Out of Business
268	Firestone - Burnsville	600 Southcross DR	Burnsville	Lead Acid Batteries	MQG	Out of Business
268	Firestone - Burnsville	600 Southcross DR	Burnsville	Oil Filters	MQG	Out of Business
268	Firestone - Burnsville	600 Southcross DR	Burnsville	Antifreeze	MQG	Out of Business
268	Firestone - Burnsville	600 Southcross DR	Burnsville	Parts Washer - Aqueous	MQG	Out of Business
268	Firestone - Burnsville	600 Southcross DR	Burnsville	Oil Sorbents	MQG	Out of Business
320	Ritz Camera	1022 Burnsville CTR	Burnsville	Fixer Solution	MQG	Out of Business
320	Ritz Camera	1022 Burnsville CTR	Burnsville	Fluorescent Lamps	MQG	Out of Business
320	Ritz Camera	1022 Burnsville CTR	Burnsville	Scrap Film	MQG	Out of Business
335	Precision Tune - Burnsville	1404 CR 42 W	Burnsville	Lead Acid Batteries	MQG	Out of Business
335	Precision Tune - Burnsville	1404 CR 42 W	Burnsville	Used Oil	MQG	Out of Business
335	Precision Tune - Burnsville	1404 CR 42 W	Burnsville	Oil Filters	MQG	Out of Business
335	Precision Tune - Burnsville	1404 CR 42 W	Burnsville	Fluorescent Lamps	MQG	Out of Business
335	Precision Tune - Burnsville	1404 CR 42 W	Burnsville	Parts Washer - Zep	MQG	Out of Business
336	Now Sports	14109 Irving AVE S	Burnsville	Lab Packs	MQG	Out of Business
336	Now Sports	14109 Irving AVE S	Burnsville	Fluorescent Lamps	MQG	Out of Business
336	Now Sports	14109 Irving AVE S	Burnsville	Parts Washer - Zep	MQG	Out of Business
358	Transmission Shop of Burnsville	616 Southcross DR	Burnsville	Used Oil	MQG	Generator
358	Transmission Shop of Burnsville	616 Southcross DR	Burnsville	Parts Washer - System 1	MQG	Generator
358	Transmission Shop of Burnsville	616 Southcross DR	Burnsville	Oil Filters	MQG	Generator
358	Transmission Shop of Burnsville	616 Southcross DR	Burnsville	Parts Washer - Cuda	MQG	Generator

370	Crossroads Animal Hospital	14321 Nicollet CT	Burnsville	Fixer Solution	MQG	Generator
370	Crossroads Animal Hospital	14321 Nicollet CT	Burnsville	Scrap Film	MQG	Generator
370	Crossroads Animal Hospital	14321 Nicollet CT	Burnsville	Pharmaceuticals (Not Acute)	MQG	Generator
370	Crossroads Animal Hospital	14321 Nicollet CT	Burnsville	Lead Foil	MQG	Generator
378	Abra Autobody	510 W Southcross DR	Burnsville	Used Oil Sorbents	VSQG	Out of Business
378	Abra Autobody	510 W Southcross DR	Burnsville	Solvents	VSQG	Out of Business
378	Abra Autobody	510 W Southcross DR	Burnsville	Waste Oil	VSQG	Out of Business
378	Abra Autobody	510 W Southcross DR	Burnsville	Solvent Contaminated Rags	VSQG	Out of Business
378	Abra Autobody	510 W Southcross DR	Burnsville	Used Antifreeze	VSQG	Out of Business
378	Abra Autobody	510 W Southcross DR	Burnsville	Used Batteries	VSQG	Out of Business
378	Abra Autobody	510 W Southcross DR	Burnsville	Used Oil Filters	VSQG	Out of Business
378	Abra Autobody	510 W Southcross DR	Burnsville	Paint Booth Filters	VSQG	Out of Business
378	Abra Autobody	510 W Southcross DR	Burnsville	Vac waste - oil/water	VSQG	Out of Business
378	Abra Autobody	510 W Southcross DR	Burnsville	Thinner / Paint Recycled	VSQG	Out of Business
378	Abra Autobody	510 W Southcross DR	Burnsville	Gun cleaner solvent	VSQG	Out of Business
378	Abra Autobody	510 W Southcross DR	Burnsville	Paint Waste	VSQG	Out of Business
378	Abra Autobody	510 W Southcross DR	Burnsville	Waste Bondo Dust	VSQG	Out of Business
415	Burnsville Minnesota, LLC	1178 Burnsville CTR	Burnsville	Fluorescent Lamps	MQG	Former Generator
415	Burnsville Minnesota, LLC	1178 Burnsville CTR	Burnsville	PCB Ballasts	MQG	Former Generator
432	Quality Waste Control	1901 W 144th ST	Burnsville	Used Oil	VSQG	Out of Business
432	Quality Waste Control	1901 W 144th ST	Burnsville	Parts Washer Solvent	VSQG	Out of Business
432	Quality Waste Control	1901 W 144th ST	Burnsville	Lead Acid Batteries	VSQG	Out of Business
432	Quality Waste Control	1901 W 144th ST	Burnsville	Oil Filters	VSQG	Out of Business
432	Quality Waste Control	1901 W 144th ST	Burnsville	Fluorescent Lamps	VSQG	Out of Business
513	Metro Dentalcare - Burnsville Specialty	14344 Burnhaven DR	Burnsville	Amalgam	MQG	Generator
513	Metro Dentalcare - Burnsville Specialty	14344 Burnhaven DR	Burnsville	Fixer Solution	MQG	Generator
513	Metro Dentalcare - Burnsville Specialty	14344 Burnhaven DR	Burnsville	Lead Foil	MQG	Generator
513	Metro Dentalcare - Burnsville Specialty	14344 Burnhaven DR	Burnsville	Scrap Film	MQG	Generator
513	Metro Dentalcare - Burnsville Specialty	14344 Burnhaven DR	Burnsville	Pharmaceuticals (Not Acute)	MQG	Generator
658	Burnhaven Veterinary Hospital	1900 W 144th ST	Burnsville	Fluorescent Lamps	MQG	Out of Business
658	Burnhaven Veterinary Hospital	1900 W 144th ST	Burnsville	Pharmaceuticals (Not Acute)	MQG	Out of Business
661	Nelson Chiropractic Clinic	14321 Nicollet CT	Burnsville	Fixer Solution	MQG	Generator
661	Nelson Chiropractic Clinic	14321 Nicollet CT	Burnsville	Scrap Film	MQG	Generator
727	Target Store T2340	810 CR 42 W	Burnsville	Aerosols	VSQG	Generator
727	Target Store T2340	810 CR 42 W	Burnsville	Acute Pharmaceuticals (P-List)	VSQG	Generator
727	Target Store T2340	810 CR 42 W	Burnsville	Aerosols	VSQG	Generator
727	Target Store T2340	810 CR 42 W	Burnsville	Acute Pharmaceuticals (P-List)	VSQG	Generator

727	Target Store T2340	810 CR 42 W	Burnsville	Aerosols	VSQG	Generator
727	Target Store T2340	810 CR 42 W	Burnsville	Flammable Liquids	VSQG	Generator
727	Target Store T2340	810 CR 42 W	Burnsville	Oxidizing Liquid	VSQG	Generator
727	Target Store T2340	810 CR 42 W	Burnsville	Toxic Liquids	VSQG	Generator
727	Target Store T2340	810 CR 42 W	Burnsville	Acute Pharmaceuticals (P-List)	VSQG	Generator
727	Target Store T2340	810 CR 42 W	Burnsville	Corrosive Liquids - Basic	VSQG	Generator
727	Target Store T2340	810 CR 42 W	Burnsville	Corrosive Liquids - Acidic	VSQG	Generator
727	Target Store T2340	810 CR 42 W	Burnsville	Batteries, Wet	VSQG	Generator
727	Target Store T2340	810 CR 42 W	Burnsville	Toxic Solids	VSQG	Generator
727	Target Store T2340	810 CR 42 W	Burnsville	Oxidizing Liquid, Corrosive	VSQG	Generator
727	Target Store T2340	810 CR 42 W	Burnsville	Compressed Gas, Flammable	VSQG	Generator
727	Target Store T2340	810 CR 42 W	Burnsville	Batteries, Dry	VSQG	Generator
727	Target Store T2340	810 CR 42 W	Burnsville	Flammable Solids	VSQG	Generator
727	Target Store T2340	810 CR 42 W	Burnsville	Liquified Petroleum Gas, Propa	VSQG	Generator
727	Target Store T2340	810 CR 42 W	Burnsville	Oxidizing Solid	VSQG	Generator
727	Target Store T2340	810 CR 42 W	Burnsville	Universal Waste	VSQG	Generator
727	Target Store T2340	810 CR 42 W	Burnsville	Hazardous Waste,Solid	VSQG	Generator
727	Target Store T2340	810 CR 42 W	Burnsville	PAINT AND/OR PAINT-RELATED MA	VSQG	Generator
738	Holiday Sports 496	1780 CR 42	Burnsville	Lead Acid Batteries	MQG	Out of Business
738	Holiday Sports 496	1780 CR 42	Burnsville	Fluorescent Lamps	MQG	Out of Business
766	Crawford Chiropractic	14019 Grand AVE S	Burnsville	Fixer Solution	MQG	Out of Business
766	Crawford Chiropractic	14019 Grand AVE S	Burnsville	Scrap Film	MQG	Out of Business
799	Centerpointe Dental	14321 Nicollet CT Suite 200	Burnsville	Fixer Solution	MQG	Generator
799	Centerpointe Dental	14321 Nicollet CT Suite 200	Burnsville	Scrap Film	MQG	Generator
799	Centerpointe Dental	14321 Nicollet CT Suite 200	Burnsville	Lead Foil	MQG	Generator
799	Centerpointe Dental	14321 Nicollet CT Suite 200	Burnsville	Amalgam	MQG	Generator
799	Centerpointe Dental	14321 Nicollet CT Suite 200	Burnsville	Pharmaceuticals (Not Acute)	MQG	Generator
939	Burnsville Center Family Dental	1064 Burnsville CTR	Burnsville	Fixer Solution	MQG	Out of Business
939	Burnsville Center Family Dental	1064 Burnsville CTR	Burnsville	Scrap Film	MQG	Out of Business
939	Burnsville Center Family Dental	1064 Burnsville CTR	Burnsville	Lead Foil	MQG	Out of Business
939	Burnsville Center Family Dental	1064 Burnsville CTR	Burnsville	Amalgam	MQG	Out of Business
990	Burnsville Express Lube	508 Southcross DR	Burnsville	Used Oil	VSQG	Out of Business
990	Burnsville Express Lube	508 Southcross DR	Burnsville	Oil Filters	VSQG	Out of Business
990	Burnsville Express Lube	508 Southcross DR	Burnsville	Antifreeze	VSQG	Out of Business
990	Burnsville Express Lube	508 Southcross DR	Burnsville	Parts Washer Solvent	VSQG	Out of Business
990	Burnsville Express Lube	508 Southcross DR	Burnsville	Lead Acid Batteries	VSQG	Out of Business
1052	Photo Express	1258 CR 42 W	Burnsville	Fixer Solution	MQG	Out of Business
1052	Photo Express	1258 CR 42 W	Burnsville	Scrap Film	MQG	Out of Business
1053	Great Prints One Hour Photo	1800 CR 42	Burnsville	Fixer Solution	VSQG	Out of Business
1053	Great Prints One Hour Photo	1800 CR 42	Burnsville	Scrap Film	VSQG	Out of Business
1065	National Camera Exchange	14380 Burnhaven DR	Burnsville	Fixer Solution	MQG	Former Generator

1065	National Camera Exchange	14380 Burnhaven DR	Burnsville	Scrap Film	MQG	Former Generator
1112	LaMettry's Collision	14601 Burnhaven DR	Burnsville	Paint Thinner/Sludge	VSQG	Generator
1112	LaMettry's Collision	14601 Burnhaven DR	Burnsville	Paint Filters	VSQG	Generator
1112	LaMettry's Collision	14601 Burnhaven DR	Burnsville	Fluorescent Lamps	VSQG	Generator
1112	LaMettry's Collision	14601 Burnhaven DR	Burnsville	Lead Acid Batteries	VSQG	Generator
1112	LaMettry's Collision	14601 Burnhaven DR	Burnsville	Paint Still Bottoms	VSQG	Generator
1112	LaMettry's Collision	14601 Burnhaven DR	Burnsville	Used Oil	VSQG	Generator
1112	LaMettry's Collision	14601 Burnhaven DR	Burnsville	Used Oil Filters	VSQG	Generator
1112	LaMettry's Collision	14601 Burnhaven DR	Burnsville	Used Antifreeze	VSQG	Generator
1112	LaMettry's Collision	14601 Burnhaven DR	Burnsville	Waste Aerosol Cans	VSQG	Generator
1118	Southcross Motors	14613 Burnhaven DR	Burnsville	Antifreeze	MQG	Out of Business
1118	Southcross Motors	14613 Burnhaven DR	Burnsville	Used Oil	MQG	Out of Business
1118	Southcross Motors	14613 Burnhaven DR	Burnsville	Oil Filters	MQG	Out of Business
1118	Southcross Motors	14613 Burnhaven DR	Burnsville	Lead Acid Batteries	MQG	Out of Business
1118	Southcross Motors	14613 Burnhaven DR	Burnsville	Parts Washer - Cuda	MQG	Out of Business
1166	Kemnitz, Keith A DDS	14344 Burnhaven DR	Burnsville	Fixer Solution	MQG	Out of Business
1166	Kemnitz, Keith A DDS	14344 Burnhaven DR	Burnsville	Scrap Film	MQG	Out of Business
1166	Kemnitz, Keith A DDS	14344 Burnhaven DR	Burnsville	Lead Foil	MQG	Out of Business
1212	Tires Plus #8135	1975 CR 42 W	Burnsville	Used Oil	MQG	Generator
1212	Tires Plus #8135	1975 CR 42 W	Burnsville	Oil Filters	MQG	Generator
1212	Tires Plus #8135	1975 CR 42 W	Burnsville	Lead Acid Batteries	MQG	Generator
1212	Tires Plus #8135	1975 CR 42 W	Burnsville	Fluorescent Lamps	MQG	Generator
1212	Tires Plus #8135	1975 CR 42 W	Burnsville	Antifreeze	MQG	Generator
1212	Tires Plus #8135	1975 CR 42 W	Burnsville	Parts Washer - Aqueous	MQG	Generator
1357	Lenscrafters - Burnsville	2070 Burnsville CTR	Burnsville	Fluorescent Lamps	MQG	Generator
1357	Lenscrafters - Burnsville	2070 Burnsville CTR	Burnsville	Used Oil	MQG	Generator
1357	Lenscrafters - Burnsville	2070 Burnsville CTR	Burnsville	Coating/Alcohol Waste	MQG	Generator
1431	Northland Auto-Care, Inc.	400 W CR 42	Burnsville	Parts Washer Solvent	VSQG	Out of Business
1431	Northland Auto-Care, Inc.	400 W CR 42	Burnsville	Brake Cleaner	VSQG	Out of Business
1431	Northland Auto-Care, Inc.	400 W CR 42	Burnsville	Lead Acid Batteries	VSQG	Out of Business
1431	Northland Auto-Care, Inc.	400 W CR 42	Burnsville	Used Oil	VSQG	Out of Business
1431	Northland Auto-Care, Inc.	400 W CR 42	Burnsville	Oil Filters	VSQG	Out of Business
1434	Valvoline Instant Oil Change	14250 Buckhill RD	Burnsville	Antifreeze	MQG	Out of Business
1434	Valvoline Instant Oil Change	14250 Buckhill RD	Burnsville	Used Oil	MQG	Out of Business
1434	Valvoline Instant Oil Change	14250 Buckhill RD	Burnsville	Oil Filters	MQG	Out of Business
1495	National Tire & Battery	14200 Morgan AVE S	Burnsville	Parts Washer Solvent	VSQG	Out of Business
1495	National Tire & Battery	14200 Morgan AVE S	Burnsville	Lead Acid Batteries	VSQG	Out of Business
1495	National Tire & Battery	14200 Morgan AVE S	Burnsville	Used Oil	VSQG	Out of Business
1499	Walgreens #2510	14201 Morgan Ave S	Burnsville	Fixer Solution	MQG	Out of Business
1506	Burnsville Saturn	14700 Buckhill RD	Burnsville	Antifreeze	MQG	Out of Business
1506	Burnsville Saturn	14700 Buckhill RD	Burnsville	Lead Acid Batteries	MQG	Out of Business

1506	Burnsville Saturn	14700 Buckhill RD	Burnsville	Fluorescent Lamps	MQG	Out of Business
1506	Burnsville Saturn	14700 Buckhill RD	Burnsville	Used Oil	MQG	Out of Business
1506	Burnsville Saturn	14700 Buckhill RD	Burnsville	Oil Filters	MQG	Out of Business
1506	Burnsville Saturn	14700 Buckhill RD	Burnsville	Parts Washer - Aqueous	MQG	Out of Business
1506	Burnsville Saturn	14700 Buckhill RD	Burnsville	Cuda Parts Washer Sludge	MQG	Out of Business
1511	Home Depot #2809	155 Nicollet BLVD	Burnsville	Fluorescent Lamps	VSQG	Generator
1511	Home Depot #2809	155 Nicollet BLVD	Burnsville	Paint Related Material	VSQG	Generator
1511	Home Depot #2809	155 Nicollet BLVD	Burnsville	Latex Paint	VSQG	Generator
1511	Home Depot #2809	155 Nicollet BLVD	Burnsville	Pesticide/Herbicide	VSQG	Generator
1511	Home Depot #2809	155 Nicollet BLVD	Burnsville	Aerosols	VSQG	Generator
1511	Home Depot #2809	155 Nicollet BLVD	Burnsville	Flammable Liquids	VSQG	Generator
1511	Home Depot #2809	155 Nicollet BLVD	Burnsville	Toxic Liquids	VSQG	Generator
1511	Home Depot #2809	155 Nicollet BLVD	Burnsville	Toxic Solids	VSQG	Generator
1511	Home Depot #2809	155 Nicollet BLVD	Burnsville	Corrosive Solids	VSQG	Generator
1511	Home Depot #2809	155 Nicollet BLVD	Burnsville	Corrosive Liquid	VSQG	Generator
1511	Home Depot #2809	155 Nicollet BLVD	Burnsville	Compressed Gas	VSQG	Generator
1511	Home Depot #2809	155 Nicollet BLVD	Burnsville	Oxidizer Solid	VSQG	Generator
1511	Home Depot #2809	155 Nicollet BLVD	Burnsville	Flammable solids	VSQG	Generator
1511	Home Depot #2809	155 Nicollet BLVD	Burnsville	Lighters	VSQG	Generator
1511	Home Depot #2809	155 Nicollet BLVD	Burnsville	Hypochlorite Solutions	VSQG	Generator
1511	Home Depot #2809	155 Nicollet BLVD	Burnsville	Oxidizer Liquid	VSQG	Generator
1511	Home Depot #2809	155 Nicollet BLVD	Burnsville	GASOLINE	VSQG	Generator
1511	Home Depot #2809	155 Nicollet BLVD	Burnsville	WASTE ORGANIC PEROXIDE	VSQG	Generator
1511	Home Depot #2809	155 Nicollet BLVD	Burnsville	UNIVERSAL WASTE CYLINDERS	VSQG	Generator
1511	Home Depot #2809	155 Nicollet BLVD	Burnsville	ELECTRONIC WASTE	VSQG	Generator
1511	Home Depot #2809	155 Nicollet BLVD	Burnsville	UNIVERSAL BATTERIES	VSQG	Generator
1569	Ticen's Pro-Care Inc.	14284 Newton AVE	Burnsville	Parts Washer 142 Flash	MQG	Generator
1569	Ticen's Pro-Care Inc.	14284 Newton AVE	Burnsville	Used Oil	MQG	Generator
1569	Ticen's Pro-Care Inc.	14284 Newton AVE	Burnsville	Oil Filters	MQG	Generator
1569	Ticen's Pro-Care Inc.	14284 Newton AVE	Burnsville	Lead Acid Batteries	MQG	Generator
1595	Waste Management	1901 W 144th ST	Burnsville	Parts Washer Solvent	MQG	Generator
1595	Waste Management	1901 W 144th ST	Burnsville	Lead Acid Batteries	MQG	Generator
1595	Waste Management	1901 W 144th ST	Burnsville	Used Oil	MQG	Generator
1595	Waste Management	1901 W 144th ST	Burnsville	Oil Filters	MQG	Generator
1595	Waste Management	1901 W 144th ST	Burnsville	Fluorescent Lamps	MQG	Generator
1665	McAndrews Chiropractic Center	14019 Grand AVE S	Burnsville	Fixer Solution	MQG	Out of Business
1677	Walser Burnsville Mazda	14720 Buckhill RD	Burnsville	Used Oil	MQG	Generator
1677	Walser Burnsville Mazda	14720 Buckhill RD	Burnsville	Parts Washer - Cuda	MQG	Generator
1677	Walser Burnsville Mazda	14720 Buckhill RD	Burnsville	Oil Filters	MQG	Generator
1677	Walser Burnsville Mazda	14720 Buckhill RD	Burnsville	Fluorescent Lamps	MQG	Generator
1677	Walser Burnsville Mazda	14720 Buckhill RD	Burnsville	Antifreeze	MQG	Generator

1677	Walser Burnsville Mazda	14720 Buckhill RD	Burnsville	Lead Acid Batteries	MQG	Generator
1677	Walser Burnsville Mazda	14720 Buckhill RD	Burnsville	Oil Sorbents	MQG	Generator
1789	Certified Appliance Recycling	2140 B CR 42	Burnsville	PCB Ballasts & Capacitors	VSQG	Out of Business
1789	Certified Appliance Recycling	2140 B CR 42	Burnsville	Mercury Switches	VSQG	Out of Business
1789	Certified Appliance Recycling	2140 B CR 42	Burnsville	Fluorescent Lamps	VSQG	Out of Business
1803	Kmart #9383	14230 Burnhaven DR	Burnsville	Lead Acid Batteries	LQG	Out of Business
1803	Kmart #9383	14230 Burnhaven DR	Burnsville	Pharmaceuticals (Not Acute)	LQG	Out of Business
1803	Kmart #9383	14230 Burnhaven DR	Burnsville	Acute Pharmaceuticals (P-List)	LQG	Out of Business
1803	Kmart #9383	14230 Burnhaven DR	Burnsville	Flammable Liquids	LQG	Out of Business
1803	Kmart #9383	14230 Burnhaven DR	Burnsville	Aerosols	LQG	Out of Business
1803	Kmart #9383	14230 Burnhaven DR	Burnsville	Oxidizing Liquid	LQG	Out of Business
1803	Kmart #9383	14230 Burnhaven DR	Burnsville	Pesticides	LQG	Out of Business
1803	Kmart #9383	14230 Burnhaven DR	Burnsville	Toxic Liquids	LQG	Out of Business
1803	Kmart #9383	14230 Burnhaven DR	Burnsville	Propane	LQG	Out of Business
1803	Kmart #9383	14230 Burnhaven DR	Burnsville	Fluorescent Lamps	LQG	Out of Business
1817	Smith Nielsen	620 Southcross DR	Burnsville	Antifreeze	MQG	Out of Business
1817	Smith Nielsen	620 Southcross DR	Burnsville	Used Oil	MQG	Out of Business
1817	Smith Nielsen	620 Southcross DR	Burnsville	Used Oil Filters	MQG	Out of Business
1817	Smith Nielsen	620 Southcross DR	Burnsville	Parts Washer Solvent	MQG	Out of Business
1817	Smith Nielsen	620 Southcross DR	Burnsville	Lead Acid Batteries	MQG	Out of Business
1817	Smith Nielsen	620 Southcross DR	Burnsville	Parts Washer - Aqueous	MQG	Out of Business
1821	Target Photo Lab #0056	810 W CR 42	Burnsville	Fixer Solution	MQG	Out of Business
1821	Target Photo Lab #0056	810 W CR 42	Burnsville	Film Negatives	MQG	Out of Business
1833	All Tune & Lube	508 Southcross DR	Burnsville	Parts Washer Solvent	VSQG	Out of Business
1833	All Tune & Lube	508 Southcross DR	Burnsville	Lead Acid Batteries	VSQG	Out of Business
1833	All Tune & Lube	508 Southcross DR	Burnsville	Fluorescent Lamps	VSQG	Out of Business
1833	All Tune & Lube	508 Southcross DR	Burnsville	Antifreeze	VSQG	Out of Business
1833	All Tune & Lube	508 Southcross DR	Burnsville	Used Oil	VSQG	Out of Business
1833	All Tune & Lube	508 Southcross DR	Burnsville	Oil Filters	VSQG	Out of Business
1891	Duren, Craig, DDS	351 Nicollet BLVD W	Burnsville	Amalgam	MQG	Generator
1891	Duren, Craig, DDS	351 Nicollet BLVD W	Burnsville	Pharmaceuticals (Not Acute)	MQG	Generator
1909	Certified Appliance Recycling	2090 CR 42	Burnsville	PCB Ballasts & Capacitors	VSQG	Out of Business
1909	Certified Appliance Recycling	2090 CR 42	Burnsville	Mercury Switches	VSQG	Out of Business
1909	Certified Appliance Recycling	2090 CR 42	Burnsville	Fluorescent Lamps	VSQG	Out of Business
1909	Certified Appliance Recycling	2090 CR 42	Burnsville	Solvent	VSQG	Out of Business
1951	Burnsville Toyota	14800 Burnhaven DR	Burnsville	Parts Washer - System 1	VSQG	Generator
1951	Burnsville Toyota	14800 Burnhaven DR	Burnsville	Used Oil	VSQG	Generator
1951	Burnsville Toyota	14800 Burnhaven DR	Burnsville	Oil Filters	VSQG	Generator
1951	Burnsville Toyota	14800 Burnhaven DR	Burnsville	Antifreeze	VSQG	Generator
1951	Burnsville Toyota	14800 Burnhaven DR	Burnsville	Fluorescent Lamps	VSQG	Generator
1951	Burnsville Toyota	14800 Burnhaven DR	Burnsville	Waste Fuel	VSQG	Generator

1964	Sundberg's Auto	508 Southcross DR	Burnsville	Parts Washer Solvent	VSQG	Out of Business
1964	Sundberg's Auto	508 Southcross DR	Burnsville	Used Oil	VSQG	Out of Business
1964	Sundberg's Auto	508 Southcross DR	Burnsville	Oil Filters	VSQG	Out of Business
1964	Sundberg's Auto	508 Southcross DR	Burnsville	Lead Acid Batteries	VSQG	Out of Business
1964	Sundberg's Auto	508 Southcross DR	Burnsville	Antifreeze	VSQG	Out of Business
2124	Car Care - Burnsville	1014 County Road 42 W	Burnsville	Parts Washer Solvent	VSQG	Out of Business
2124	Car Care - Burnsville	1014 County Road 42 W	Burnsville	Used Oil	VSQG	Out of Business
2124	Car Care - Burnsville	1014 County Road 42 W	Burnsville	Oil Filters	VSQG	Out of Business
2124	Car Care - Burnsville	1014 County Road 42 W	Burnsville	Lead Acid Batteries	VSQG	Out of Business
2126	Minnesota Valley Surgery Ctr.	1000 140th ST W STE 102	Burnsville	Pharmaceuticals (Not Acute)	VSQG	Generator
2152	Sherwin Williams #3129	2000 CR 42 W	Burnsville	Generated Oil Base Paint	VSQG	Generator
2152	Sherwin Williams #3129	2000 CR 42 W	Burnsville	Collected Business Oil Based Paint	VSQG	Generator
2152	Sherwin Williams #3129	2000 CR 42 W	Burnsville	Aerosols	VSQG	Generator
2168	Hollister Co.	1178 Burnsville Center STE 2	Burnsville	Aerosols	MQG	Out of Business
2168	Hollister Co.	1178 Burnsville Center STE 2	Burnsville	Flammable Liquid	MQG	Out of Business
2172	Macy's East Store #235	14251 Burnhaven DR	Burnsville	Flammable Liquids	VSQG	Generator
2172	Macy's East Store #235	14251 Burnhaven DR	Burnsville	Lamps (Universal Waste)	VSQG	Generator
2172	Macy's East Store #235	14251 Burnhaven DR	Burnsville	Non Haz Cosmetics	VSQG	Generator
2187	JC Penney - Store 30	14301 Burnhaven DR	Burnsville	Flammable Liquids	VSQG	Generator
2187	JC Penney - Store 30	14301 Burnhaven DR	Burnsville	Fluorescent Lamps	VSQG	Generator
2187	JC Penney - Store 30	14301 Burnhaven DR	Burnsville	Corrosives	VSQG	Generator
2187	JC Penney - Store 30	14301 Burnhaven DR	Burnsville	HID Lamps	VSQG	Generator
2187	JC Penney - Store 30	14301 Burnhaven DR	Burnsville	AEROSOLS	VSQG	Generator
2187	JC Penney - Store 30	14301 Burnhaven DR	Burnsville	INCANDESCENT LAMPS	VSQG	Generator
2187	JC Penney - Store 30	14301 Burnhaven DR	Burnsville	NON-PCB BALLAST	VSQG	Generator
2187	JC Penney - Store 30	14301 Burnhaven DR	Burnsville	Oxidizers	VSQG	Generator
2187	JC Penney - Store 30	14301 Burnhaven DR	Burnsville	U-Bend Lamps	VSQG	Generator
2187	JC Penney - Store 30	14301 Burnhaven DR	Burnsville	Lead Acid Battery	VSQG	Generator
2187	JC Penney - Store 30	14301 Burnhaven DR	Burnsville	Lithium Battery	VSQG	Generator
2187	JC Penney - Store 30	14301 Burnhaven DR	Burnsville	Non-Haz	VSQG	Generator
2250	Burnsville Volkswagen	14700 Buck Hill Rd.	Burnsville	Lead Acid Batteries	MQG	Out of Business
2250	Burnsville Volkswagen	14700 Buck Hill Rd.	Burnsville	Used Oil	MQG	Out of Business
2250	Burnsville Volkswagen	14700 Buck Hill Rd.	Burnsville	Oil Filters	MQG	Out of Business
2250	Burnsville Volkswagen	14700 Buck Hill Rd.	Burnsville	Antifreeze	MQG	Out of Business
2250	Burnsville Volkswagen	14700 Buck Hill Rd.	Burnsville	Fluorescent Lamps	MQG	Out of Business
2250	Burnsville Volkswagen	14700 Buck Hill Rd.	Burnsville	Brake Parts Washer - Aqueous	MQG	Out of Business
2250	Burnsville Volkswagen	14700 Buck Hill Rd.	Burnsville	Contaminated Gas	MQG	Out of Business
2250	Burnsville Volkswagen	14700 Buck Hill Rd.	Burnsville	Oil Rags	MQG	Out of Business
2250	Burnsville Volkswagen	14700 Buck Hill Rd.	Burnsville	Parts Washer - Aqueous	MQG	Out of Business
2284	Twin Cities Orthopedic	1000 West 140th Street, STE 2	Burnsville	Pharmaceuticals (Not Acute)	MQG	Generator

2326	Cub Foods #1631 - Burnsville South	1750 W. County Road 42	Burnsville	Pharmaceuticals (Not Acute)	VSQG	Generator
2326	Cub Foods #1631 - Burnsville South	1750 W. County Road 42	Burnsville	Lab Packs/Returned Products	VSQG	Generator
2326	Cub Foods #1631 - Burnsville South	1750 W. County Road 42	Burnsville	Fluoresscent Lamps	VSQG	Generator
2326	Cub Foods #1631 - Burnsville South	1750 W. County Road 42	Burnsville	Aerosols	VSQG	Generator
2326	Cub Foods #1631 - Burnsville South	1750 W. County Road 42	Burnsville	Corrosives	VSQG	Generator
2326	Cub Foods #1631 - Burnsville South	1750 W. County Road 42	Burnsville	Broken/Crushed lamps	VSQG	Generator
2326	Cub Foods #1631 - Burnsville South	1750 W. County Road 42	Burnsville	Flammable Liquids	VSQG	Generator
2343	Costco #1087 - Burnsville	14050 Burnhaven Drive	Burnsville	Pharmaceuticals (Not Acute)	VSQG	Generator
2343	Costco #1087 - Burnsville	14050 Burnhaven Drive	Burnsville	Acute Pharmaceuticals (P-List)	VSQG	Generator
2343	Costco #1087 - Burnsville	14050 Burnhaven Drive	Burnsville	Ignitable Wastes	VSQG	Generator
2343	Costco #1087 - Burnsville	14050 Burnhaven Drive	Burnsville	Toxic	VSQG	Generator
2343	Costco #1087 - Burnsville	14050 Burnhaven Drive	Burnsville	Corrosive	VSQG	Generator
2343	Costco #1087 - Burnsville	14050 Burnhaven Drive	Burnsville	Aerosols	VSQG	Generator
2343	Costco #1087 - Burnsville	14050 Burnhaven Drive	Burnsville	Flammable Gas	VSQG	Generator
2343	Costco #1087 - Burnsville	14050 Burnhaven Drive	Burnsville	Electronics	VSQG	Generator
2343	Costco #1087 - Burnsville	14050 Burnhaven Drive	Burnsville	Universal Batteries	VSQG	Generator
2343	Costco #1087 - Burnsville	14050 Burnhaven Drive	Burnsville	Universal Lamps	VSQG	Generator
2343	Costco #1087 - Burnsville	14050 Burnhaven Drive	Burnsville	Oxidizing Liquids	VSQG	Generator
2343	Costco #1087 - Burnsville	14050 Burnhaven Drive	Burnsville	Oxidizing Solids	VSQG	Generator
2343	Costco #1087 - Burnsville	14050 Burnhaven Drive	Burnsville	Broken Fluorescent Lamps	VSQG	Generator
2343	Costco #1087 - Burnsville	14050 Burnhaven Drive	Burnsville	Spill Clean Up Solids	VSQG	Generator
2343	Costco #1087 - Burnsville	14050 Burnhaven Drive	Burnsville	Gasoline Waste Solids	VSQG	Generator
2343	Costco #1087 - Burnsville	14050 Burnhaven Drive	Burnsville	Flammable Solids	VSQG	Generator
2343	Costco #1087 - Burnsville	14050 Burnhaven Drive	Burnsville	Flammable Liquids	VSQG	Generator
2343	Costco #1087 - Burnsville	14050 Burnhaven Drive	Burnsville	Lighters	VSQG	Generator
2343	Costco #1087 - Burnsville	14050 Burnhaven Drive	Burnsville	Liquor	VSQG	Generator
2343	Costco #1087 - Burnsville	14050 Burnhaven Drive	Burnsville	Non Regulated Waste MN01	VSQG	Generator
2343	Costco #1087 - Burnsville	14050 Burnhaven Drive	Burnsville	Gasoline Water Mixture	VSQG	Generator
2343	Costco #1087 - Burnsville	14050 Burnhaven Drive	Burnsville	Organic Peroxide	VSQG	Generator
2359	Metro Dentalcare Childrens Dentistry	14336 Burnhaven Dr.	Burnsville	Fixer Solution	MQG	Generator
2359	Metro Dentalcare Childrens Dentistry	14336 Burnhaven Dr.	Burnsville	Scrap Film	MQG	Generator
2359	Metro Dentalcare Childrens Dentistry	14336 Burnhaven Dr.	Burnsville	Used Oil	MQG	Generator

2359	Metro Dentalcare Childrens Dentistry	14336 Burnhaven Dr.	Burnsville	Pharmaceuticals (Not Acute)	MQG	Generator
2359	Metro Dentalcare Childrens Dentistry	14336 Burnhaven Dr.	Burnsville	Amalgam	MQG	Generator
2359	Metro Dentalcare Childrens Dentistry	14336 Burnhaven Dr.	Burnsville	Lead Foil	MQG	Generator
2425	Honest -1 Auto Care	1014 County Road 42 W	Burnsville	Used Oil	MQG	Generator
2425	Honest -1 Auto Care	1014 County Road 42 W	Burnsville	Used Oil Filters	MQG	Generator
2425	Honest -1 Auto Care	1014 County Road 42 W	Burnsville	Fluorescent Lamps	MQG	Generator
2425	Honest -1 Auto Care	1014 County Road 42 W	Burnsville	Lead Acid Batteries	MQG	Generator
2443	Walgreens #11419	950 County Rd 42 West	Burnsville	Aerosols	VSQG	Generator
2443	Walgreens #11419	950 County Rd 42 West	Burnsville	Compressed Gas	VSQG	Generator
2443	Walgreens #11419	950 County Rd 42 West	Burnsville	Corrosive Liquids	VSQG	Generator
2443	Walgreens #11419	950 County Rd 42 West	Burnsville	Flammable Liquid/Solids	VSQG	Generator
2443	Walgreens #11419	950 County Rd 42 West	Burnsville	Acute Pharmaceuticals (P-List)	VSQG	Generator
2443	Walgreens #11419	950 County Rd 42 West	Burnsville	Pharmaceuticals (Not Acute)	VSQG	Generator
2443	Walgreens #11419	950 County Rd 42 West	Burnsville	Electronics	VSQG	Generator
2443	Walgreens #11419	950 County Rd 42 West	Burnsville	Fluorescent Lamps	VSQG	Generator
2443	Walgreens #11419	950 County Rd 42 West	Burnsville	Mixed Batteries	VSQG	Generator
2443	Walgreens #11419	950 County Rd 42 West	Burnsville	Oxidizing Liquid	VSQG	Generator
2443	Walgreens #11419	950 County Rd 42 West	Burnsville	Non Regulated Waste MN01	VSQG	Generator
2443	Walgreens #11419	950 County Rd 42 West	Burnsville	Toxic Liquids	VSQG	Generator
2474	Luther Burnsville Hyundai	14700 Buck Hill Road	Burnsville	Used Oil Filters	MQG	Generator
2474	Luther Burnsville Hyundai	14700 Buck Hill Road	Burnsville	Oil Rags	MQG	Generator
2474	Luther Burnsville Hyundai	14700 Buck Hill Road	Burnsville	Aqueous Parts Washer	MQG	Generator
2474	Luther Burnsville Hyundai	14700 Buck Hill Road	Burnsville	Used Oil	MQG	Generator
2474	Luther Burnsville Hyundai	14700 Buck Hill Road	Burnsville	Lead Acid Batteries	MQG	Generator
2474	Luther Burnsville Hyundai	14700 Buck Hill Road	Burnsville	Fluorescent Lamps	MQG	Generator
2474	Luther Burnsville Hyundai	14700 Buck Hill Road	Burnsville	Used Oil	MQG	Generator
2474	Luther Burnsville Hyundai	14700 Buck Hill Road	Burnsville	Lead Acid Batteries	MQG	Generator
2496	Meineke Of Burnsville	600 Southcross Dr.	Burnsville	Used Oil	MQG	Generator
2496	Meineke Of Burnsville	600 Southcross Dr.	Burnsville	Used Oil Filters	MQG	Generator
2496	Meineke Of Burnsville	600 Southcross Dr.	Burnsville	Lead Acid Batteries	MQG	Generator
2150	Best Buy - Burnsville	14141 Aldrich Ave S	Burnsville	Electronics	MQG	Generator
2253	Sundberg's Auto	604 Southcross Dr	Burnsville	Parts Washer Solvent	MQG	Generator
2253	Sundberg's Auto	604 Southcross Dr	Burnsville	Used Oil	MQG	Generator
2253	Sundberg's Auto	604 Southcross Dr	Burnsville	Oil Filters	MQG	Generator
2253	Sundberg's Auto	604 Southcross Dr	Burnsville	Lead Acid Batteries	MQG	Generator
270	All Imports	604 Southcross DR	Burnsville	Lead Acid Batteries	VSQG	Out of Business
270	All Imports	604 Southcross DR	Burnsville	Parts Washer Solvent	VSQG	Out of Business
270	All Imports	604 Southcross DR	Burnsville	Used Oil	VSQG	Out of Business

270	All Imports	604 Southcross DR	Burnsville	Antifreeze	VSQG	Out of Business
270	All Imports	604 Southcross DR	Burnsville	Oil Filters	VSQG	Out of Business
92	Shamrock Cleaners	1266 CR 42 W	Burnsville	Perc Sludge	VSQG	Out of Business
2596	Dollar Tree #3581	14101 Aldrich Ave S	Burnsville	Aerosols	MQG	Generator
2596	Dollar Tree #3581	14101 Aldrich Ave S	Burnsville	Spilled Material	MQG	Generator
2596	Dollar Tree #3581	14101 Aldrich Ave S	Burnsville	Perfumes and Nail Pol Remover	MQG	Generator
2743	CVS Pharmacy #17405	810 CR 42 W	Burnsville	Aerosols	VSQG	Generator
2743	CVS Pharmacy #17405	810 CR 42 W	Burnsville	Acute Pharmaceuticals (P-List)	VSQG	Generator
2743	CVS Pharmacy #17405	810 CR 42 W	Burnsville	Pharmaceuticals (Not Acute)	VSQG	Generator
2743	CVS Pharmacy #17405	810 CR 42 W	Burnsville	Flammable Liquids	VSQG	Generator
2743	CVS Pharmacy #17405	810 CR 42 W	Burnsville	Oxidizing Liquid	VSQG	Generator
2743	CVS Pharmacy #17405	810 CR 42 W	Burnsville	Waste Electronics	VSQG	Generator
2743	CVS Pharmacy #17405	810 CR 42 W	Burnsville	Universal Waste Batteries	VSQG	Generator
2774	Ulta Beauty #288	830 CR 42 W	Burnsville	Flammable Liquid	VSQG	Generator
2774	Ulta Beauty #288	830 CR 42 W	Burnsville	Aerosol	VSQG	Generator
2774	Ulta Beauty #288	830 CR 42 W	Burnsville	Corrosive Liquid	VSQG	Generator
2774	Ulta Beauty #288	830 CR 42 W	Burnsville	Fluorescent Lamps	VSQG	Generator
2774	Ulta Beauty #288	830 CR 42 W	Burnsville	Oxidizing Liquids	VSQG	Generator
2777	Victoria's Secret #136	1036 Burnsville Center	Burnsville	Flammable Liquid	MQG	Generator
2776	Bath & Body Works #1317	915 West CR 42	Burnsville	Flammable Liquid	MQG	Generator
2809	Express 638	1039 Burnsville Center, Spc 11	Burnsville	Flammable Liquids	MQG	Out of Business
2809	Express 638	1039 Burnsville Center, Spc 11	Burnsville	Aerosols	MQG	Out of Business
2843	American Eagle Outfitters 131	2049 Burnsville Center, Ste 20	Burnsville	Feedstocks/By Products	MQG	Generator
2843	American Eagle Outfitters 131	2049 Burnsville Center, Ste 20	Burnsville	Aerosol	MQG	Generator
2856	Burnsville Family Physicians	1000 W 140th St, Ste 100	Burnsville	Pharmaceuticals (Not Acute)	MQG	Generator
2917	Sally Beauty Supply #3166	13939 Aldrich South	Burnsville	Electrronics	VSQG	Generator
2917	Sally Beauty Supply #3166	13939 Aldrich South	Burnsville	Aerosols	VSQG	Generator
2917	Sally Beauty Supply #3166	13939 Aldrich South	Burnsville	Flammable Liquids	VSQG	Generator
2917	Sally Beauty Supply #3166	13939 Aldrich South	Burnsville	Oxidizing Liquid	VSQG	Generator
2927	Caliber Collision Center - Burnsville 3307	510 W Southcross DR	Burnsville	Used Oil Sorbents	VSQG	Generator
2927	Caliber Collision Center - Burnsville 3307	510 W Southcross DR	Burnsville	Solvents	VSQG	Generator
2927	Caliber Collision Center - Burnsville 3307	510 W Southcross DR	Burnsville	Waste oil	VSQG	Generator
2927	Caliber Collision Center - Burnsville 3307	510 W Southcross DR	Burnsville	Solvent Rags	VSQG	Generator
2927	Caliber Collision Center - Burnsville 3307	510 W Southcross DR	Burnsville	Used Antifreeze	VSQG	Generator
2927	Caliber Collision Center - Burnsville 3307	510 W Southcross DR	Burnsville	Used Batteries	VSQG	Generator

2927	Caliber Collision Center - Burnsville 3307	510 W Southcross DR	Burnsville	Oil Filters	VSQG	Generator
2927	Caliber Collision Center - Burnsville 3307	510 W Southcross DR	Burnsville	Paint Filters	VSQG	Generator
2927	Caliber Collision Center - Burnsville 3307	510 W Southcross DR	Burnsville	Vac Waste- Oil/Water mix	VSQG	Generator
2927	Caliber Collision Center - Burnsville 3307	510 W Southcross DR	Burnsville	Thinner/Paint Recycled	VSQG	Generator
2927	Caliber Collision Center - Burnsville 3307	510 W Southcross DR	Burnsville	Gun cleaner solvent	VSQG	Generator
2927	Caliber Collision Center - Burnsville 3307	510 W Southcross DR	Burnsville	Paint waste	VSQG	Generator
2927	Caliber Collision Center - Burnsville 3307	510 W Southcross DR	Burnsville	Bondo Dust	VSQG	Generator

Dakota County Site Inventory

Site ID	MPCA Leak ID	MPCA_VICID	Site Name	Site Classification	Comments	File Status
3051			Shirley Drive & 138th Street West	Large, Unlimited Variety		Open
3103	15220		Sears Automotive Burnsville Center LUST	Spill, Leak, Leach or Inject Release	MPCA Closure 2004 Contaminated Soil remain	Open
3106	15154		Northwest Athletic Club LUST	Spill, Leak, Leach or Inject Release	MPCA Closure 2003 Soil unevaluated	Open
3113			Grand Avenue Demolition Disposal	Large, Unlimited Variety		Open
3114			Burnhaven Fill & Disposal	Household or Farm Dump		Open
3115			Holy Cross Church Disposals	Industrial Waste Disposal		Open
3120			Ames Construction Dump	Large, Unlimited Variety		Open
3121			County Roads 42 & 5 Disposals	Industrial Waste Disposal		Open
3134			County Road 5 & 143rd Street West	Industrial Waste Disposal		Open
3135			Pouloit Farm Dump	Household or Farm Dump		Open
3138			Burnsville Lumber	Industrial Waste Disposal		Open
3149			Quality Processing	Regulated Waste Facility		Open
3174			Clover Cleaners II	Spill, Leak, Leach or Inject Release	Current Dry Cleaners	Open
3276	6436		Quality Waste Control LUST	Spill, Leak, Leach or Inject Release	MPCA Closure 1993. No GW or Soil Contamination identified	Closed
3280	2635		Sinclair Retail LUST	Spill, Leak, Leach or Inject Release	MPCA Closure 1991 No GW contamination. Soil unevaluated	Open
3285	1115		Carson Pirie Scott Dept Store LUST	Spill, Leak, Leach or Inject Release	MPCA Closure 1991. No GW Cont. Soil Contamination remains	Open
3303	10895		Grossman Chevrolet LUST	Spill, Leak, Leach or Inject Release	MPCA Closure 2000 No GW Contamination. Soil unevaluated	Open
3308	12138		Burnsville Goodyear LUST	Spill, Leak, Leach or Inject Release	MPCA Closure 1999 No Contamination remains	Closed
3328	16473		Burnsville Target Store LUST	Spill, Leak, Leach or Inject Release	MPCA Closed 2007 Soil unevaluated	Open
3342	13298		Sinclair Gas Station LUST	Spill, Leak, Leach or Inject Release	MPCA Closure 2000 GW and Soil unevaluated	Open
3513	8211		Amoco SS #2108 LUST	Spill, Leak, Leach or Inject Release	MPCA Closure 1996 GW and Soil unevaluated	Open
3519	6740		Burnsville Automall LUST	Spill, Leak, Leach or Inject Release	MPCA Closure 1994 No GW Contamination. Cont Soil remain	Open

3524	5975	Sinclair Retail LUST	Spill, Leak, Leach or Inject Release	MPCA Closure 1993. No GW or Soil Contamination remains	Closed
3525	9923	PDQ Store 230 LUST	Spill, Leak, Leach or Inject Release	MPCA Closure 2001 GW, Soil, Free product Offsite mig uneval	Open
3530	2382	Ames Construction Inc LUST	Spill, Leak, Leach or Inject Release	MPCA Closure 1995 GW Cont Suspected. Soil not evaluated	Open
3531	6590	Burnsville Center Mall LUST	Spill, Leak, Leach or Inject Release	MPCA Closure 1994 GW & Soi Contamination unevaluated	Open
3995	14632	Sinclair Gas Station LUST	Spill, Leak, Leach or Inject Release	MPCA Closure 2003 Contaminated Soil remain	Open
3999	14626	Superamerica Store No 4201 LUST	Spill, Leak, Leach or Inject Release	MPCA Closure 2003 Contaminated Soil remain	Open

MPCA "What's In My Neighborhood" Site Data

Name	Active Flag	Address	City	MPCA Activities	MPCA IDs	Institutional Controls (Y or N)
Caliber Collision - Burnsville 3307	Y	510 Southcross Dr W	Burnsville	Air Quality; Hazardous Waste, Very small quantity generator	03700245; MND982625626	N
LaMettry's Collision Inc - Burnsville	Y	14601 Burnhaven Dr	Burnsville	Air Quality; Hazardous Waste, Very small quantity generator	03700242; MN0000662023	N
Grossman Chevrolet Inc	Y	1200 W 141st St	Burnsville	Air Quality; Hazardous Waste, Small quantity generator	03700261; MND006961908	N
Burnsville Center Dispersed Generation	Y	14370 Burnhaven Dr	Burnsville	Air Quality; Underground Tanks	03700323; TS0122561	N
Metro DentalCare - Burnsville Specialty	Y	14344 Burnhaven Dr	Burnsville	Hazardous Waste, Very small quantity generator	MNR000004069	N
Metro DentalCare Children's Dentistry	Y	14336 Burnhaven Dr	Burnsville	Hazardous Waste	MND985745637	N
Crawford Chiropractic	Y	14019 Grand Ave S	Burnsville	Hazardous Waste, Minimal quantity generator	MND985720184	N
Burnhaven Chiropractic	N	14051 Burnhaven Dr	Burnsville	Hazardous Waste	MND985706852	N
Burnsville Family Dental - 1064	N	1064 Burnsville Ctr	Burnsville	Hazardous Waste	MND985768621	N
Precision Tune - Burnsville	Y	1404 County Road 42 W	Burnsville	Brownfields, Petroleum Brownfield and Voluntary Investigation and Cleanup; Hazardous Waste, Minimal quantity generator; Petroleum Remediation, Leak Site; Underground Tanks	BF0000820; LS0012138; MND981527732; TS0001392	N
Shamrock Cleaners of Burnsville	Y	1266 County Road 42 W	Burnsville	Hazardous Waste	MND981093370	N
Southcross Motors	Y	14613 Burnhaven Dr	Burnsville	Hazardous Waste, Very small quantity generator	MN0000486985	N
Centerpointe Dental - Burnsville	Y	14321 Nicollet Ct Ste 200	Burnsville	Hazardous Waste, Minimal quantity generator	MND985736222	N
Midas Muffler - Burnsville	Y	14053 Grand Ave	Burnsville	Hazardous Waste, Very small quantity generator; Petroleum Remediation, Leak Site	LS0020564; MND981526908	N
Hirshfield's - Burnsville	Y	14250 Burnham Dr	Burnsville	Hazardous Waste	MN0000977389	N
Nelson Chiropractic Clinic	Y	14321 Nicollet Ct	Burnsville	Hazardous Waste, Minimal quantity generator	MND985706845	N

Walser Toyota - Burnsville	Y	14730 Buck Hill Rd	Burnsville	Hazardous Waste, Very small quantity generator; Underground Tanks	MND982651366; TS0013675	N
Tires Plus 8135	Y	1975 County Road 42 W	Burnsville	Aboveground Tanks; Hazardous Waste, Very small quantity generator	MNR000004218; TS0055285	N
Honest-1 Auto Care	Y	1014 County Road 42 W	Burnsville	Hazardous Waste, Minimal quantity generator	MND116217050	N
SuperAmerica 4201	N	1900 W County Road 42	Burnsville	Hazardous Waste	MNR000011056	N
Savers Store 5107	Y	14308 Burnhaven Dr	Burnsville	Hazardous Waste, Very small quantity generator	MND985745801	N
Sears 1132/6132	Y	14250 Buck Hill Rd	Burnsville	Hazardous Waste, Very small quantity generator; Petroleum Remediation, Leak Site; Underground Tanks	LS0015220; MND137050852; TS0016228	N
Ames Construction	Y	14420 County Road 5	Burnsville	Hazardous Waste, Very small quantity generator; Solid Waste	MND043169309	N
Waste Management - Burnsville	N	1901 Ames Dr	Burnsville	Hazardous Waste, Minimal quantity generator; Industrial Stormwater; Underground Tanks	MND077631299; MNR0534Z4; MNR053B5F; TS0001428	N
Target Store T2340	Y	810 County Road 42 W	Burnsville	Aboveground Tanks; Hazardous Waste, Small quantity generator; Petroleum Remediation, Leak Site; Underground Tanks	LS0016473; MND985712918; TS0001401	N
Hollister Co - Burnsville	Y	1178 Burnsville Ctr Ste 2043	Burnsville	Hazardous Waste, Very small quantity generator	MNS000137349	N
Cub Foods - Burnsville South	Y	1800 County Road 42 W	Burnsville	Air Quality	03700322	N
Walser Burnsville Chrysler Mazda	Y	14720 Buckhill Rd	Burnsville	Hazardous Waste, Very small quantity generator	MNR000104364	N
Qualex Inc - Burnsville	N	810 County Road 42 W	Burnsville	Hazardous Waste	MNS000109025	N
Macy's North - Burnsville	Y	14251 Burnhaven Dr	Burnsville	Aboveground Tanks; Hazardous Waste, Very small quantity generator; Underground Tanks	MNR000115808; TS0001420	N
Fairview Ridges Clinic	Y	303 Nicollet Blvd Ste 160	Burnsville	Hazardous Waste, Very small quantity generator	MNS000118737	N
US Coating	Y	1609 County Road 42 W Ste 312	Burnsville	Hazardous Waste	MNS000118935	N
Ames Construction Inc	Y	14420 County Road 5	Burnsville	Aboveground Tanks; Petroleum Remediation, Leak Site; Underground Tanks	LS0002382; TS0001402	N
Cub Foods 1631	Y	1750 County Road 42 W	Burnsville	Aboveground Tanks; Hazardous Waste, Very small quantity generator	MNS000153965; TS0121981	N
Kohl's Store 49	Y	13900 Aldrich Ave	Burnsville	Aboveground Tanks; Hazardous Waste, Minimal quantity generator	MNS000171157; TS0055685	N
Pearle Vision 6702	Y	1056 Burnsville Center	Burnsville	Hazardous Waste, Minimal quantity generator	MNS000141325	N
Kmart Store 9383	Y	14230 Burnhaven Dr	Burnsville	Hazardous Waste, Large quantity generator	MNS000133504	N
Orthopaedic Consultants	Y	1000 140th St W Ste 201	Burnsville	Hazardous Waste, Very small quantity generator	MNS000145367	N
Luther Burnsville Hyundai	Y	14700 Buck Hill Rd	Burnsville	Aboveground Tanks; Hazardous Waste, Very small quantity generator	MNS000151613; TS0055843	N
Minnesota Valley Surgery Center	Y	1000 140th St W Ste 102	Burnsville	Hazardous Waste, Very small quantity generator	MNS000127662	N
JC Penney 30	Y	14301 Burnhaven Dr	Burnsville	Hazardous Waste, Very small quantity generator; Underground Tanks	MNS000132985; TS0001419	N

Jared the Galleria of Jewelry - Burnsville	Y	801 County Road 42 W	Burnsville	Hazardous Waste, Minimal quantity generator	MNS000172957	N
Burnsville Volkswagen - 14550	Y	14550 Buck Hill Rd	Burnsville	Hazardous Waste, Very small quantity generator	MNS000171413	N
Walgreen's Store 2510	Y	14201 Morgan Ave S	Burnsville	Hazardous Waste, Very small quantity generator	MNS000157701	N
Cobblestone Court	Y	14150 Nicollet Ave S	Burnsville	Hazardous Waste	MNS000162040	N
Costco Wholesale 1087	Y	14050 Burnhaven Dr	Burnsville	Aboveground Tanks; Hazardous Waste, Large quantity generator; Underground Tanks	MNS000159988; TS0125386	N
Peace Of Mind Veterinary Care	Y	1900 Ames Dr	Burnsville	Hazardous Waste, Minimal quantity generator	MNS000159079	N
Augustana Regent	Y	14500 Regent Ln	Burnsville	Hazardous Waste, Minimal quantity generator	MNS000160663	N
Walgreen's Store 11419	Y	950 County Road 42 W	Burnsville	Hazardous Waste, Very small quantity generator	MNS000157305	N
Burnsville Volkswagen	Y	14550 Buck Hill Rd	Burnsville	Aboveground Tanks	TS0125722	N
Michael's Store 8608	Y	13901 Aldrich Ave S	Burnsville	Hazardous Waste, Very small quantity generator	MNS000186437	N
PETCO Store 1613	Y	14051 Aldrich Ave S	Burnsville	Hazardous Waste, Very small quantity generator	MNS000193136	N
Dollar Tree 03581	Y	14101 Aldrich Ave S	Burnsville	Hazardous Waste, Very small quantity generator	MNS000200980	N
Duren Family Dental	Y	351 Nicollet Blvd W	Burnsville	Hazardous Waste, Minimal quantity generator	MNS000197301	N
Dick's Sporting Goods 265	Y	901 County Road 42 W	Burnsville	Hazardous Waste, Very small quantity generator	MNS000217380	N
BURNSVILLE TOYOTA	Y	14800 BURNHAVEN DRIVE	BURNSVILLE	Construction Stormwater; Hazardous Waste, Minimal quantity generator	C00043056; MNS000323696	N
The Sports Authority	Y	1300 County Road 42	Burnsville	Hazardous Waste, Minimal quantity generator	MNS000303992	N
ULTA BEAUTY #288 (Burnsville)	Y	830 County Road 42 W	Burnsville	Hazardous Waste, Very small quantity generator	MNS000307568	N
Express 638	Y	1039 Burnsville Ctr Ste 1140	Burnsville	Hazardous Waste	MNS000311888	N
Sally Beauty Supply	Y	13939 Aldrich Ave S	Burnsville	Hazardous Waste, Minimal quantity generator	MNS000319328	N
Best Buy Mobile Store 1679	Y	1086 Burnsville Ctr Ste 2057	Burnsville	Hazardous Waste	MNS000320304	N
American Eagle Outfitters 131	Y	2049 Burnsville Ctr Ste 50	Burnsville	Hazardous Waste, Very small quantity generator	MNS000321496	N
Saloncentric Inc - 4307	Y	14011 Grand Ave	Burnsville	Hazardous Waste, Minimal quantity generator	MNS000340216	N
RWS 2A & 2B	N	14300 Buck Hill Rd	Burnsville	Construction Stormwater	C00012125	N
Sinclair Retail #22052	N	14235 Burnhaven Dr	Burnsville	Petroleum Remediation, Leak Site; Underground Tanks	LS0005975; TS0001050	N
United Properites - Burnsville	Y	14550 Burnhaven Dr	Burnsville	Hazardous Waste	MNS000110106	N
Northwest Racquet Swim & Health Club	Y	14600 Burnhaven Dr	Burnsville	Aboveground Tanks; Petroleum Remediation, Leak Site; Underground Tanks	LS0015154; TS0014070	N
Burnsville Shell	Y	14301 Nicollet Ct	Burnsville	Brownfields, Petroleum Brownfield; Petroleum Remediation, Leak Site; Underground Tanks	LS0009923; PB4806; TS0014341	N
Mervyns Burnsville	N	901 County Road 42 W	Burnsville	Hazardous Waste	MND985766526	N
Wl Gore & Associates Inc	Y	14500 Burnhaven Dr Ste 153	Burnsville	Hazardous Waste, Very small quantity generator	MN0000117614	N

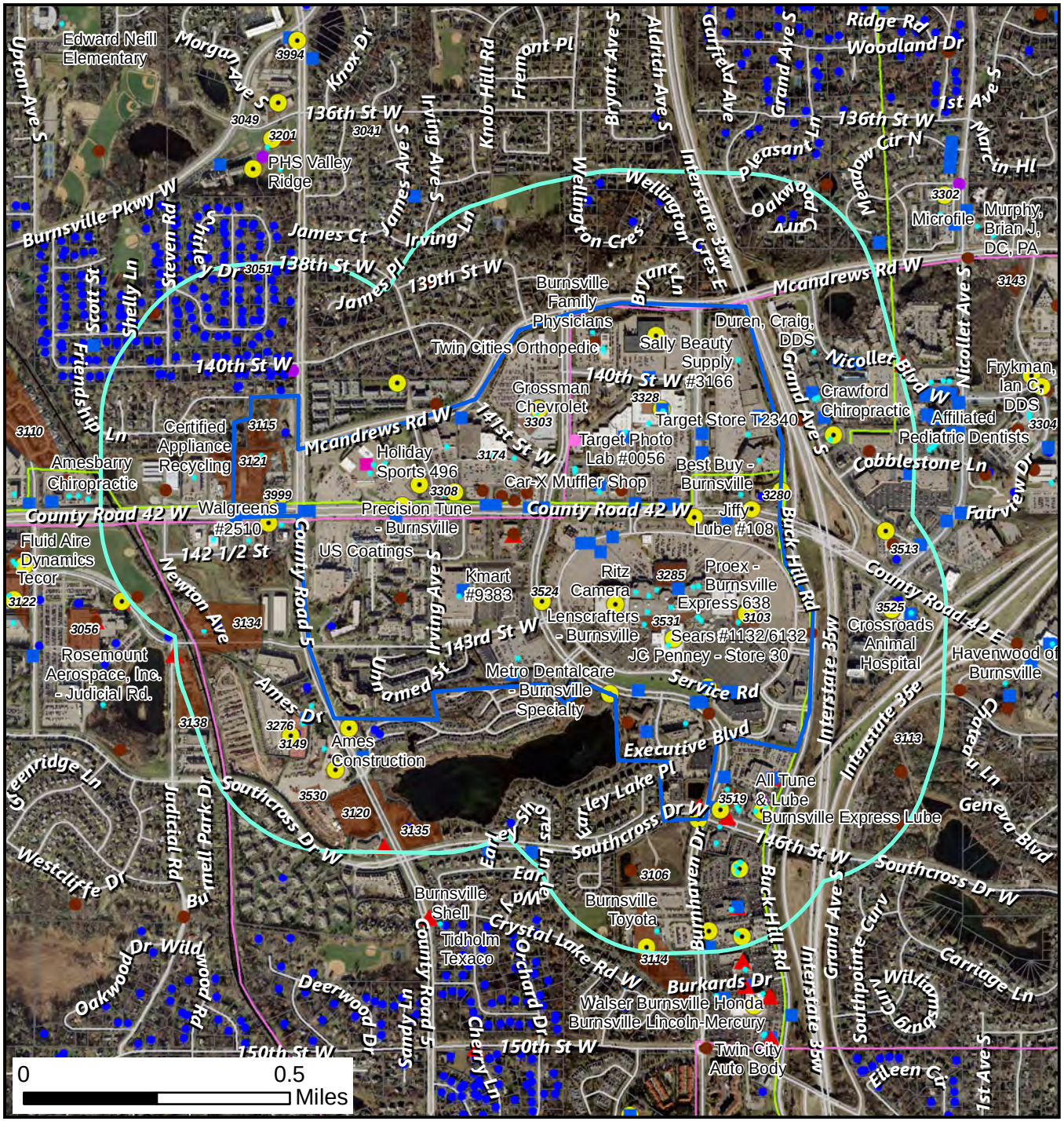
Toyota Regional Pond Project	N	Address Unknown	Burnsville	Construction Stormwater	C00030893	N
Burnsville Fire Station #1	Y	2100 143rd Street West	Burnsville	Construction Stormwater	C00057960	N
Sherwin Williams Co	Y	2000 County Road 42 W	Burnsville	Hazardous Waste, Very small quantity generator	MND985743442	N
Bursville Surgical Addition	N	1000 W 140th Street	Burnsville	Construction Stormwater	C00034416	N
Burnhaven Library Additions	N	1101 County Road 42 West	Burnsville	Construction Stormwater	C00030981	N
Jiffy Lube 108	Y	550 County Road 42 W	Burnsville	Aboveground Tanks; Hazardous Waste, Very small quantity generator; Underground Tanks	MND981526643; TS0001296	N
Builders Square 1329	Y	14230 Burnhaven Dr	Burnsville	Hazardous Waste, Minimal quantity generator	MNR000018093	N
Grossmans Chevrolet/Energy Alternatives	Y	1200 W 141st St	Burnsville	Aboveground Tanks; Petroleum Remediation, Leak Site; Underground Tanks	LS0010895; LS0018022; TS0001242; TS0122585	N
Aca Management 354	Y	500 Southcross Dr W	Burnsville	Hazardous Waste, Minimal quantity generator	MND985724020	N
McDonalds	N	14200 Grand Ave S	Burnsville	Construction Stormwater	C00028363	N
Holiday Stationstore #213	Y	14150 Irving Ave S	Burnsville	Petroleum Remediation, Leak Site; Underground Tanks	LS0019488; TS0001129	N
Transmission Shop Inc	Y	616 Southcross Dr W	Burnsville	Aboveground Tanks; Underground Tanks	TS0011375	N
Friendship Area Street Reconstruction	N	Address Unknown	Burnsville	Construction Stormwater	C00035563	N
Proex Photo & Portrait	N	2150 Burnsville Ctr	Burnsville	Hazardous Waste	MND982420317	N
Starbucks	Y	Address Unknown	Burnsville	Construction Stormwater	C00040578	N
Burnhaven Library	N	1101 W County Road 42	Burnsville	Underground Tanks	TS0019879	N
Chick-fil-A, Store #3491	Y	Address Unknown	Burnsville	Construction Stormwater	C00039851	N
Oasis Food Market #552	Y	1500 Southcross Dr	Burnsville	Underground Tanks	TS0013299	N
Regent At Burnsville Senior Housing Comm	N	14500 Regent Ln	Burnsville	Construction Stormwater	C00009320	N
National Camera Exchange Bv	Y	14380 Burnhaven Dr	Burnsville	Hazardous Waste, Very small quantity generator	MN0000089565	N
Chancellor Manor - Burnsville	Y	14250 Irving Ave S	Burnsville	Construction Stormwater	C00028091	N
TCF Bank Burnsville	N	1400 County Road 42 W	Burnsville	Construction Stormwater	C00022866	N
Northland Auto Care Inc	Y	400 County Road 42 W	Burnsville	Hazardous Waste, Very small quantity generator; Petroleum Remediation, Leak Site; Underground Tanks	LS0002635; LS0013298; LS0014632; LS0016926; MND982208068; TS0001051	N
Holiday Stationstore 213	Y	14150 Irving Ave S	Burnsville	Hazardous Waste, Small quantity generator	MNR000032623	N
All Imports Auto Services	Y	518 Southcross Dr W	Burnsville	Underground Tanks	TS0011376	N
RC Smith Co	Y	14200 Southcross Dr	Burnsville	Hazardous Waste, Very small quantity generator	MNR000104604	N
Ticens Pro Care Inc	Y	14284 Newton Ave S	Burnsville	Hazardous Waste, Very small quantity generator	MNR000069807	N
Reserve at Twin Lakes	Y	280 Southcross Drive West	Burnsville	Construction Stormwater	C00058542	N

Rize on Grand	Y	14501 Grand Avenue South	Burnsville	Construction Stormwater	C00054114	N
Cross Roads Animal Hospital	Y	14321 Nicollet Ct	Burnsville	Hazardous Waste, Very small quantity generator	MND981951593	N
Metro Self Storage	Y	2398 Egan Drive	Burnsville	Construction Stormwater	C00041513	N
Norwest Bank Burnsville Na	Y	925 County Road 42 W	Burnsville	Hazardous Waste, Very small quantity generator	MN0000229278	N
2016 Pond Cleanout	Y			Construction Stormwater	C00045198	N
Copy X Press	N	2016 County Road 42 W	Burnsville	Hazardous Waste	MN0000550590	N
Home Depot #2809 Pavement Rehabilitation	Y	Address Unknown	Burnsville	Construction Stormwater	C00040899	N
Starbucks	Y	1226-1246 Co Road 42 W	Burnsville	Construction Stormwater	C00041076	N
Lenscrafters	Y	2070 Burnsville Ctr	Burnsville	Hazardous Waste, Very small quantity generator	MNR000018960	N
Southcross BP	Y	500 Southcross Dr W	Burnsville	Aboveground Tanks; Brownfields, Petroleum Brownfield; Petroleum Remediation, Leak Site; Underground Tanks	LS0018911; PB4297; TS0014703	N
Former Grossman Chevrolet	Y	14050 Burnhaven Dr	Burnsville	Brownfields, Petroleum Brownfield	PB3862	N
Burnsville BP	Y	14220 Grand Ave	Burnsville	Hazardous Waste, Minimal quantity generator; Petroleum Remediation, Leak Site; Underground Tanks	LS0008211; MND985724160; TS0001183	N
General Cinema Demo	Y	14551 Burnhaven Dr	Burnsville	Hazardous Waste	MNS000122382	N
Now Sports Inc	Y	14109 Irving Ave S	Burnsville	Hazardous Waste, Very small quantity generator	MND985769140	N
Summit Townhomes	N	1500 McAndrews Rd W	Burnsville	Construction Stormwater	C00004575	N
Texaco Express Lube	Y	508 Southcross Dr W	Burnsville	Aboveground Tanks; Underground Tanks	TS0054410	N
Prestwick Place (Falmoor Glen)Future	Y	Address Unknown	Rosemount	Construction Stormwater	C00035663	N
Donaldsons/carson Pirie Scott	N	901 County Road 42 W	Burnsville	Petroleum Remediation, Leak Site; Underground Tanks	LS0001115; TS0001330	N
Aldi Grocery	Y	County Rd 42 and Burnhaven Drive	Burnsville	Construction Stormwater	C00043074	N
Burnsville Automall	Y	500 620 Southcross Dr	Burnsville	Petroleum Remediation, Leak Site	LS0006740	N
Burnsville Shopping Center	Y	1178 Burnsville Ctr	Burnsville	Petroleum Remediation, Leak Site; Underground Tanks	LS0006590; TS0013640	N
Fj Moore Mfg Co	N	14500 County Road 5	Burnsville	Hazardous Waste	PW5103027209	N
New Employee Parking Lot	Y	14300 Judicial Rd	Burnsville	Construction Stormwater	C00053534	N
Blacks Photography	Y	1098 Burnsville Ctr	Burnsville	Hazardous Waste, Very small quantity generator	MND982073967	N
Luther Burnsville Volkswagen	N	14551 Burnhaven Dr	Burnsville	Construction Stormwater	C00031001	N
Certified Appliance Recycling	Y	2090 County Road 42 Ste 104	Burnsville	Hazardous Waste, Very small quantity generator	MNS000103101	N
Photo Express	N	1258 County Road 42 W	Burnsville	Hazardous Waste	MN0000327189	N

Homart Development Company	N	1178 Burnsville Ctr	Burnsville	Hazardous Waste	MND084490564	N
Speedway 4201	Y	1900 W County Road 42	Burnsville	Petroleum Remediation, Leak Site; Underground Tanks	LS0014626; TS0001425	N
Walser Burnsville Chrysler-maz	Y	14720 Buckhill Rd	Burnsville	Aboveground Tanks	TS0122271	N
TH 35W MnPASS Expansion	N	Address Unknown	Burnsville	Construction Stormwater	C00031776	N
Prestwick Place 10th	Y	Address Unknown	Rosemount	Construction Stormwater	C00037804; SUB0040562; SUB0045482	N
US Bank and Walgreens	Y	900 County Rd 42 W	Burnsville	Construction Stormwater	C00027122	N
Now Sports Inc	N	1298 County Road 42 W	Burnsville	Hazardous Waste	MND982619157	N
2018 Street Reconstruction (18-101)	Y			Construction Stormwater	C00049505	N
Quality Waste Control	Y	1901 W 140th St	Burnsville	Petroleum Remediation, Leak Site	LS0006436	N
2019 Street Reclamation (19-103B)	Y		Burnsville	Construction Stormwater	C00053682; CS-gen	N
Prestwick Place 10th Addition	Y	Connemara Trl & Ailsbury Ave	Rosemount	Construction Stormwater	C00038868	N

End of Report

Environmental Review Map



Burnsville Center Village Area AUAR
Burnsville, Minnesota
Review Date: June 1, 2021

- Hazardous Waste Generators
- Wells

MPCA WIMN Sites

- Multiple Programs
- Air Quality
- Environmental Review
- Feedlots
- Hazardous Waste
- Investigation and Cleanup
- Pollution Prevention
- Solid Waste
- Stormwater
- SSTS
- Tanks
- Water Quality
- DC Site Inventory
- DC Solid Waste Facilities
- NPMS Pipelines
- Electric Transmission Lines
- Railroads
- Parcels
- Municipal Boundary

DCADDA Holy Cross Lutheran Church 14020 Co. Rd. 5

Elev 1020±10

No.

Rudy

E. H. RENNER & SONS WELL COMPANY

7700 Highway No. 7 St. Louis Park

115-21-23 206168

ADP 1968 1C p.57

Lot 1 B-3

WELL LOG RECEIVED

OCT 1 1963

DIVISION OF WATERS

(115.21.3C)

INVOICES: Prior Lake Quad

(Well) No.

(Pump) No. DCHM 104

Date Started 9-17 19 62 Date Completed 10-16-62 19

Owner or Contractor (781-2741 (contractor) Lund-Martin Co. Address 3023 N.E. Randolph, Mpls 18, M

Job Location American Lutheran Church, County Rd 17, Burnsville, Minn

not in telephone book

NO MAP

Lot Block Twp or city Burnsville County Dakota State of Minnesota

Well: Step Down 6" Pipe to 90 ft.

Cased with 4" Type and Size Ft. 220 Total Depth of Well 292' from grade

Feet of Open Hole 72 Finished in Sandstone Water Level 160' 860 975

Tested at 25 gallons per min. Draw down of - - feet. ▽160/860

Screen:

Size Make Slot or Gauge 98 Number 922

Pump:

Make Jacuzzi Model 15-S4E 3-2 H.P. 1½ 220V Type Sub Tank Size 125 ASME

Motor Serial No. C1041B50D1 Pump Serial No. ENH-6890 Drop Pipe 200 feet

Size 1¼" Galv Capacity of pump G.P.M. Date Installed Oct 17, 1962

TUBB Pitless Unit, 4", offset copper 1035

KIND OF FORMATION	COLOR OF FORMATION	STARTED DEPTH	ENDED DEPTH	TOTAL THICKNESS OF FORMATION	REMARKS
Hard Clay - rocks	Brown	0	25.	CLAY, rock 25	
Sand - Gravel	Brown	25	98	SAND, GRVL 73	005, 73 922
Platttville Limestone	Brown	98	108	LMSN 10	P 457 (22) T/902
Shale	Grey	108	120	SHLE 12	
Dry soft sandstone	Yellow	120	218	SNDS 98	SP 915 (140) T/915
Hard rock & Shale	Gray	218	260	Rock, SHLE 42	
Hard Sandrock	Light Gray	260	292	SNDS 32	T/960 S-O 775 (32)
Aquifer					
OSTH - cPDc					
1989					

CODED

THIS DATA CONTAINED WITHIN THIS [illegible] MAY BE USED FOR SCIENTIFIC PURPOSES ONLY BY DULY AUTHORIZED PERSONNEL IN ACCORDANCE WITH MSA 103.51.

STATE OF MINNESOTA DEPARTMENT OF HEALTH

ABANDONED WELL RECORD

90-9100

MINNESOTA UNIQUE WELL NO. (leave blank if not known) H3292

1. LOCATION OF WELL

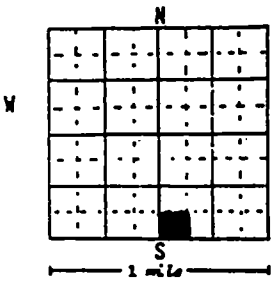
County Name: DAKOTA

Township Name	Township Number	Range Number	Section No.	Fraction
BURNSVILLE	115 (N) or S	21 E or (W)	24	SWSWSE

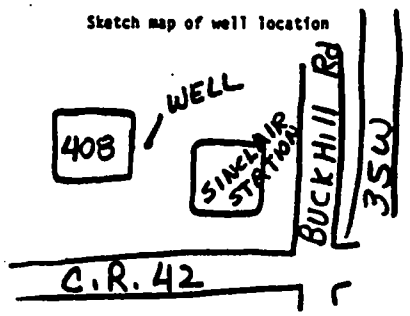
4. WELL DEPTH (completed): 315 ft. Date sealed: JUNE 15, 1990

Numerical Street Address and City of Well Location or Distance from Road Intersection:
408 WEST COUNTY ROAD 42

Show exact location of well (in section grid with "X")



Sketch map of well location



5. DRILLING METHOD (if known)
1 [X] Cable tool 4 [ ] Reverse 7 [ ] Driven 10 [ ] Dug
2 [ ] Hollow Rod 5 [ ] Air 8 [ ] Bored 11 [ ] _____
3 [ ] Rotary 6 [ ] Jetted 9 [ ] Power Auger

6. OBSTRUCTIONS
Well obstructed [ ] Yes [X] No
Obstructions removed [ ] Yes [ ] No If obstructions cannot be removed, contact MDH before sealing.

7. USE
1 [ ] Domestic 4 [ ] Monitoring 8 [ ] Heat Loop
2 [ ] Irrigation 5 [X] Public 9 [ ] Industry
3 [ ] Test Well 6 [ ] Municipal 10 [ ] Commercial
7 [ ] Air Conditioning 11 [ ] _____

2. PROPERTY OWNER'S NAME: JACKS RESTAURANT

Mailing Address if different than property address indicated above:
408 W. CO. RD. #42
BURNSVILLE, MN. 55337

8. CASING(S)
1 [X] Black 4 [X] Threaded 7 [ ] _____
2 [ ] Galv. 5 [ ] Welded
3 [ ] Plastic 6 [ ] Stainless Steel
6 in. to 220 ft.
_____ in. to _____ ft.

3. FORMATION LOG — If not known, indicate formation log from new well or nearby well.

FORMATION LOG	COLOR	HARDNESS OF FORMATION	FROM	TO
CLAY/ROCKS	BROWN		0	35
GRAVEL/ROCKS	BROWN		35	100
SAND	BROWN		100	205
SAND	GRAY		205	240
SANDY CLAY	GRAY		240	260
HARD SAND	GRAY		260	270
HARD ROCK	GRAY		270	

9. SCREEN
[ ] Screened well from ____ ft. to ____ ft.
[X] Open Hole from 220 ft. to 315 ft. (If known)

10. STATIC WATER LEVEL
87 ft. [X] below [ ] above land surface. Date Measured 6-8-90

11. WELLHEAD COMPLETION
1 [X] Pitless Adapter 4 [ ] Found Buried
2 [ ] Basement offset 5 [ ] _____
3 [ ] Well Pit

12. GROUTING INFORMATION
[X] Neat Cement 2 [ ] Bentonite 3 [ ] 80 BAGS
Grout material PORTLAND from 315 SURFACE lbs
NEAT — — —
GROUT

13. NEAREST SOURCES OF CONTAMINATION
150 feet E direction GAS STATION
Well disinfected before sealing? [X] Yes

14. PUMP [X] Removed [ ] Not Present
Type: 1 [X] Submersible 3 [ ] L.S. Turbine 5 [ ] Reciprocating
2 [ ] Jet 4 [ ] Centrifugal 6 [ ] _____

15. EXISTING WELLS (Please sketch locations of abandoned and active wells in remarks section or on back.)
Other unused well(s) on property? [ ] Yes [X] No
Abandoned: [ ] Permanent [ ] Temporary [ ] Not sealed

16. REMARKS, ELEVATION, SOURCE OF DATA - CASINGS REMOVED, CASINGS PERFORATED, ETC.

THE GEOLOGY WAS TAKEN FROM THE WELL AT:
13400 WENTWORTH AVE. S.
BURNSVILLE, MN.

WATER LEVEL IN THE WELL ABOVE: 200'
DATE WATER LEVEL WAS TAKEN: 8-29-61

WORK DONE FOR: IMPERIAL DEVELOPERS
9001 GRAND AVE. S. BLOOMINGTON, 55420
ATTN: MARTY

JUN 15 1990

SEALED

According to MN State Regulations

K-9

17. WATER WELL CONTRACTORS CERTIFICATION
This well was sealed under my jurisdiction and this report is true to the best of my knowledge and belief.

RECEIVED

E.H. RENNER & SONS, INC. 71015
Licensee Business Name License No.
15688 JARVIS ST. NW. ELK RIVER
Address MN 55330 1-612-427-6100
Signed _____ Date 6-18-90
STEVE LIND Date 6-15-90
Name of Driller
JON WAGNER

OFFICIAL ABANDONED WELL RECORD (May be used for Property Transfer)
IMPORTANT: FILE WITH DEED

VO

WELL AND BORING SEALING RECORD

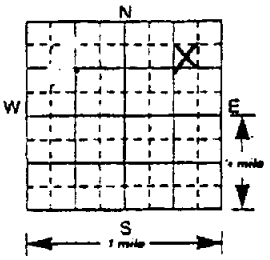
MINNESOTA DEPARTMENT OF HEALTH
Minnesota Statutes, Chapter 103I

Sealing No. H 120570
Minnesota Unique No. or W-series No. 496480
(Leave blank if not known)

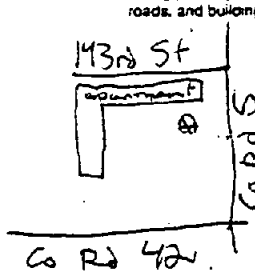
WELL OR BORING LOCATION

County Name: Dakota 115
Township Name: Burnsville | Township No: ~~118~~ 117N | Range No.: 21W | Section No.: 25 | Fraction (sm. - lg.): SW¼ SE¼ NW¼ NW¼
Numerical Street Address or Fire Number and City of Well or Boring Location: 1600 W 143rd Str, Burnsville

Show exact location of well or boring in section grid with "X".



Sketch map of well or boring location, showing property lines, roads, and buildings.



PROPERTY OWNER'S NAME

Sentinel Development

Mailing Address if different than property address indicated above.

5150 Edina Industrial Blvd.
Edina, MN

GEOLOGICAL MATERIAL	COLOR	HARDNESS OF FORMATION	FROM	TO
If not known, indicate estimated formation log from nearby well or boring.				
Silty Sandy Clay			0	67.5
Platteville			675	775
Glenwood			775	81
St. Peter			81	94

REMARKS, SOURCE OF DATA, DIFFICULTIES IN SEALING

3411-2379

FEB 1396 RECEIVED WELL MGMT

ADDITIONAL DATA ADDED TO THIS DOCUMENT
JAN 10 1997
DATA RECEIVED
From: Dakota6 By: VO

MINN. DEPT. OF HEALTH COPY H 120570

Date Sealed: 1-29-96
Approximate Date Well or Boring Constructed: 11-27-91
Depth Before Sealing: 94 ft.
Original Depth: 94 ft.
☒ Single Aquifer ☐ Multiaquifer
Static Water Level: ☐ Accurate ☐ Approximate — Dry ft. ____ below ____ above land

CASING TYPE

☒ Steel ☐ Plastic ☐ Tile ☐ Other

Screen from 84 to 94 ft. Open Hole from ____ to ____

OBSTRUCTION/DEBRIS/FILL

☐ Obstruction ☐ Debris ☐ Fill
Type of debris/obstruction: None
Obstruction/Debris/Fill removed? ☐ Yes ☐ No

PUMP

☐ Removed ☒ Not Present ☐ Other

CASING

Diameter	Depth	Set in oversize hole?	Annular space initially gro
2 in. from 0 to 84 ft.		☒ Yes ☐ No	☒ Yes ☐ No ☐ U
____ in. from ____ to ____ ft.		☐ Yes ☐ No	☐ Yes ☐ No ☐ U
____ in. from ____ to ____ ft.		☐ Yes ☐ No	☐ Yes ☐ No ☐ U

METHOD USED TO SEAL ANNULAR SPACE BETWEEN 2 CASINGS, OR CASING AND BORE HOLE:

☒ No Annular Space Exists
☐ Annular space grouted with tremie pipe
☐ Casing Perforation/Removal

____ in. from ____ to ____ ft. ☐ Perforated ☐ Removed
____ in. from ____ to ____ ft. ☐ Perforated ☐ Removed

Type of perforator
☐ Other

GROUTING MATERIAL

Grouting material: Cement from 0 to 94 ft. ____ yards 4
____ from ____ to ____ ft. ____ yards
____ from ____ to ____ ft. ____ yards
____ from ____ to ____ ft. ____ yards

UNSEALED WELLS AND BORINGS

Other unsealed well or boring on property? ☐ Yes ☒ No

LICENSED OR REGISTERED CONTRACTOR CERTIFICATION

This well or boring was sealed in accordance with Minnesota Rules, Chapter 4725. The information contained in this is true to the best of my knowledge.

Boart Longyear Company — 02653 ~~27653~~
Contractor Business Name — *License or Registration No.*

Authorized Representative Signature — 1-30-96

John Einum & Mike Thalacker
Name of Person Sealing Well or Boring

ENTERED

DEPARTMENT OF NATURAL RESOURCES

Division of Ecological and Water Resources
Region 3 Headquarters
1200 Warner Road
Saint Paul, MN 55106

Transmitted by Email

June 17, 2021

Deb Garross
City Planner
City of Burnsville
100 Civic Center Parkway
Burnsville, MN 55337

Dear Deb Garross,

Thank you for the opportunity to review the Burnsville Center Village Area Draft AUAR. The DNR respectfully submits the following comments for your consideration:

1. Page 18, Groundwater. Wells that are identified on the site should either be sealed in accordance with the requirements of the Minnesota Department of Health, or they should be put to use. If the wells are used, then a DNR Water Appropriation Permit will be required if the volume of water that is pumped exceeds 10,000 gallons per day, or one million gallons per year.
2. Page 21, Stormwater. The DNR recommends that water from the stormwater ponds for the development be used to irrigate landscaping in the AUAR area.
3. Page 21, Stormwater. The high amount of impervious surfaces within the project area require the use of road salt for winter maintenance. Chloride released into local lakes and streams does not break down, and instead accumulates in the environment, potentially reaching levels that are toxic to aquatic wildlife and plants. Consider promoting local business and city staff participation in the Smart Salting Training offered through the Minnesota Pollution Control Agency. There are a variety of classes available for road applicators, sidewalk applicators, and property managers. More information and resources can be found at this website. Many winter maintenance staff who have attended the Smart Salting training — both from cities and counties and from private companies — have used their knowledge to reduce salt use and save money for their organizations.

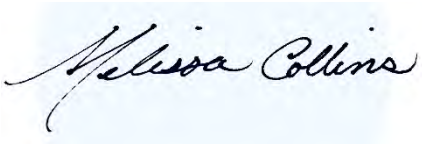
   We also encourage cities to provide public outreach to reduce the overuse of chloride. Here are some educational resources for residents as well as a sample ordinance regarding chloride use.
4. Page 22, Water Appropriation. Additional time may be needed to process applications for dewatering in this area due to the proximity of a calcareous fen to the AUAR site. The DNR

recommends that the application be accompanied by a report by a professional geologist in which the possible impact to the nearby calcareous fen from the dewatering is examined. A DNR Groundwater Specialist will review the report as part of the approval process.

5. Page 22, Water Appropriation. If it appears that the dewatering will impact the nearby calcareous fen, then the applicant will need to write a calcareous fen management plan for the dewatering.
6. Page 38, Section 13.d. We appreciate that the City of Burnsville encourages the use of native plants in landscaping.

Thank you again for the opportunity to review this document. Please let me know if you have any questions.

Sincerely,



Melissa Collins

Regional Environmental Assessment Ecologist | Ecological and Water Resources
Minnesota Department of Natural Resources
1200 Warner Road
St. Paul, MN 55106
Phone: 651-259-5755
Email: melissa.collins@state.mn.us

CC: Regina Dean, City of Burnsville

Equal Opportunity Employer

June 17, 2021

Regina Dean, Assistant Community Development Director
City of Burnsville
100 Civic Center Pkwy
Burnsville, MN 55337

RE: City of Burnsville – Burnsville Center Village Area Draft Alternative Urban Areawide Review
Metropolitan Council Review File No. 22564-1
Metropolitan Council District No. 15

Dear Ms. Dean:

Metropolitan Council staff completed its review of the Burnsville Center Village Area Draft Alternative Urban Areawide Review (AUAR) to determine its accuracy and completeness in addressing regional concerns. Staff concludes that the AUAR is complete and accurate with respect to regional concerns and does not raise major issues of consistency with Council policies. However, staff offers the following comments for your consideration:

Item 9.a.i. Land Use (Colin Kelly 651-602-1361)
The Lebanon Hills – Lake Marion Regional Trail Search Corridor appears to traverse the north edge of the project area, generally following McAndrews Road / County Road 38. This regional trail search corridor is recognized in *2040 Regional Parks Policy Plan* and the City of Burnsville's System Statement: *https://metrocouncil.org/Communities/Planning/Local-Planning-Assistance/System-Statements/System-Statements/02393472_Burnsville_2015SS.aspx*

Dakota County is the Regional Park Implementing Agency for the Lebanon Hills – Lake Marion Regional Trail Search Corridor. The City of Burnsville should coordinate with Dakota County prior to any development activities that have the potential to impact the future Lebanon Hills – Lake Marion Regional Trail.

Item 9.a.ii. Land Use (Todd Graham 651-602-1322)
The AUAR discusses a maximum build-out (or "worst case" impacts) development scenario, Scenario 1. The scenario includes 1,600 housing units, 1,100,000 sq ft of commercial space, 705,000 sq ft of office/medical/institutional space, and a 200 rooms hotel (<200,000 sq ft).

The AUAR study site includes all of Transportation Analysis Zones #573 and 574 (the northern half of the AUAR, business/office/retail land), all of TAZ 575 (southeast quarter of the AUAR, mostly mixed-use), and approximately half of TAZ 576 (southwest quarter of the AUAR, mostly mixed-use).

TAZ allocations for 2040 have been prepared by City of Burnsville. The City's Plan expects the combined TAZs #573-576 will gain +1366 jobs, +226 households, and +474 population. These may be insufficient allocations considering the AUAR scenario.

Should the Center Village Area be redeveloped as described in the AUAR, then Council staff would recommend increasing the TAZ allocations by +1400 households and +3500 population.

Council Staff recommend some amount of community forecast increase as well; amounts to be determined.

Item 11.b. Stormwater Management (Cameran J. Bailey 651-602-1212)
The City's adopted 2040 Comprehensive Plan has a Natural Environment and Water Resources Management policy stating "Utilize more green infrastructure practices on public and private sites." In support of that policy, Council Staff recommends the development and inclusion of greenroof systems as integrated components of the AUAR area's stormwater management plan. Greenroof systems increase stormwater retention and detention capacity and performance, respectively. Greenroof systems also provide habitat to wildlife (over 30 species of birds and pollinating insects have made the 60,000+ square feet of greenroofs home at the "Dakotah! Sport and Fitness" facilities in Shakopee). Greenroofs also increase the energy efficiency of buildings and decrease the existing urban heat island effect generated by the AUAR area.

Council Staff recommend the following tools to assist with additional information:

- The Center for Neighborhood Technology's "Green Values Stormwater Management Calculator" (*https://greenvalues.cnt.org/index.php*) for cross-evaluating multiple green stormwater management practices by cost, function, and maintenance.
- The MPCA's online Minnesota Stormwater Manual offers guidance for calculating stormwater management values (*https://stormwater.pca.state.mn.us/index.php/Green_roofs*).
- The Council's Surface with Purpose Tool offers technical assistance for projecting green roof stormwater retention capabilities (*https://metrocouncil.org/Communities/Planning/Local-Planning-Assistance/Solar/Surface-with-Purpose-Interactive.aspx*).

Item 13.d. Adverse effects to fish, wildlife, plant communities, and sensitive ecological resources. (Cameran J. Bailey 651-602-1212)
"Native plantings and increased green space are encouraged by the City to promote pollinator habitat within the AUAR study area. A goal of the Burnsville Center Village Redevelopment Vision is to increase green space within the AUAR study area to reduce the amount of impervious surfaces and reduce the potential for an urban heat island effect." The recommendations for the development and inclusion of green roof systems as part of the development mentioned in response to Item 11.b (above) are suggested for use in this section as well to best meet the intention of the City's stated goals.

Item 16.b. Vehicle Emissions. (Cameran J. Bailey 651-602-1212)
"Identify measures (e.g., traffic operational improvements, diesel idling minimization plan) that will be taken to minimize or mitigate vehicle-related emissions." There are over 1,000 parking stalls located at this site. Council Staff recommend city staff and the developer consider the integration of EV, or EV-ready, charging infrastructure at this proposed development to serve some portion of the parking spaces required to accommodate the proposed 1,600 residential apartment units, 200 hotel rooms, 1.1M square feet of commercial space, and 705,000 square feet of office, medical, and institutional square feet. Guidance can be found in the Great Plains Institute's "Becoming Electric Vehicle Ready" guideline document (*https://www.driveelectricmn.org/becoming-ev-ready/*).

The Council will not take formal action on the AUAR. If you have any questions or need further information, please contact Patrick Boylan, Principal Reviewer, at 651-602-1438 or via email at patrick.boylan@metc.state.mn.us.

Sincerely,

Angela R. Torres, AICP, Manager
Local Planning Assistance

CC: Tod Sherman, Development Reviews Coordinator, MnDOT - Metro Division
Phillip Sterner, Metropolitan Council District No. 15
Judy Sventek, Water Resources Manager
Patrick Boylan, Sector Representative/Principal Reviewer
Reviews Coordinator

N:\CommDev\LPA\Communities\Burnsville\Letters\Burnsville 2021 Burnsville Center Village Area Draft AUAR 22564-1.docx

DEPARTMENT OF ADMINISTRATION
STATE HISTORIC PRESERVATION OFFICE

June 11, 2021

Deb Garross
City Planner
City of Burnsville
100 Civic Center Parkway
Burnsville, MN 55337

RE: Burnsville Center Village Area Draft AUAR
Burnsville, Dakota County
SHPO Number: 2021-1945

Dear Deb Garross:

Thank you for consulting with our office on the Draft Alternative Urban Areawide Review (AUAR) for the Burnsville Center Village Area. Based on our review of the documentation, we conclude that there are no properties listed in the National or State Registers of Historic Places and no known or suspected archaeological properties in the area that will be affected by this project.

However, there are reported burial mounds in the vicinity of the proposed development area. Therefore, we recommend that you consult with the Minnesota Office of the State Archaeologist and the Minnesota Indian Affairs Council on the Draft AUAR.

Please note that this comment letter does not address the requirements of Section 106 of the National Historic Preservation Act of 1966 and 36CFR800, procedures of the Advisory Council on Historic Preservation for the protection of historic properties. If this project is considered for federal assistance, or requires a federal license or permit, it should be submitted to our office by the responsible federal agency.

Please contact Kelly Gragg-Johnson, SHPO Environmental Review Specialist, at kelly.graggjohnson@state.mn.us if you have any questions regarding our comments.

Sincerely,

Sarah J. Beimers
Environmental Review Program Manager

cc: Amanda Gronhovd, Office of the State Archaeologist
Melissa Cerda, Minnesota Indian Affairs Council

DEPARTMENT OF ADMINISTRATION
STATE ARCHAEOLOGIST

June 16, 2021

Deb Garross
City Planner
100 Civic Center Pkwy,
Burnsville, Minnesota, 55337
deb.garross@burnsvillemn.gov

RE: Burnsville Center Village Area AUAR

Deb Garross:

I appreciate being given the opportunity to comment on the above listed draft AUAR. Review of our files indicates that archaeological cemetery site lead 21DKaa, recorded as seven burial mounds, intersects the AUAR study area. Therefore, I recommend a qualified archaeologist conduct a comprehensive literature review to determine the potential for intact precontact and historical period archaeological or cemetery sites in the AUAR study area. The Minnesota Historical Society maintains a list of archaeologists at: http://www.mnhs.org/preservation/directory.

Please contact me if you have any questions or concerns.

Sincerely,

Jennifer Tworzyanski
Assistant to the State Archaeologist
Kellogg Center
328 West Kellogg Blvd
St Paul, MN 55102
651.201.2265
Jennifer.tworzyanski@state.mn.us