

EDEN PRAIRIE TOWN CENTER STATION

CITY OF EDEN PRAIRIE

SOUTHWEST CORRIDOR INVESTMENT FRAMEWORK
TRANSITIONAL STATION AREA ACTION PLAN



Hoisington Koegler Group Inc.



SOUTHWEST LRT
community works
www.swlrtccommunityworks.org



ABOUT THIS CHAPTER:

The Transitional Station Area Action Plans are the product of a Hennepin County led effort to help communities along the Southwest LRT corridor prepare for SW LRT's opening day in 2018 and beyond.

An individualized plan has been created for each of the 17 stations in the Southwest corridor, each plan comprising a chapter in the larger Southwest Corridor Investment Framework. The station area action plans suggest ways to build on local assets, enhance mobility, identify infrastructure needs, and capitalize on promising opportunities for development and redevelopment near each station.

Plan Components:

INTRODUCTION 16-2

A brief overview of the station location and its surroundings

WHERE ARE WE TODAY? 16-4

A description of existing conditions in the station area, including:

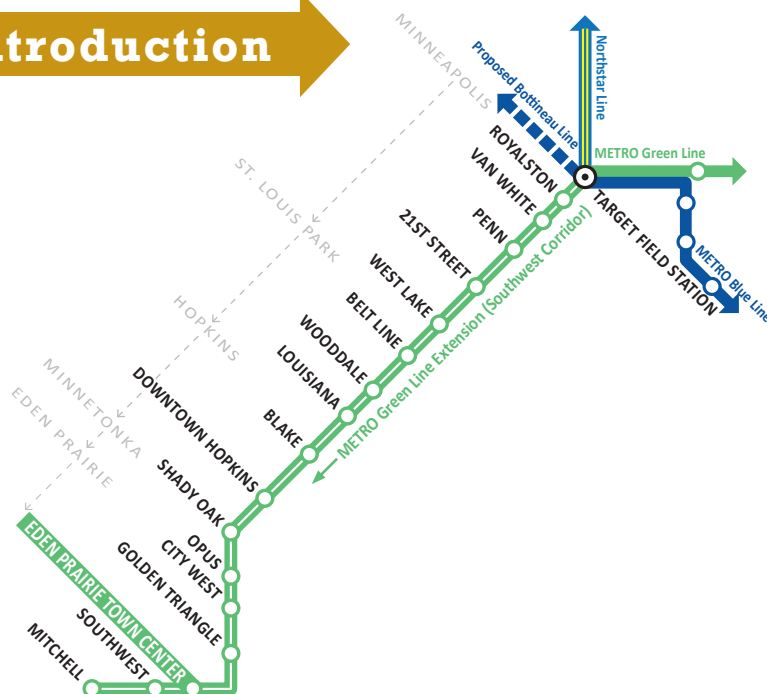
- » Land Use
- » Transit Connections
- » Access + Circulation Issues (Bike, Ped, and Auto)
- » Infrastructure Needs

WHERE ARE WE GOING? 16-8

This section presents a number of recommendations for the station area in anticipation of opening day needs and the long-term TOD environment. This includes:

- » Access + Circulation Plan
- » Station Area Site Plan
- » Infrastructure Plan
- » Development Potential
- » Summary of Key Initiatives

Introduction



EDEN PRAIRIE TOWN CENTER STATION WITHIN THE CORRIDOR:

A mixed-use town center structured around a walkable street and block network.

URBAN VILLAGE The Eden Prairie Town Center station, located on Eden Road adjacent to the Emerson Process Management building, is the southern most Urban Village along the corridor (see Place Types discussion beginning on p. 1-19). The area is dominated by commercial and retail uses including the Eden Prairie Center east of the station. Other land uses consist of medical offices and light industrial.

Over time, the area is envisioned to become a transit-oriented mixed-use town center with higher density uses surrounding the station. Ridership at the station will be generated by multiple users including local businesses, retail employees, and area residents.

To support neighborhood growth, improvements to the existing road network will be required to establish a walkable street and block network that can structure new development and enhance connectivity between area destinations.

NEIGHBORHOODS A small pocket of multi-family residential housing is located to the south and east of the station along Singletree Lane. The extension of sidewalks and trails from these neighborhoods to key destinations will enhance access and improve the overall pedestrian environment.

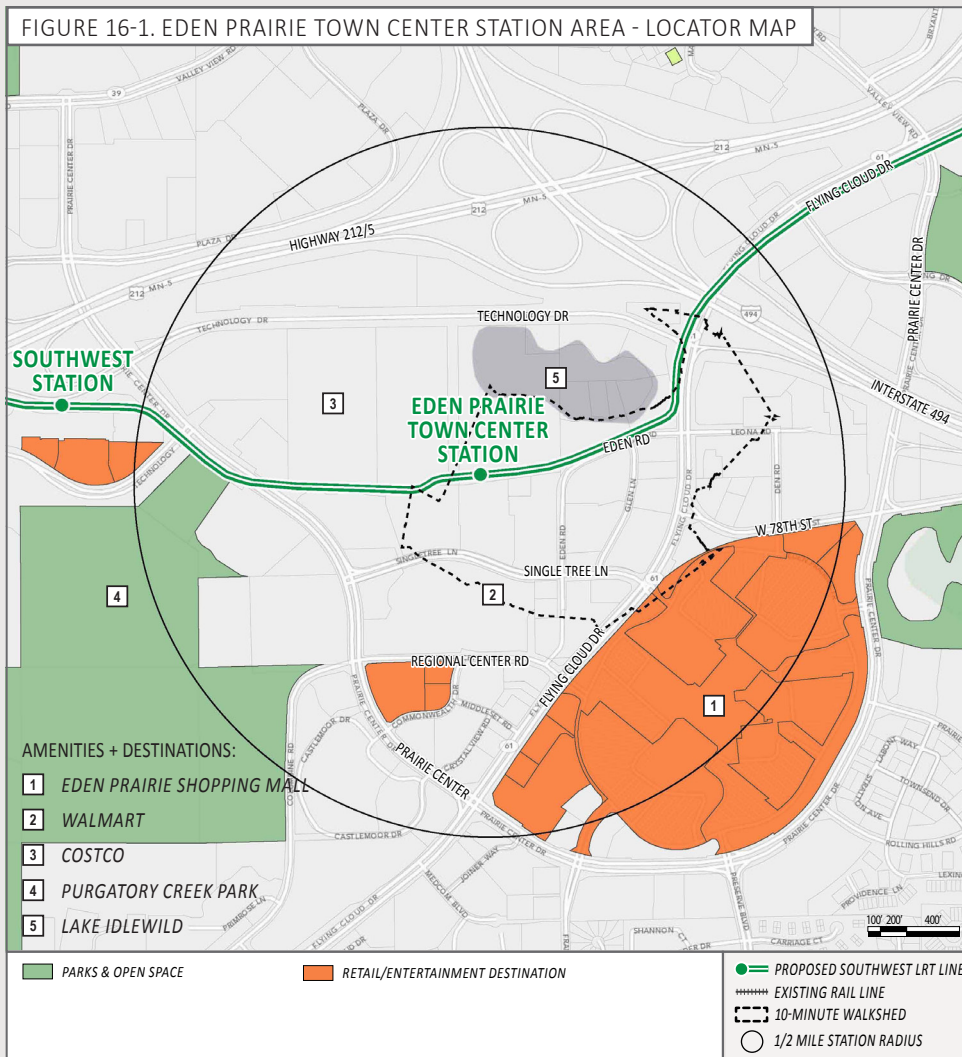
TRAIL CONNECTIONS Purgatory Creek Park is located west of the station area, providing access to trails surrounding the creek and wetland area.

OTHER DESTINATIONS Eden Prairie Center, a major retail destination, is located just east of the station area and is expected to be a significant destination along the Southwest Corridor. Lake Idlewild and Purgatory Creek Park are also within a short walk of the station.

Station Location

The Eden Prairie Town Center station is located in the heart of the future Town Center area. Today, the Town Center area consists of auto-oriented commercial and retail uses, multi-family residential, office, and light industrial uses.

The City of Eden Prairie has planned for this area to redevelop over time and become a more compact, pedestrian-friendly, mixed-use town center. Existing destinations in the area include the Eden Prairie Center shopping mall, Walmart, Costco, and other retail and restaurant businesses, Purgatory Creek Park, and Lake Idlewild. The Town Center station is anticipated to serve the local businesses, retail employees, and residents living in the area.



NOTE: 10-minute walkshed approximates the area accessible within a 10-minute walk from the station platform using only the existing sidewalk/trail network. See Glossary for walkshed assumptions and methodology.

EDEN PRAIRIE TOWN CENTER STATION AREA TODAY:



Picnic shelter at Purgatory Creek Park



View west along Technology Drive



Commercial/office along Technology Drive



Existing office use and parking



Existing manufacturing/light industrial



Purgatory Creek Park

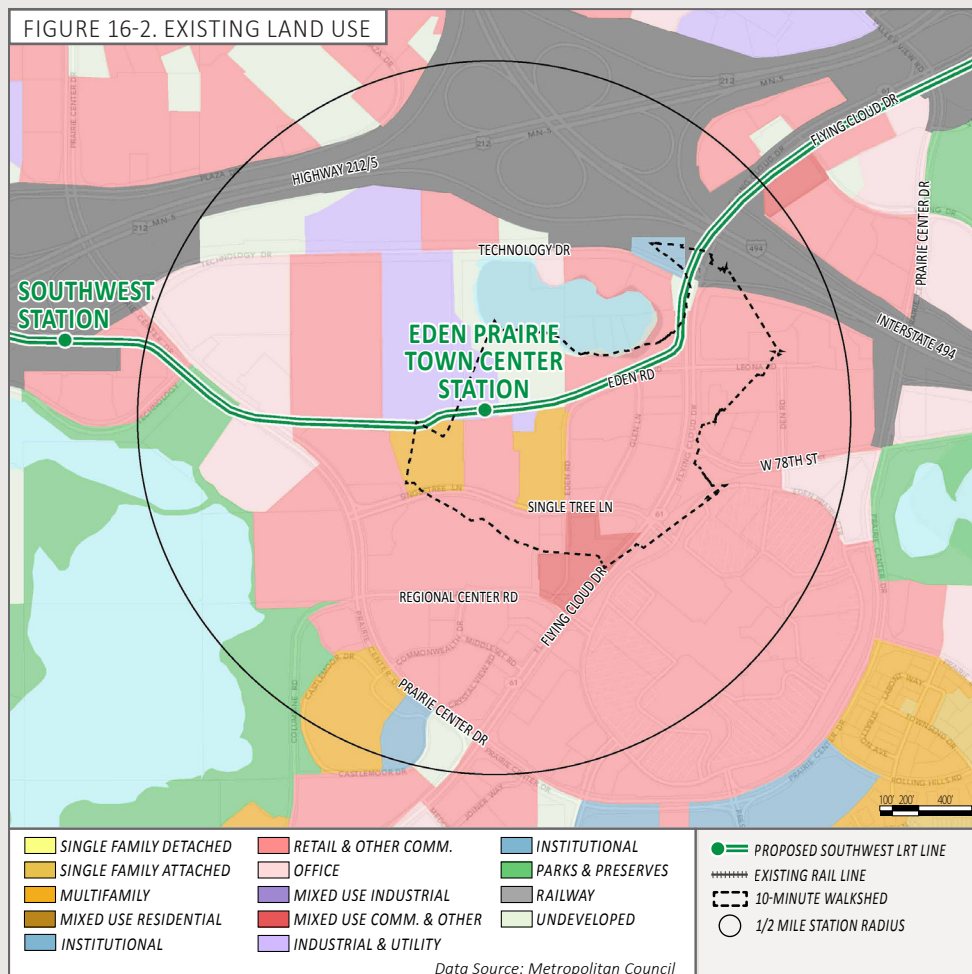
Where Are We Today?

The following section describes the station area's **EXISTING CONDITIONS**, including the local context, land uses, transit and transportation systems, pedestrian and bicycle facilities, assets, destinations, and barriers to accessing the station. This analysis of current conditions presents key issues and opportunities in the station area and informs the recommendations for future station area improvements.

NOTE: Existing conditions maps are based on data provided by Hennepin County and local municipalities. The data used to create each map is collected to varying degrees of accuracy and represents infrastructure and conditions at varying points in time. Actual conditions may vary slightly from what is shown.

Land Use

The predominant land use in the Town Center station area is retail and restaurant. The Eden Prairie Center shopping mall is located just outside of the existing 10-minute walkshed and east of the proposed station. Walmart and Costco stores are also located near the station area. Several other retail stores, shops, services, and restaurants also exist in the station area. In addition to retail uses, office, light industrial, multi-family housing, parks and open space uses exist in the station area. The City of Eden Prairie has planned for this area to redevelop over time and become a more compact, pedestrian-friendly, mixed-use town center served by public transit.

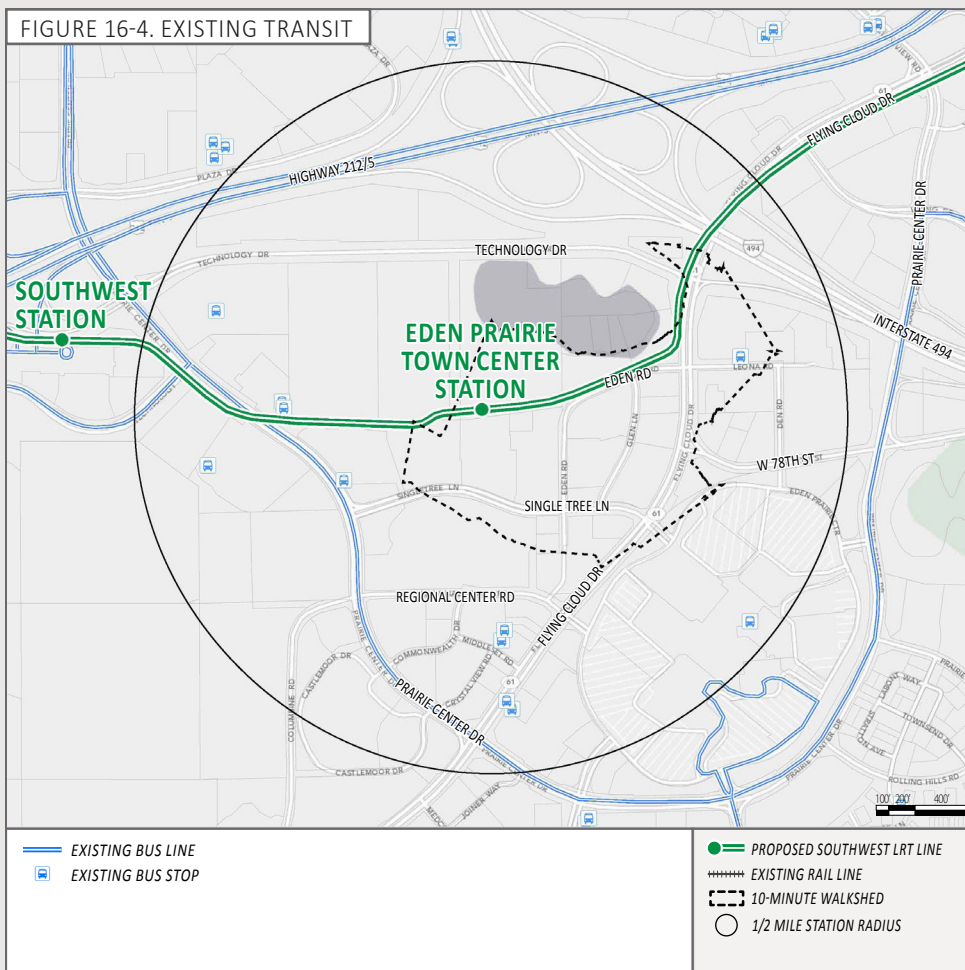
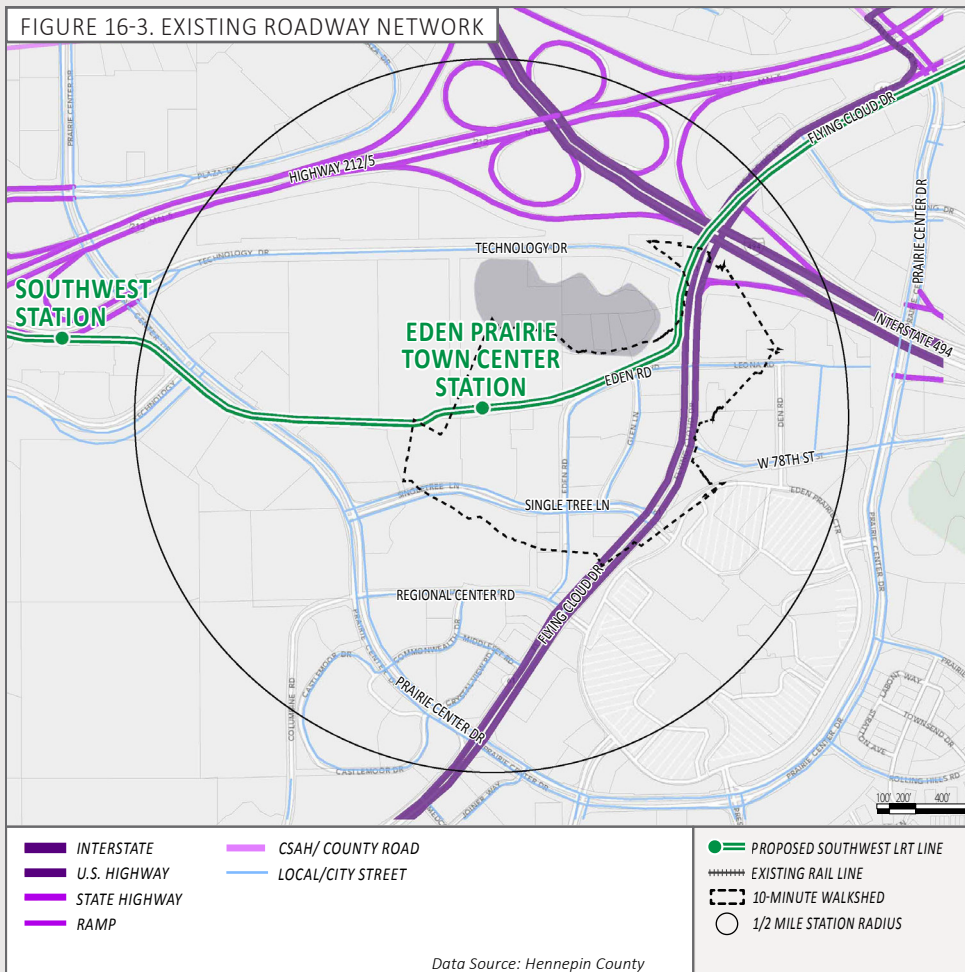


Roadway Network

The station area is characterized by large block sizes and several major roadways today. The existing road network sees heavy traffic from shoppers during certain times of the day and week. These roads are large and designed for the automobile, lacking pedestrian-friendly design elements. The proposed station location lacks road access today. New roadways would need to be designed and built to provide access to the station platform. These improvements should include the extension of Eden Road west to the station platform, and what the City has identified as a future “Main Street” that runs north-south in the center of the Town Center. Singletree Lane an important east-west roadway through the Town Center, provides access to several existing businesses. Singletree Lane has been identified to become a Complete Street, providing enhanced pedestrian and bicycle facilities. Prairie Center Drive is a wide roadway that carries heavy amounts of traffic around the Town Center and Eden Prairie Center shopping mall. Access to the mall is provided off Prairie Center Drive and Flying Cloud Drive. Flying Cloud Drive is another busy street that borders the east side of the Town Center and connects to destinations north and south of the Town Center. Technology Drive runs along the north side of the Town Center, running east-west. Highway 212 runs along the north side of the Town Center, north of Technology Drive, intersecting with I-494 northeast of the station area.

Transit

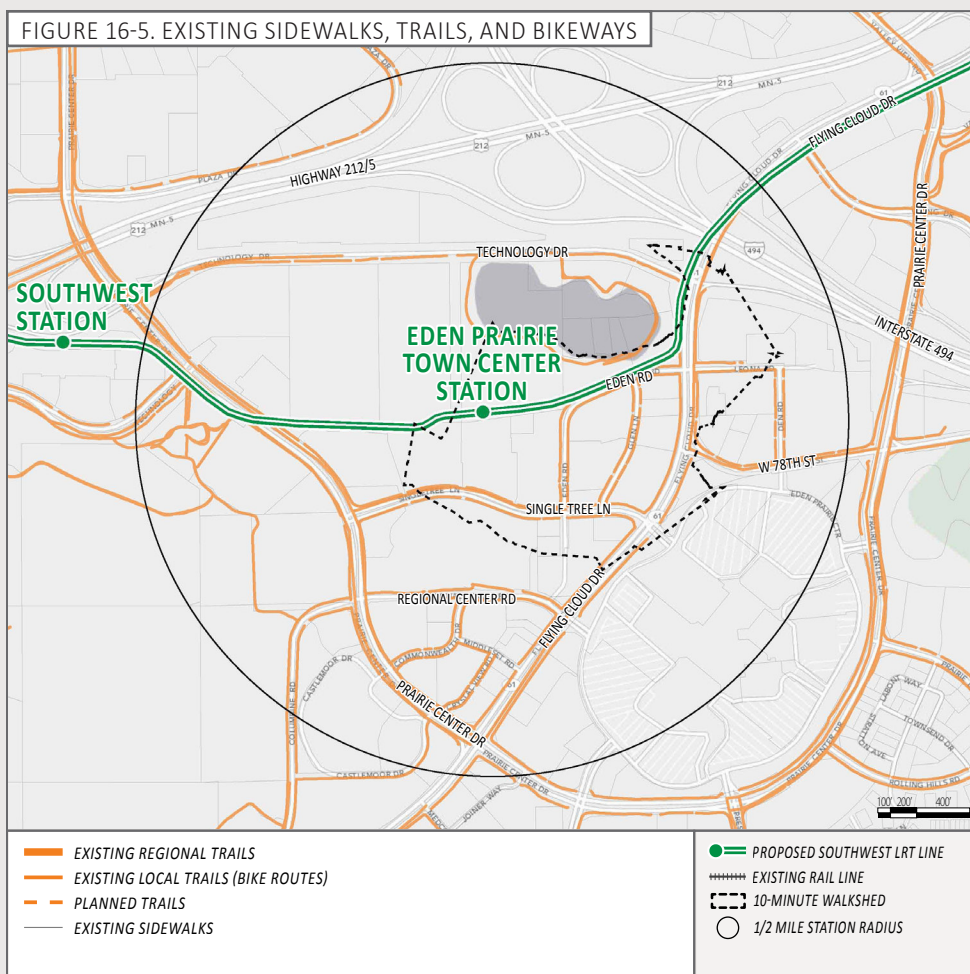
The Town Center station is located approximately a half-mile from the existing Southwest Transit Center, served by Southwest Transit express bus service. Southwest Transit bus routes #684, #690, #695 and #698 operate in the vicinity of the Town Center station. These routes run on Eden Prairie Center Drive and Technology Drive, with stops along each roadway. Several express routes also run along Highway 212 to the north of the station area.



Sidewalk, Trails and Bikeways

All of the roadways in the Town Center include sidewalks or trails, however, the large block sizes and wide roadways make it difficult for pedestrians to move about the area. Sidewalks and trails will need to be extended, along with new roadways, to serve the proposed station area. Today there are no roads or sidewalk connections to the proposed station platform.

FIGURE 16-5. EXISTING SIDEWALKS, TRAILS, AND BIKEWAYS



Sanitary Sewer

Sanitary sewer infrastructure consists of a collection of gravity flow sewer mains, lift stations, and pressurized forcemains that transport sewage to a wastewater treatment plant (WWTP). An efficient collection system has the capacity to accommodate all of the existing land uses within its particular sewershed. Beyond capacity, the material and age of pipes within a system can also impact a system's effectiveness.

Sanitary sewer infrastructure within the project area is typically maintained by either the City of Edin Prairie or by the Metropolitan Council Environmental Services (MCES) Division. MCES maintains a series of interceptor trunk sewers which collect sewage from the municipalities at key locations and convey sewage across community boundaries to regional WWTPs. Wastewater from the station area is treated by the MCES Blue Lake WWTP located in Shakopee.

FIGURE 16-6. EXISTING SANITARY SEWER

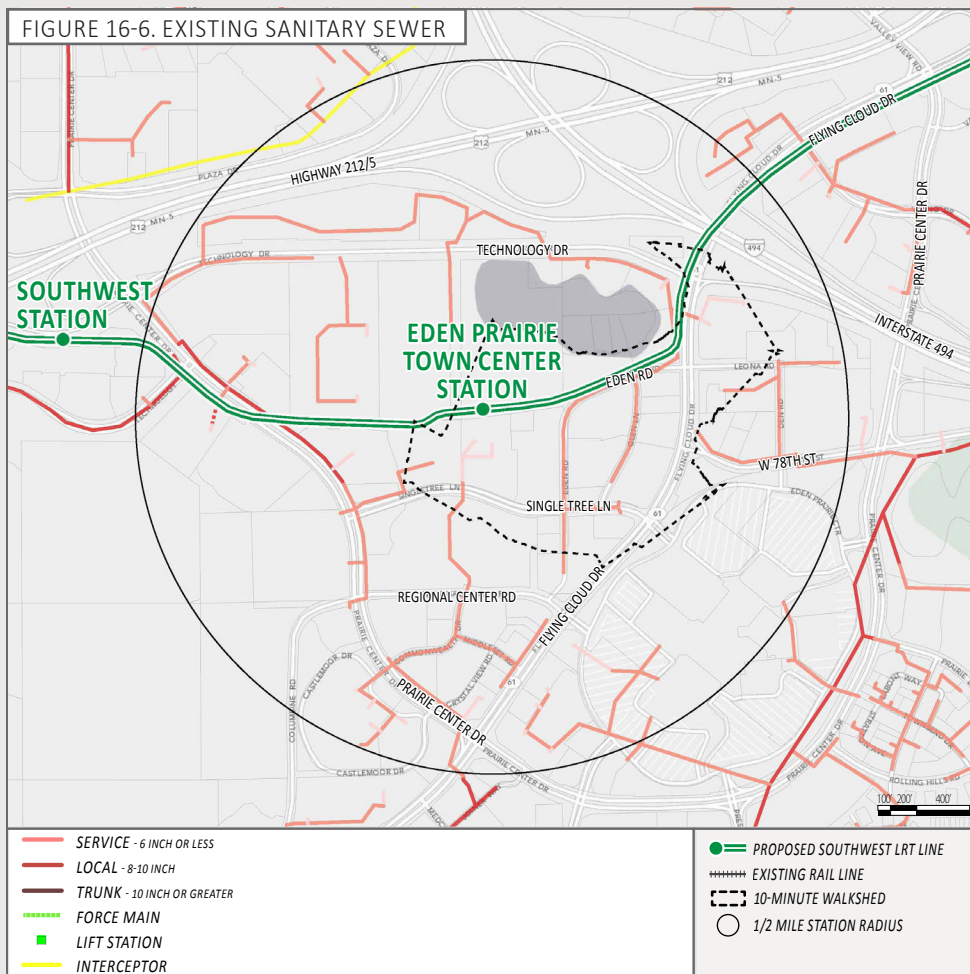
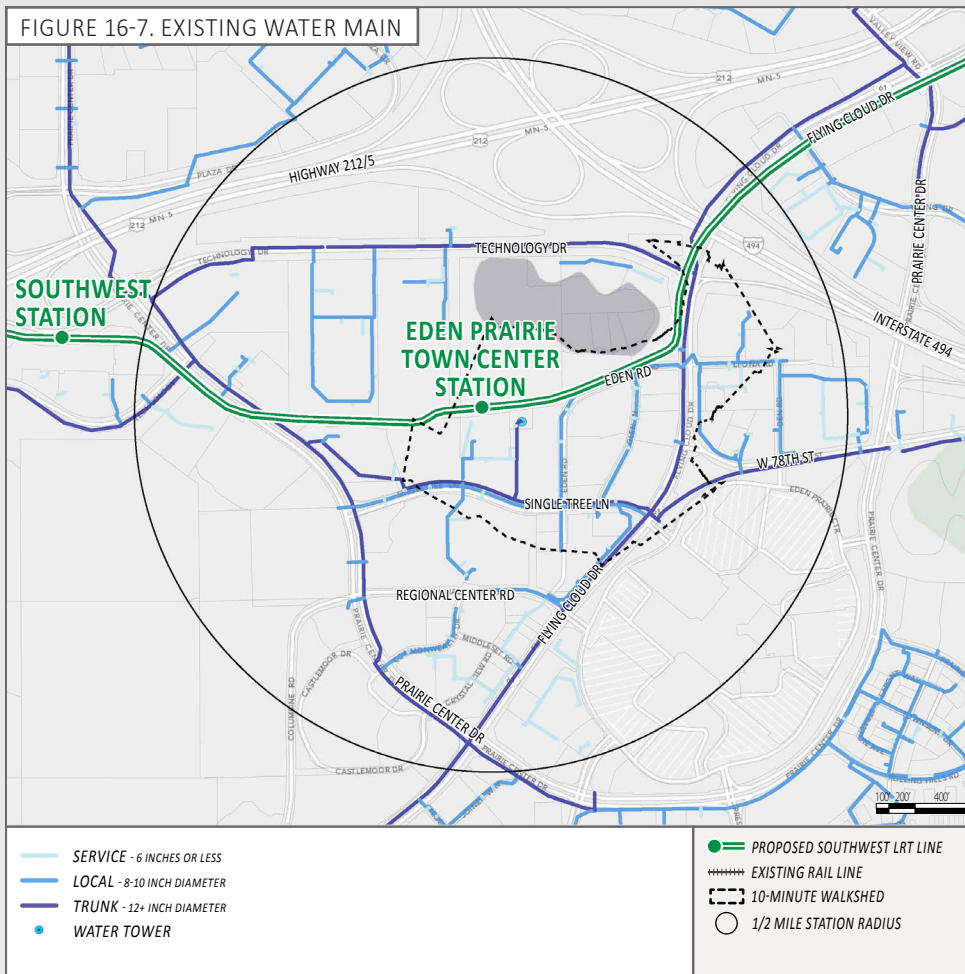


FIGURE 16-7. EXISTING WATER MAIN



Water Main

Water main distribution systems serve to supply potable water to individual properties and to support fire suppression throughout the community. A well-designed system can maintain adequate pressure to support demand of individual properties and provide high flow rates to fire hydrants/fire suppression systems in emergency situations. Because of the complexity of water distribution networks and the importance of pressure, flow, and water quality, City water system models are used to evaluate a system's adequacy. The material and age of the system's water mains can also be factors in system breaks, leaks, and pressure and flow degradations.

Water pressure and flow rates can be influenced by: the size of water main serving an area, proximity and elevation relative to a water tower, proximity to a trunk water main with high flow capacity, if the water main creates a loop, the demand of adjacent land uses, and the condition of the water main.

Stormwater

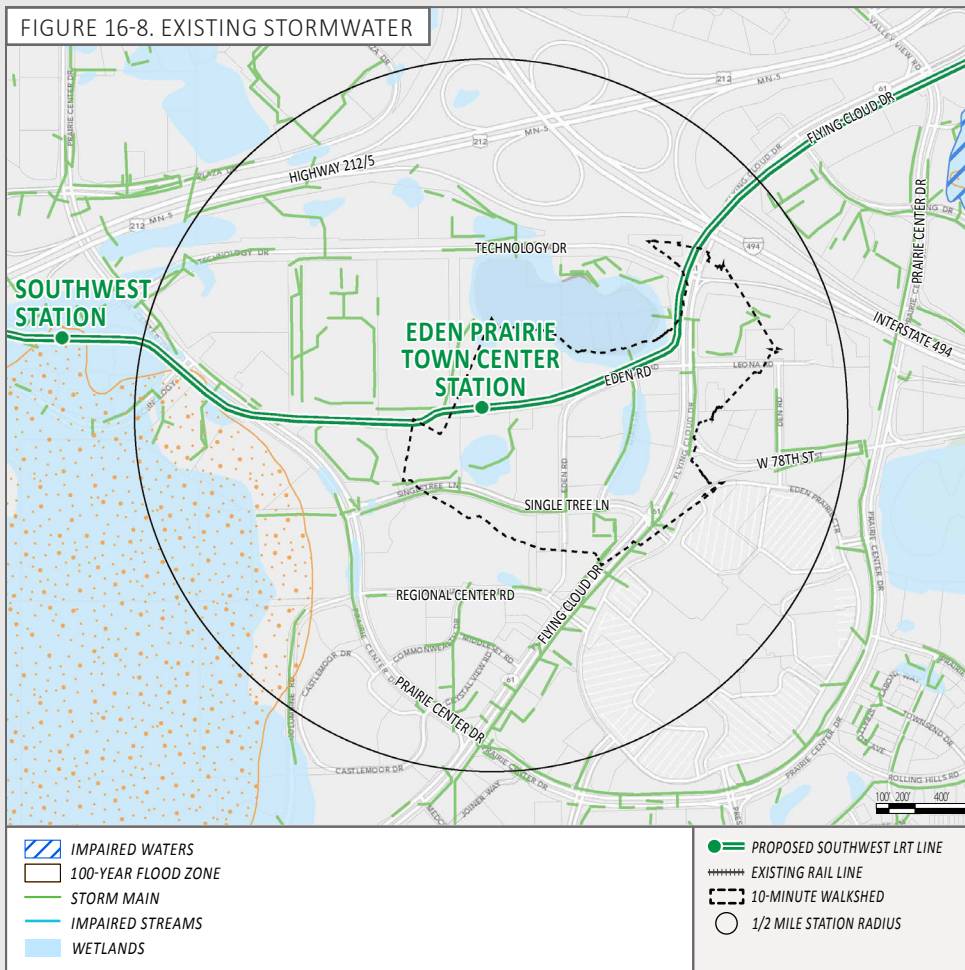
The station is located within the Riley-Purgatory-Bluff Creek Watershed District. The majority of the drainage from the 10-minute walk zone is directed through wetlands into Purgatory Creek and ultimately into Staring Lake southwest of the station. Staring Lake is impaired by nutrients and mercury. There is 100-year floodplain extending from the wetlands and Purgatory Creek.

Discharging within one mile of impaired water may trigger additional Minnesota Pollution Control Agency NPDES (National Pollution Discharge Elimination System) requirements which require additional stormwater management. For impaired waters where a TMDL (Total Maximum Daily Load) has been approved, these requirements may increase further. Zoning requirements as a result of being within the 100-year floodplain may limit development/redevelopment potential.

Any development/redevelopment that occurs in the station area is anticipated to improve the existing drainage conditions as a result of enforcing the City and the Watershed requirements.

The City is currently (Fall 2013) in process of completing a stormwater study for the Town Center area to investigate stormwater management near the station.

FIGURE 16-8. EXISTING STORMWATER



Where Are We Going?

The plans and diagrams on the following pages illustrate a range of recommendations for infrastructure improvements, station amenities, and potential redevelopment opportunities within the station area.

The ACCESS AND CIRCULATION PLAN shown in Figure 16-9 provides a high level view of how future transit, automobile, bike, and pedestrian systems will connect to the station area and its surroundings.

Figure 16-10 illustrates the STATION AREA IMPROVEMENTS that will facilitate access to and from the station and catalyze redevelopment in the station area. This includes opening day and long-term station area improvements

Figure 16-11 focuses on OPENING DAY STATION AREA IMPROVEMENTS only. These recommendations represent the improvements necessary to enhance the efficient function of the transit station, roadways, pedestrian and bicycle connections, and transit connections on opening day in 2018.

Station Area Improvements

The discussion below outlines a range of future station area improvements. While some of the identified improvements may be constructed as part of the LRT project itself, other improvements must be funded, designed and constructed by other entities and will require coordination between the City, County, and Metro Transit as well as local stakeholder and community groups.

ROADWAYS

Opening Day Improvements:

- » Build an extension of Eden Road, west to the station platform. Include sidewalks, tree plantings, and bike facilities.
- » Build a portion of what the Town Center plans identify as Main Street, from Singletree Lane, running north to Technology Drive. Build this street in compliance with the Town Center Streetscape Master Plan, including potential relocation and conversion of the existing Excel power lattice structure to a monopole.

Long-Term Improvements:

- » The Town Center plan calls for a collection of new roadways (including realignment of Singletree Lane across Flying Cloud Drive) that will create smaller block sizes and form a gridded pattern of streets. Figures 19-11 and 19-12 illustrate a network of new roads consistent with the Town Center plan. These new roads and the new parcels associated with them should catalyze redevelopment in the area into a compact mixed-use town center environment served by light rail transit. All new roads should include pedestrian- and bike-friendly streetscapes, safe, and well-marked pedestrian crossings.

PEDESTRIAN CONNECTIONS

Opening Day Improvements:

- » Focus sidewalk and streetscape enhancements along Singletree Lane, Eden Road, and the new Main Street.
- » Provide safe and convenient pedestrian connections to the nearby regional trails along Flying Cloud Drive, Prairie Center

Drive, Technology Drive, and at Purgatory Creek Park.

- » Improve pedestrian crossings along Singletree Lane, Flying Cloud Drive, Prairie Center Drive, and Eden Road.
- » Design Singletree Lane as a complete, multi-modal street with facilities to enhance transit, pedestrian, and bicycle movement.
- » Design the future Main Street as a Complete Street, accommodating multiple modes of transportation, consistent with the Town Center Streetscape Master Plan.

Long-Term Improvements:

- » Provide sidewalk and streetscape enhancements along existing and proposed roadways consistent with the Town Center plan. The plan calls for a new network of streets on a grid, with smaller block sizes, suitable for a more compact, mixed-use town center.
- » Improve pedestrian crossings along all new roadway intersections that will be constructed consistent with the Town Center plan.

TRANSIT CONNECTIONS

Opening Day Improvements:

- » Improve pedestrian connections between the LRT station and bus transit stops located along Singletree Lane and Technology Drive, and accommodate future bus service along the new Main Street and the extension of Eden Road.

BIKE CONNECTIONS

Opening Day Improvements:

- » Provide on-street bike facilities (lanes, routes, signage, etc.)



Streetscape enhancements



Example of public plaza near station platform

on the new Main Street, Eden Road, and Singletree Lane to better connect the station to nearby homes, businesses, shops, amenities, and destinations.

- » Provide bike parking, lockers, and bike share facilities in a highly visible area near the station platform.
- » Provide bike connections to the nearby regional trails along Flying Cloud Drive, Prairie Center Drive, Technology Drive, and at Purgatory Creek Park.
- » Provide on-street bike lanes on Singletree Lane and the new Main Street.

PARK AND RIDE

Opening Day Improvements:

- » Park and ride facilities may be necessary to reduce the occurrence of “hide and ride” at this station. Identify a site near the station platform suitable for park and ride facilities.

KISS AND RIDE

Opening Day Improvements:

- » Kiss and ride facilities should be located near the station platform along Eden Road.
- » Ensure that kiss and ride facilities are designed to accommodate full-sized buses.

STATION AMENITIES (Beyond SW LRT Base Project Scope)

Opening Day Improvements:

- » Wayfinding – include signage and wayfinding near the station area platform, the park and ride facility and along trails and sidewalks near the station. Include wayfinding/signage at key destinations with the Town Center, including the Eden Prairie Center shopping mall.
- » Seating – provide comfortable and durable seating near the station platform and at the park and ride facility.

- » Lighting – provide adequate lighting for the safety of pedestrians, bicyclists, and motorists near the station platform, at the park and ride facility, nearby bus stops, and near the kiss and ride drop-off.
- » Plaza – provide a small public plaza area near the station platform to provide transit users with a paved queue area to wait for LRT trains and move about the station area.
- » Public Art – provide public art in the station area.
- » Bike Facilities – provide bicycle parking, lockers, pumping station, and bike share facilities in a highly visible area near the station platform.

DEVELOPMENT POTENTIAL

Opening Day Improvements:

- » The site located south of the proposed LRT station platform (Brunswick Bowling Center) represents an opportunity for opening day redevelopment potential. The park and ride facility could potentially be developed here along with other uses. This may be an opportunity for joint development.
- » The city-owned daycare at Singletree Lane, between Eden Road and Glen Lane, along with the property immediately north provides another opportunity for opening day redevelopment and another potential site for Joint Development with a park and ride facility.

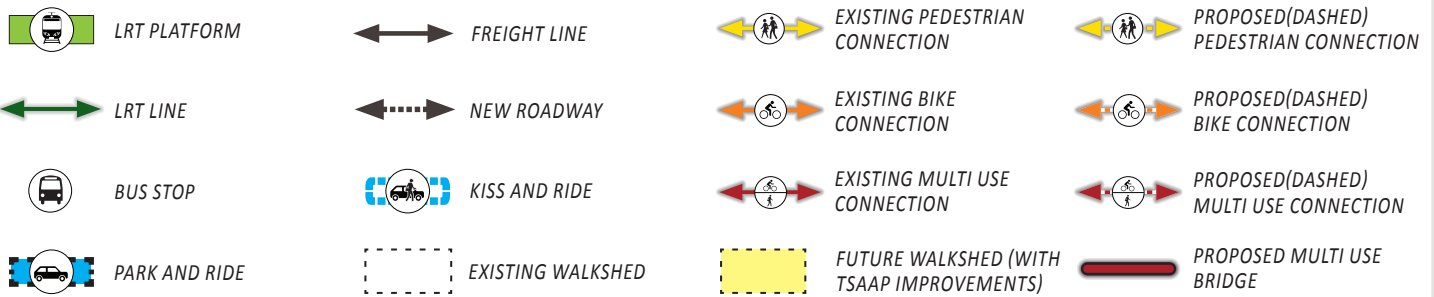
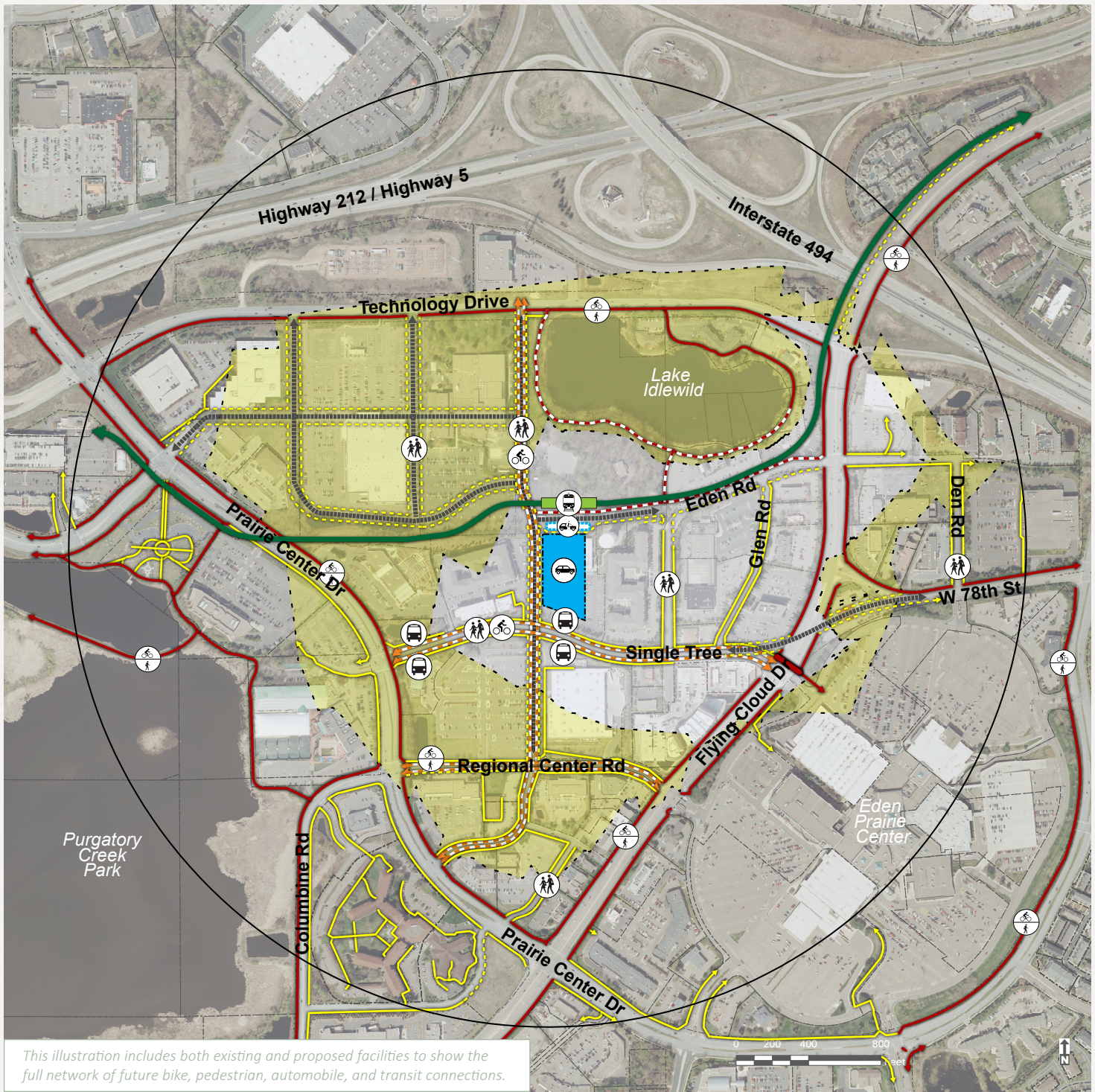
Long-Term Improvements:

- » See the “Development Potential” discussion on page 16-18 for more on long-term development opportunities.

UTILITIES

- » See the “Station Area Utility Plan” beginning on page 16-20 for all utility recommendations.

FIGURE 16-9. ACCESS + CIRCULATION PLAN



NOTE: Existing walkshed approximates the area accessible within a 10-minute walk from the station platform using only the existing sidewalk/trail network. Future walkshed incorporates all proposed improvements to the sidewalk/trail network. Walksheds are based on GIS modeling and available sidewalk/trail information- and may not reflect exact on-the-ground conditions. See Glossary for detailed explanation of walkshed assumptions and methodology.

FIGURE 16-10. STATION AREA IMPROVEMENTS

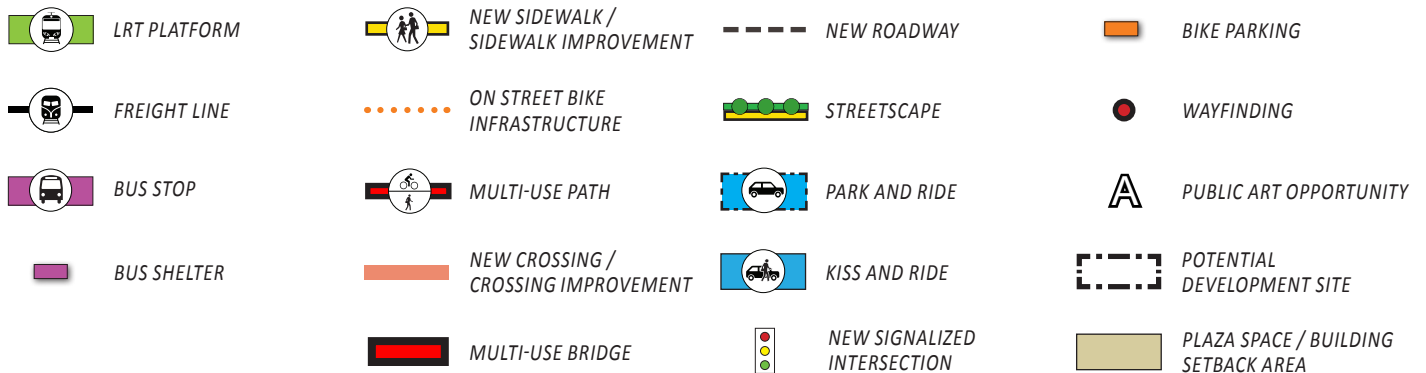
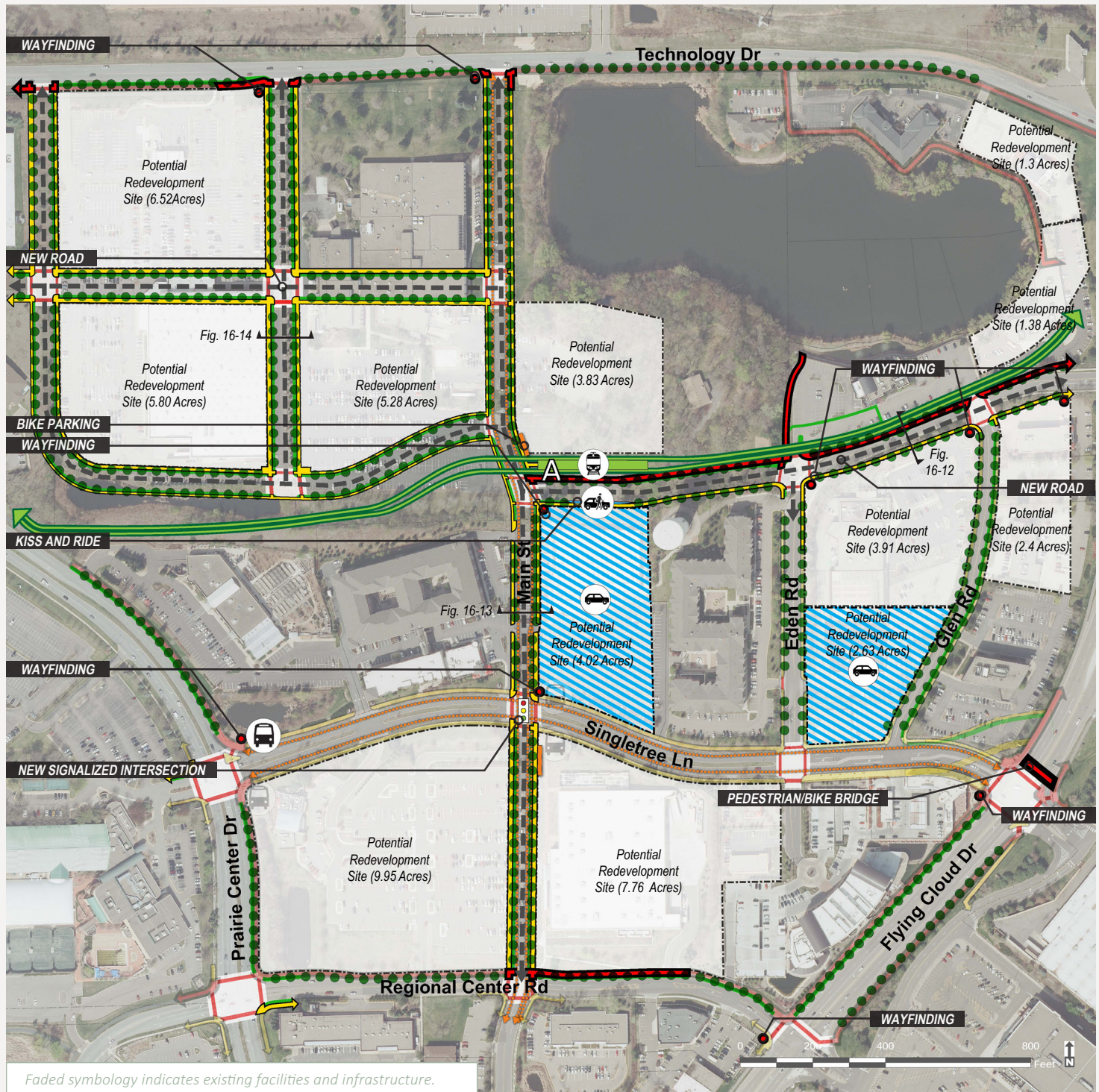
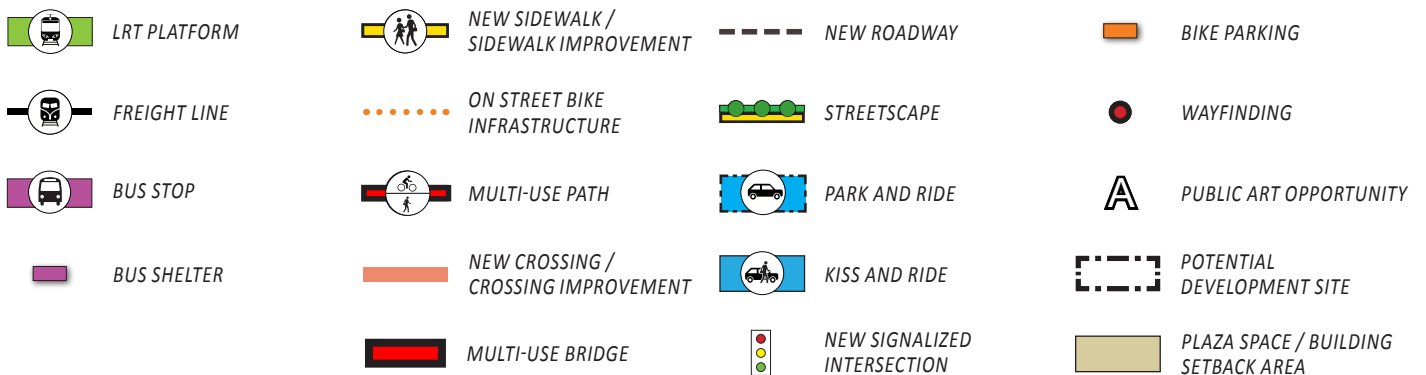
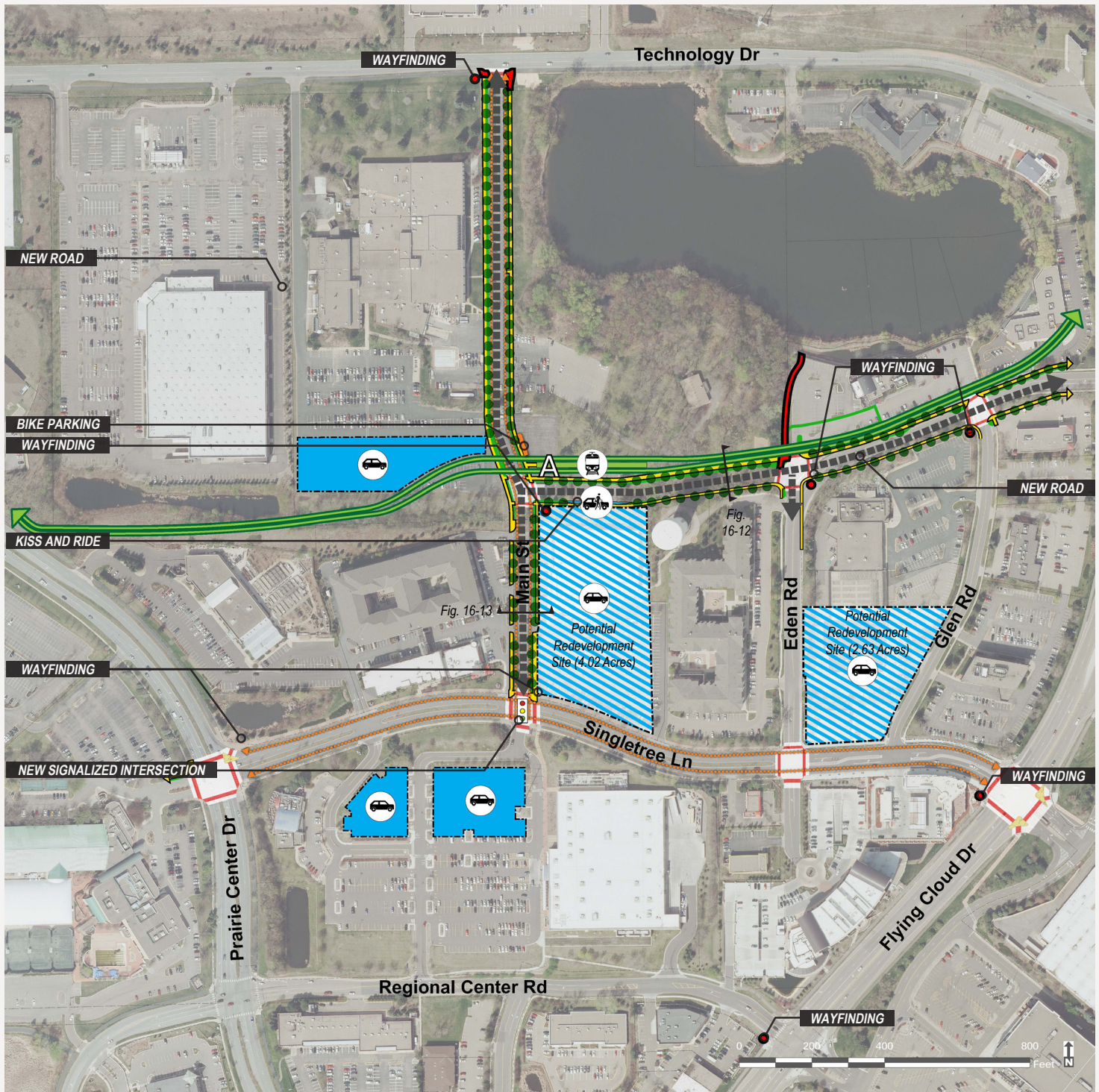


FIGURE 16-11. OPENING DAY STATION AREA IMPROVEMENTS



Conceptual Street Sections

The street cross section illustrated below is conceptual and represents a potential future streetscape condition, addressing facilities for a variety of transportation modes, streetscape amenities, and the relationship between buildings and the street edge. Further design and engineering work will be required to ensure the streetscape is in compliance with City and/or County design standards and needs.

EDEN ROAD

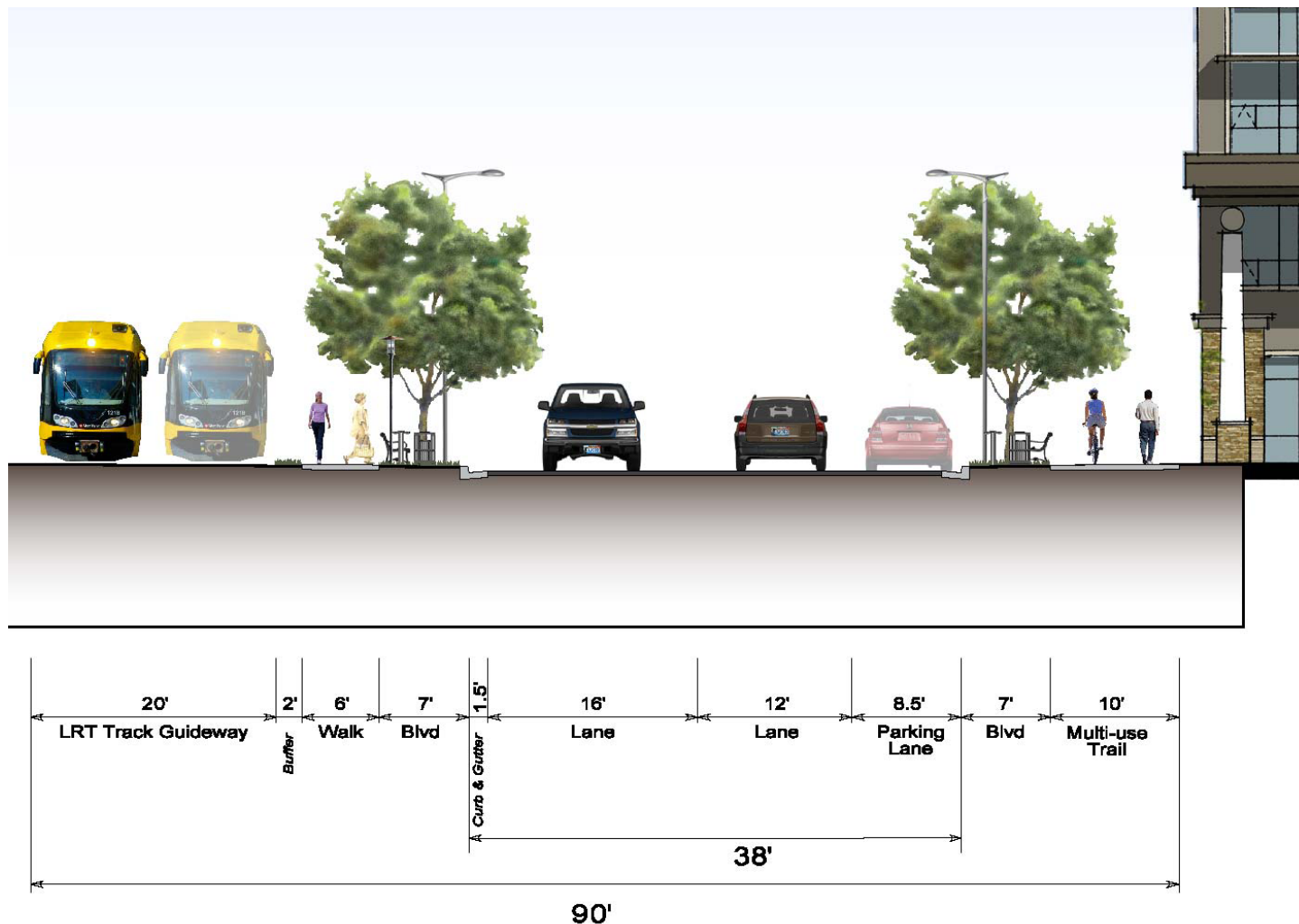
Dimensional Criteria:

- » 90 feet Right-of-Way Width
- » 38 feet Pavement Width (2-way)
- » 20'-30' o/c Street Tree Spacing
- » 6'-0" Sidewalk Width
- » 10'-0" Trail Width

Design Features:

- » Sidewalk (north side of street)
- » Trail (south side of street)
- » On-Street Parking (south side of street)
- » Street Trees/Plantings/Raingardens
- » Streetscape Furnishings (seating, planters, trash receptacles, bicycle racks)
- » Signage/Wayfinding
- » Transit Facilities (shelters, seating, signage, lighting)
- » Street and Pedestrian Lighting

FIGURE 16-12. CONCEPTUAL STREET SECTION - EDEN ROAD



Conceptual Street Sections (Continued)

The street cross section illustrated below is conceptual and represents a potential future streetscape condition, addressing facilities for a variety of transportation modes, streetscape amenities, and the relationship between buildings and the street edge. Further design and engineering work will be required to ensure the streetscape is in compliance with City and/or County design standards and needs.

MAIN STREET (MCA)

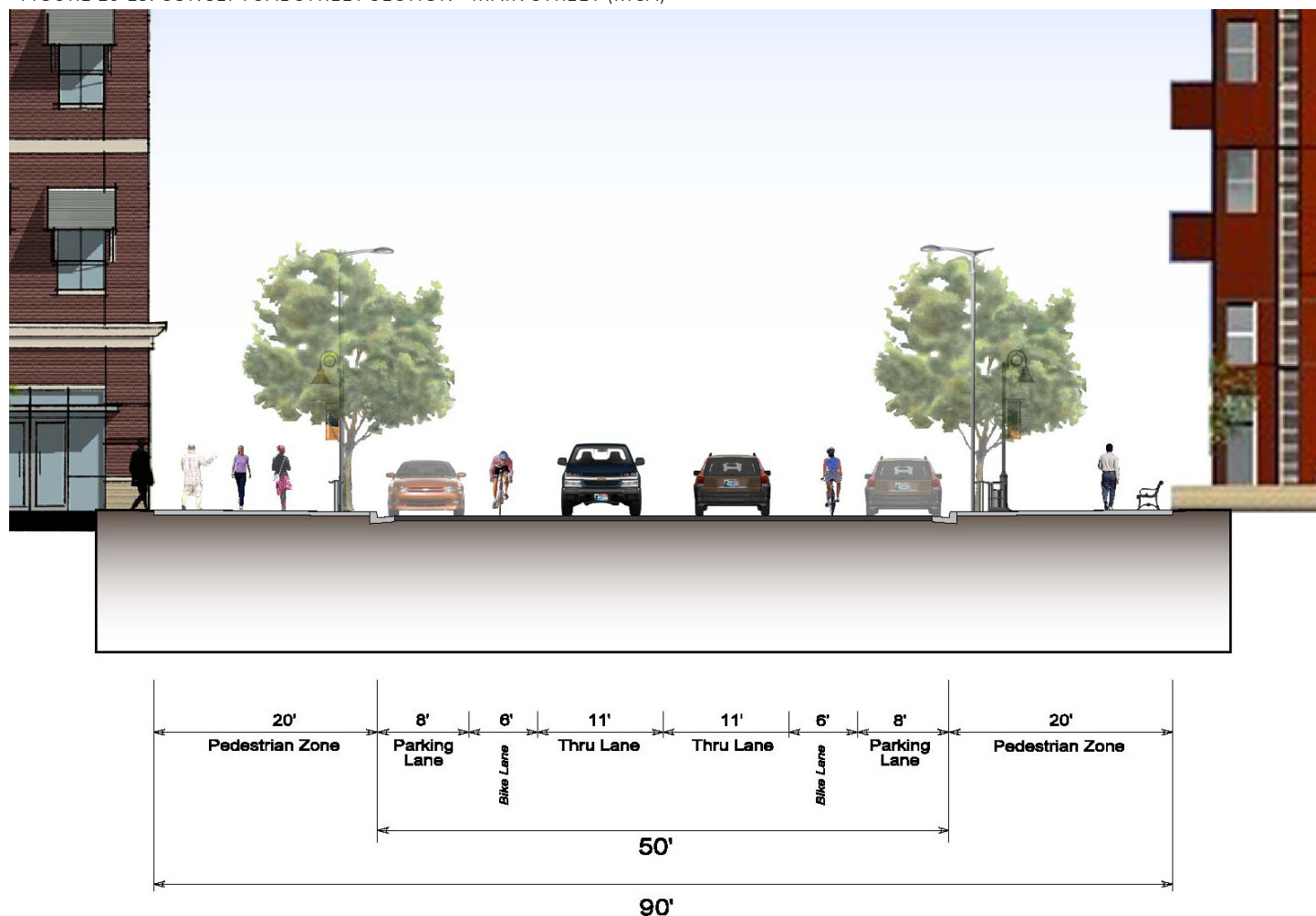
Dimensional Criteria:

- » 90 feet Right-of-Way Width
- » 50 feet Pavement Width (2-way)
- » 20'-30' o/c Street Tree Spacing
- » 20' Pedestrian Zone Width

Design Features:

- » Sidewalks
- » Bicycle Lanes (6'-0")
- » On-Street Parking
- » Street Trees/Plantings/Raingardens
- » Streetscape Furnishings (seating, planters, trash receptacles, bicycle racks)
- » Signage/Wayfinding
- » Street and Pedestrian Lighting
- » Public Art
- » Pedestrian-Friendly Crossings (markings, countdown traffic signals, ADA features)

FIGURE 16-13. CONCEPTUAL STREET SECTION - MAIN STREET (MCA)



Conceptual Street Sections (Continued)

The street cross section illustrated below is conceptual and represents a potential future streetscape condition, addressing facilities for a variety of transportation modes, streetscape amenities, and the relationship between buildings and the street edge. Further design and engineering work will be required to ensure the streetscape is in compliance with City and/or County design standards and needs.

NEW ROAD SEGMENTS

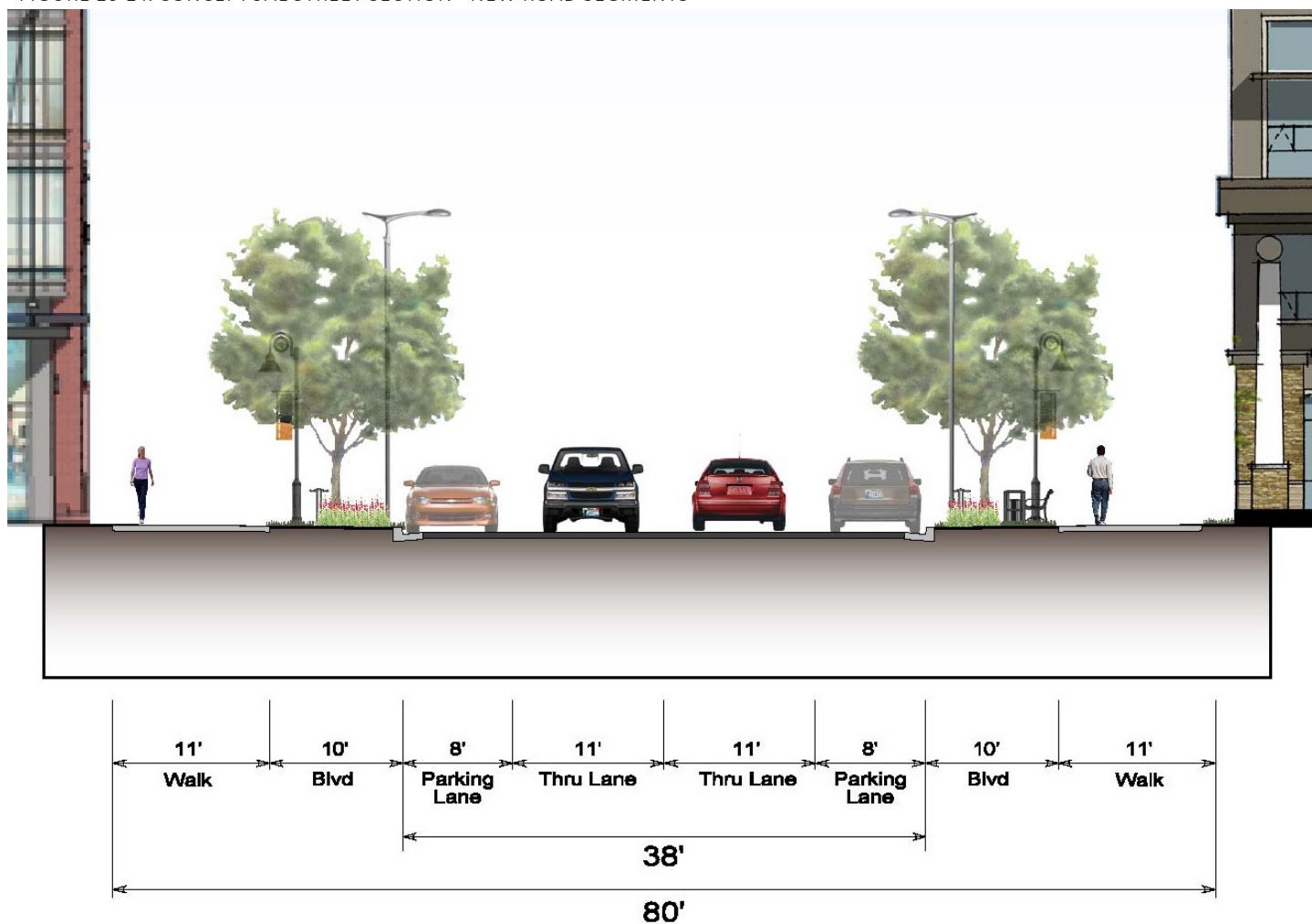
Dimensional Criteria:

- » 80 feet Right-of-Way Width
- » 38 feet Pavement Width (2-way)
- » 20'-30' o/c Street Tree Spacing
- » 11'-0" Sidewalk Width

Design Features:

- » Sidewalks
- » On-Street Parking
- » Street Trees/Plantings/Raingardens
- » Streetscape Furnishings (seating, planters, trash receptacles, bicycle racks)
- » Signage/Wayfinding
- » Transit Facilities (bus stops/layovers, shelters, seating, signage, lighting)
- » Street and Pedestrian Lighting
- » Public Art
- » Pedestrian-Friendly Crossings (markings, countdown traffic signals, ADA features)

FIGURE 16-14. CONCEPTUAL STREET SECTION - NEW ROAD SEGMENTS



Opening Day Improvements

The following tables and diagrams outline the proposed improvements to be implemented in advance of SW LRT's opening day in 2018. Table 16-1 and Figure 16-15 show opening day improvements that are part of the SW LRT anticipated base project scope; these improvements will be part of the overall project cost for construction of the LRT line. Table 16-2 and Figure 16-16 include opening day improvements that are recommended as part of the Southwest Corridor Investment Framework and are beyond the SW LRT anticipated base project scope. Table 16-3 (also shown in Figure 16-16) includes locally requested "betterments" - or improvements that cities have requested to be included in the base project scope pending funding availability.

TABLE 16-1. SOUTHWEST LRT ANTICIPATED BASE PROJECT SCOPE - OPENING DAY STATION AREA IMPROVEMENTS

PLAN KEY	IMPROVEMENT	PROJECT LOCATION	PROJECT NOTES
A	LRT Platform	Along north side of Eden Road Extension, just east of the future Main Street	Includes related LRT infrastructure
B	Park and Ride	Existing surface parking lots near LRT station	160 stall leased surface park and ride lot (includes lighting and ped access to LRT station)
C	Kiss and Ride	Eden Road (extension)	Pullout dropoff area on Eden Road extension
D	Roadways	Eden Road extension	New road from existing Eden Road west to western edge of station platform (includes lighting and sidewalks)
E	Sidewalk/Trail	Along Eden Road extension	Sidewalks along both sides of new road
F	Sidewalk/Trail	LRT Platform to Singletree	Sidewalk and easement
G	Intersection enhancements	Eden Road	New crosswalks and traffic signals at the new road and Eden Road intersection
H	Intersection enhancements	Eden Road	New crosswalks and traffic signals at the Glen Lane and Eden Road intersection
I	Bike Facilities	Near station platform	Allowance for bike storage
J	Wayfinding	Near station platform	Allowance
K	Landscaping	Near station platform	Allowance (includes landscape along new road segment)
L	Water*	Near station platform	New water service and fire hydrant to station
M	Utilities*	Project limit area	Adjustment of existing utilities
N	Stormwater management*	Near station platform	Allowance

Note: Anticipated Southwest LRT Base Project Scope as of December 2013 (subject to change)

** Improvement not symbolized on opening day figures (exact location to be determined as part of the base project scope)*

TABLE 16-2. SOUTHWEST CORRIDOR INVESTMENT FRAMEWORK (TSAAP) - OPENING DAY STATION AREA IMPROVEMENTS

PLAN KEY	IMPROVEMENT	PROJECT LOCATION	PROJECT NOTES	PRIORITY
1	Intersection enhancements	Singletree Lane at future Main Street	Enhanced crosswalks, traffic signal, and turn lanes on Singletree Lane	Primary
2	Intersection enhancements	Singletree Lane	Enhanced pedestrian crossings along Singletree Lane	Secondary
3	Public Art	Station Area	Incorporate public art (beyond SPO Improvements)	Secondary
4	Bike Facilities	Near station platform	Bike parking, lockers and bike share facilities (beyond SPO improvements)	Primary
5	Bike Facilities	Singletree Lane, Flying Cloud Drive to Prairie Center Drive	On-street bike lanes	Secondary
6	Bike Facilities	Future Main Street (per Major Study Area Plan), LRT station south to Singletree Lane	On-street bike lanes	Primary
7	Bike Facilities	Future Main Street (per Major Study Area Plan), LRT station north to Technology Drive	On-street bike lanes	Secondary
8	Wayfinding	Station Area	Signage and wayfinding (beyond SPO improvements)	Primary
9	Water	Future Main Street	Construct water main in conjunction with roadway construction	Primary
10	Public Plaza	North of station platform	Includes paving, planting, seating, and lighting (beyond SPO improvements)	Primary

TABLE 16-3. SOUTHWEST LRT LOCALLY REQUESTED BETTERMENTS - OPENING DAY STATION AREA IMPROVEMENTS

PLAN KEY	IMPROVEMENT	PROJECT LOCATION	PROJECT NOTES
B1	Roadways	Future Main Street (per Major Study Area Plan), LRT station south to Singletree Lane	Construct new road from LRT station south to Singletree Lane, Convert Xcel powerline lattice structure to monopole.
B2	Roadways	Future Main Street (per Major Study Area Plan), LRT station north to Technology Drive	Construct new road from LRT station north to Technology Drive, Convert Xcel powerline lattice structure to monopole.
B3	Sidewalk/Trail	Future Main Street (per Major Study Area Plan), LRT station south to Singletree Lane	Construct sidewalks along new roadway
B4	Sidewalk/Trail	Future Main Street (per Major Study Area Plan), LRT station north to Technology Drive	Construct sidewalks along new roadway

FIGURE 16-15. SOUTHWEST LRT ANTICIPATED BASE PROJECT SCOPE - OPENING DAY STATION AREA IMPROVEMENTS

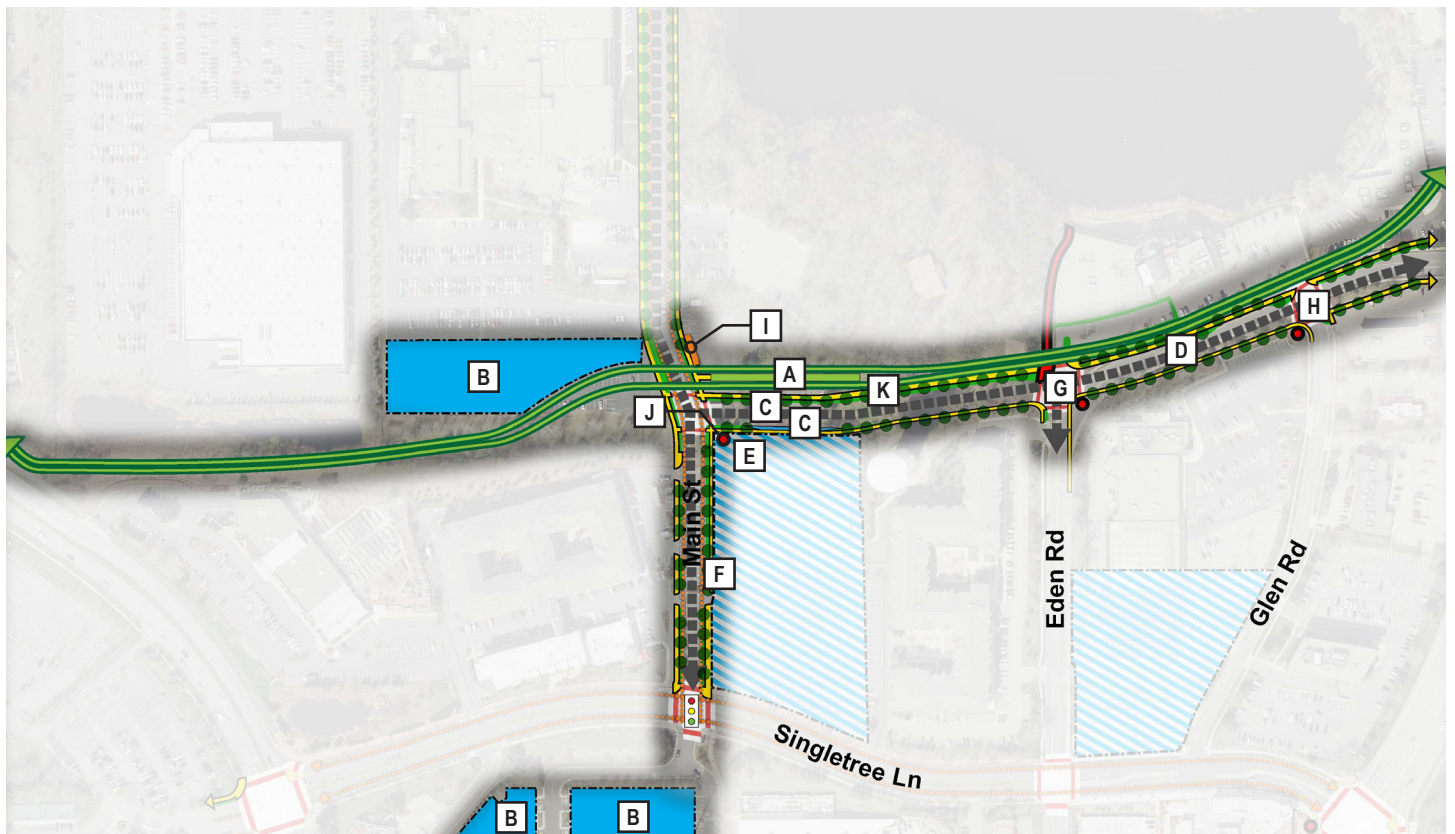
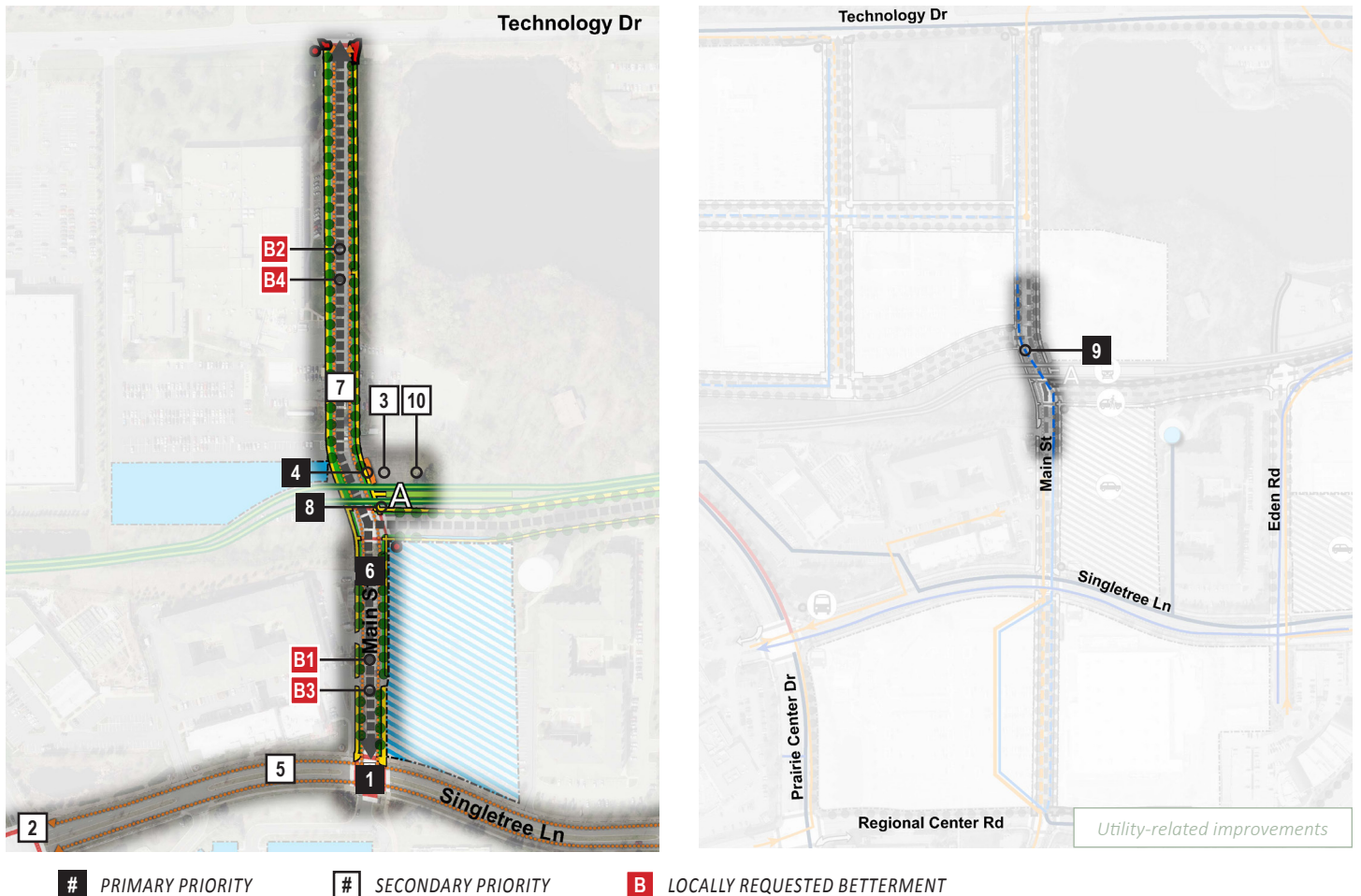


FIGURE 16-16. SW CORRIDOR INVESTMENT FRAMEWORK (TSAAP) - OPENING DAY STATION AREA IMPROVEMENTS + BETTERMENTS



Development Potential

OVERVIEW

Several factors surrounding the Town Center station present opportunities for future redevelopment. In addition to a new LRT station, other nearby destinations and amenities that might drive development interest include the Eden Prairie Center shopping mall, other nearby retail destinations and the Purgatory Creek Park and Open Space area.

The Town Center station area consists of predominantly auto-oriented commercial/retail uses. Other uses in the area include office, light industrial, high density residential, parks and open spaces. Current City plans for the Town Center call for high-density, mixed land uses in a more compact, pedestrian-friendly town center configuration. Access and visibility from major roadways, including Highway 212 and I-494 is also likely to influence development interest near the station.

Key challenges that should be addressed to facilitate development potential include land uses, block sizes, and limited access and connectivity to the station platform. New roadways should be introduced to enhance mobility in the Town Center and provide access to the platform where none exists today. New roads should be consistent with the Town Center plans.

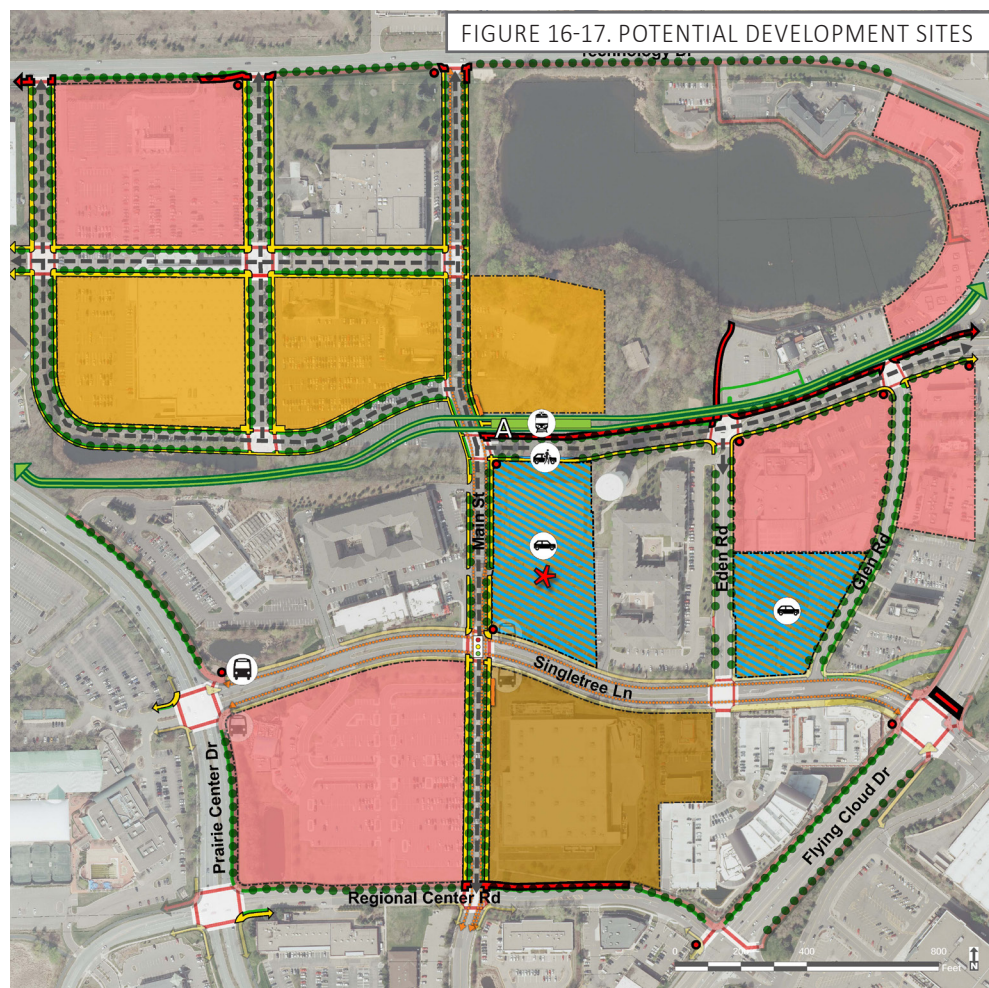
LAND USES

Higher density, mixed-use development is likely to occur near the Town Center Station. The Town Center Plan and Design Guidelines identify future land uses in the station area to be higher density than currently exist. Land uses will consist of a mix of office, residential, retail and entertainment, and park/open space uses.

PLANNING STRATEGIES

Several strategies should be addressed to facilitate future development in the station area. Existing land uses, large block sizes, lack of public access to the station platform, and limited pedestrian facilities create challenges to accessing the station. Redevelopment should seek opportunities to introduce additional streets and development blocks near the station to enhance station access and mobility. New sidewalks, trail connections, and enhanced pedestrian crossings that connect the station area with potential development sites, local destinations, and neighborhoods will have a positive influence on development potential in the area.

FIGURE 16-17. POTENTIAL DEVELOPMENT SITES



FUTURE LAND USE:

- MULTI-FAMILY RESIDENTIAL
- RETAIL & OTHER COMMERCIAL
- MIXED-USE RESIDENTIAL

★ OPENING DAY
DEVELOPMENT POTENTIAL

Key Considerations for Change and Development Over Time

Development should help to support the creation of a walkable, mixed-use town center by increasing density and diversity of existing uses and putting in place a new finer grained street and block pattern. Key considerations should include:

BUILT FORM AND LAND USE

- » Redevelop retail shopping sites and vacant lands to introduce a mix of high-density residential and commercial uses with retail uses at street level.
- » Design new buildings to enhance pedestrian access by orienting them towards the street and locating them as close to the street line as possible.
- » Encourage active street level uses on buildings throughout the station area with an emphasis on buildings adjacent to the station and facing onto Singletree Lane, Glen Road, and Main Street.
- » Situate new development to preserve for the creation of a finer grained network of streets and blocks.
- » Locate and orient short-term pad retail uses where they can help to frame and animate streets.
- » Support the creation of a finer grained town center by restricting the length of new buildings and encouraging the development of mid-block connections on larger sites.

PUBLIC REALM

- » Introduce a public plaza to the north of the station platforms where it can act as a receiving point for passengers walking to the station or transferring to the LRT by bus or bike and provide southwest-facing spill-out space for active uses fronting on the station.
- » Initiate public realm improvements along Flying Cloud Drive including a substantial tree planting program in order to reduce the perceived width of the street.
- » Remove channelized turning lanes and initiate intersection improvements throughout the station area to make it easier for pedestrians to travel between the station and area destinations such as the Eden Prairie Center shopping mall.

MOBILITY

- » Use redevelopment of adjacent plaza sites to introduce a new street and block pattern including the creation of a new Main Street between Technology Drive and Regional Center Road, a secondary north-south street between Technology Drive and Singletree Lane to the west of the proposed Main Street and the creation of a new east-west street adjacent to the corridor.
- » In the short-term, organize access roads and driveways for large areas of surface parking so that they align with adjacent streets and help to establish an interconnected street and block pattern.

- » Support pedestrians through the introduction of sidewalks on all streets within the station area, new crossings, and curb cuts for people in wheel chairs or other mobility devices.
- » Extend the Purgatory Creek Trail network east to the station in order to improve connections between area neighborhoods and the station.
- » Introduce dedicated cycling facilities on Singletree Lane and Main Street to support cycling throughout the Town Center.
- » Minimize the impact of parking and circulation on pedestrians by locating parking below grade or to the rear of new buildings in structures, and consolidating access and service drives.
- » Accommodate retail and short-term parking on the street or in shared parking facilities to minimize the construction of single-use parking areas.
- » Limit vehicular access points along Singletree Lane and Main Street.



Mixed-use development



High quality pedestrian-friendly street

Station Area Utility Plan

OVERVIEW

The station area utility plan and strategies recommended below were developed by considering future transit-oriented development within the station area, as depicted by the Station Area Improvements Plan (Figure 16-10). Eden Prairie will need to apply these localized recommendations to the city wide system to ensure that the potential development/redevelopment will not be limited by larger system constraints. Existing models or other methods can be used to check for system constraints in the station areas.

Eden Prairie should also consider reviewing the condition of the existing utilities in the station development area. The station construction would provide Eden Prairie an opportunity to address any utilities needing repairs. Once the larger system has been reviewed for system constraints, Eden Prairie will be able to accurately plan for necessary utility improvements in their city Capital Improvement Program (CIP). All utilities located beneath the proposed LRT rail or station platform should be encased prior to the construction of these facilities. The cost associated with encasing these facilities is assumed to be a project cost and is not included in potential improvements identified for the City of Eden Prairie CIP.

APPROACH

Utility improvement strategies are outlined in this report for the ultimate station area development (2030), as well as improvements which should be considered prior to opening day anticipated in 2018. Although recommendations are categorized in one of these two timeframes, Eden Prairie should weigh the benefits of completing more or less of these improvements as land becomes available for future development. Eden Prairie should take the utility analysis a level further and model future utilities in their city utility system models.

The proposed development and redevelopment areas were evaluated based on Metropolitan Commission Sewer Availability Charge (SAC) usage rates and estimated flows. Estimated flows for one possible development scenario in this area indicate that internal to the station area, no more than eight inch pipe are necessary to serve the mix of proposed and existing development. Each utility system should still be reviewed to identify capacity and demand constraints to the larger system associated with increase in flows from the proposed developments and existing developments in the area. Eden Prairie should anticipate the construction of new municipal utilities in conjunction with new or realigned roadways.

GENERAL RECOMMENDATIONS - SANITARY SEWER

Sanitary sewer recommendations for station area improvements include opportunities for Eden Prairie to improve the existing sanitary sewer network, without necessarily replacing existing sanitary sewers. When recommendations for “improving” existing sanitary sewer are noted, Eden Prairie should consider the level to which each specific sewer should be improved. Methods of improvement could include: lining the existing sewer, pipe joint repair, sewer manhole repair, relocation, and complete replacement.

The following items should be evaluated prior to opening day of the station, although action may not be required until necessary for development:

- » Televising existing sewer mains in the station area and proposed development area to determine the condition of the sewer mains, susceptibility for backups or other issues and evaluate for Infiltration and Inflow (I&I).
- » Locations of known I&I. If previous sewer televising records, city maintenance records, or an I&I study have shown problems, the city should consider taking measures to address the problem.
- » The age and material of existing gravity and/or forcemain sanitary sewer in the identified station area. If the lines are older than the material’s typical design life or materials which are susceptible to corrosion relative to soils in the area, the city should consider repairing, lining or replacing the mains.
- » Locations of known capacity constraints or areas where city sewer models indicate capacity issues. If there are known limitations, the city should further evaluate the benefit of increasing pipe sizes.
- » City sewer system models (existing and future). A review of these models with future development would assist Eden Prairie in determining if sewers in the project area should be increased to meet existing or future city system needs.
- » Existing sewer pipes should be relocated or encased in areas where they cross or are immediately adjacent to the LRT line/station.

GENERAL RECOMMENDATIONS - WATER MAIN

Water main recommendations for station area improvements also include opportunities for Eden Prairie to improve the existing water system network. Creating loops in the network can help prevent stagnant water from accumulating along water main stubs, and creating loops of similar sized water main provides the city a level of redundancy in their water network. Redundancy helps reduce the impacts to the community during system repairs, and also helps stabilize the pressure in the network.

The following items should be evaluated prior to opening day of the station, although action may not be required until necessary for development:

- » The age and material of the existing mains in the identified station area. If the mains are older than the materials typical design life or materials which are susceptible to corrosion relative to soils in the area, the city should consider replacing the main.
- » Locations of previous water main breaks. If water main breaks repeatedly occur in specific areas, the city should consider replacing or repairing the main.
- » Locations with known water pressure issues or areas where city models indicate low pressure. If there are known limitations (for either fire suppression or domestic uses), the city should further evaluate the benefit of increasing main sizes.
- » Locations with known or potential water quality issues. If there are mains known to be affecting the water quality (color, taste, odor, etc.) of their system, Eden Prairie should consider taking measures to address the problem affecting water quality.
- » City water system models (existing and future). A review of these models with future development would assist Eden Prairie in determining if mains in the project area should be improved to meet existing or future city system needs based on demand constraints.
- » Existing water main pipes should be relocated or encased in areas where they cross or are immediately adjacent to the LRT line/station.

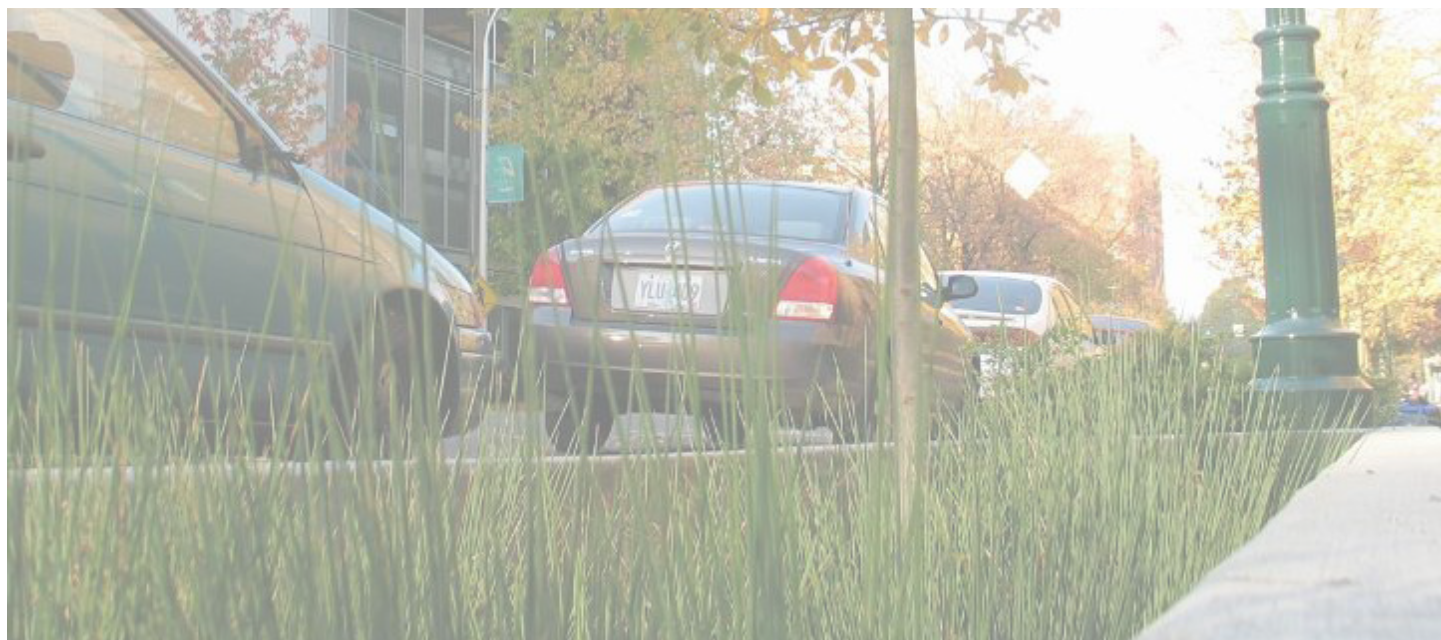
GENERAL RECOMMENDATIONS – STORM SEWER

Local storm sewer improvements are recommended to be completed in conjunction with other improvements in the station area. Improvements which will likely require storm sewer modifications include: roadway realignments, roadway extensions, and pedestrian sidewalk/street scape improvements. Storm sewer improvements may consist of: storm sewer construction, manhole reconstruction, drain tile extensions, storm sewer relocation, and complete replacement. These local storm sewer improvements are included as part of the overall cost of roadway and streetscape improvements recommended in this plan. Where roadway/streetscape improvements are part of the SW LRT anticipated base project scope, associated storm sewer improvements are assumed to be a project cost. Eden Prairie should also consider coordinating with the local watershed district and other agencies to review the condition of and capacity of existing trunk storm sewer systems serving more regional surface water needs.

STORMWATER MANAGEMENT BEST PRACTICES

There are numerous stormwater best management practices (BMPs) that can be used to address stormwater quality and quantity. As part of this project, BMP guides were developed for four stations (Royalston, Blake, Shady Oak, and Mitchell) which exemplify the range of development intensity and character in the urbanized environment along the Southwest LRT Corridor. The recommendations and practices identified in each of the four BMP guides are applicable to various stations along the corridor.

Potential stormwater management strategies for this station area may be similar to those shown in the BMP guide for the Blake station (see p. 10-28). Eden Prairie should consider implementing applicable best management practices similar to those in the Blake station BMP guide. Stormwater management recommendations should be constructed in conjunction with public and private improvements and future development/redevelopment in the station area.



Station Area Utility Plan (Continued)

STATION AREA UTILITY RECOMMENDATIONS

Utility recommendations (illustrated in Figure 16-18) are based on a localized analysis of proposed development. It is recommended that the City of Eden Prairie take this analysis a step further and review system constraints to the existing and future sanitary sewer and water main systems using existing sewer CAD or water CAD models, or other methods of modeling these systems.

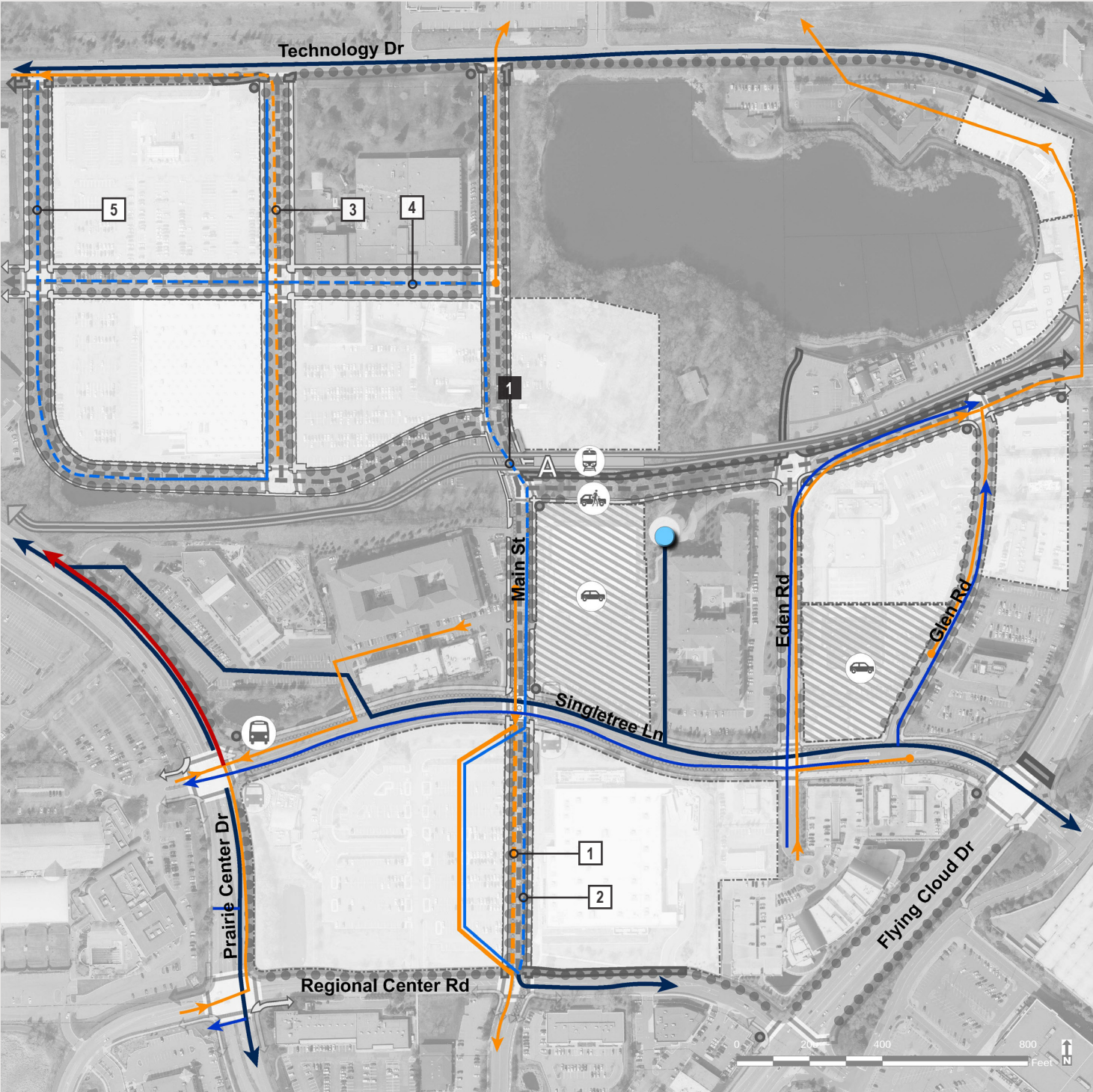
Opening Day Recommendations:

1. Construct 8-inch minimum water main in conjunction with roadway construction on Main Street (Singletree Lane to Technology Drive) to create a loop (confirm with City model) and encase crossing LRT rail construction.

Long-Term Recommendations:

1. Relocate existing 8-inch sanitary sewer to promote TOD along Main Street in conjunction with roadway construction.
2. Relocate existing 8-inch water main to promote TOD along Main Street in conjunction with roadway construction.
3. Relocate existing 8-inch sanitary sewer to promote TOD along new roadway paralleling Main Street (middle of future development) in conjunction with roadway construction.
4. Construct 8-inch minimum water main in conjunction with roadway construction on new road paralleling Technology Drive.
5. Construct 8-inch minimum water main in conjunction with roadway construction on new road paralleling Commonwealth Drive extension (west of future development).

FIGURE 16-18. STATION AREA UTILITY PLAN



WHERE ARE WE GOING?

EDEN PRAIRIE TOWN CENTER

OPENING DAY RECOMMENDATION

LONG-TERM RECOMMENDATION

— EXISTING UTILITIES

- - - PROPOSED UTILITIES

SERVICE SANITARY

LOCAL SANITARY

TRUNK SANITARY

MCES SANITARY INTERCEPTOR

SANITARY SEWER FORCEMAIN

LIFT STATION

SERVICE WATER MAIN

LOCAL WATER MAIN

TRUNK WATER MAIN

WATER TOWER

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