

171st. avenue

FOCUSED AREA STUDY

CITY OF ELK RIVER . MINNESOTA
JUNE 2, 2010



Hoisington Koegler Group Inc.

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Introduction

The master plan for the Elk River 171st Avenue FAST outlines a course for change responding to both the near and long term development & transportation realities impacting the site. The FAST ultimately becomes a series of unique, interconnected districts showcasing residential, office, retail and industrial uses within the fabric of an enhanced open space and transportation network centered on the Northstar Commuter Rail Station and Highway 10/169. The 25-30 year planning horizon recognized and guides land use and transportation changes for the area to allow for both near term investment with a constant eye toward the future vision. The master plan for the FAST provides the framework for a future development pattern recognizing strong development potential in the area today and the economic, political and environmental constraints for future development. To some degree, the vision challenges the current pattern of development, but is also grounded in reality ensuring the master plan doesn't exceed the development capabilities of Elk River and that the timetable for implementation is feasible.



INTRODUCTION

With the City owning 75 acres of land in the center of the study, known as the Gateway Business Park, and the recently opened Northstar Commuter Rail Line the time is now for planning major investments in the area to maximize the long term benefits for the community. The Northstar commuter rail will likely bring more than just trains to the FAST. As the first commuter rail line in Minnesota, the arrival of the train presents an opportunity for both near term and long-term investment in the area. The Northstar station will provide an attractive location for business and housing like Elk River Station over the next several years. Over time, as development and intensifies, the master plan envisions the station area transforming into a unique, successful transit-oriented district with the economic and cultural benefits of other station area villages located along more mature commuter rail lines such as the METRA line in suburban Chicago.

The commuter rail station is anticipated to provide a level of immediate benefit to prospects for service retail, office, industrial and residential development. While the rail station will initially provide an important marketing advantage, use of transit will likely become more ingrained in our transportation patterns over time. As redevelopment occurs and density in the study area increases, the station's benefit to development will become much more measurable. Regarding destination retail development, it is anticipated that Highway 10/169 improvements will be the driving force. For the foreseeable future, destination retail development will rely on highway access and visibility. However it is anticipated that, over time, the commuter rail station will assume increasing importance in delivering benefit to retail venues in the study area.

The Elk River 171st Avenue FAST will have an employment focus, leveraging key assets such as the Northstar line, Great River Energy and the Elk River Resource Recovery Facility and reinforce Elk River as a regional hub. The plan seeks to maximize land value and create nearly 6,500,000 square feet of retail, office and industrial space, and create an estimated 900 million dollars of development value for the City of Elk River at the maturity of the plan. The master plan also seeks to develop upwards of 2500 housing units and provide an array of household alternatives at varying prices amidst new parks and open spaces allowing recreational and social opportunities for all ages and the opportunity to connect within the community.

The master plan for the 171st Avenue FAST seeks to develop a successful 21st century economic model. The plan contains the details and parameters for future development and redevelopment with a focus on implementation and providing the flexibility to respond to future opportunities and challenges.



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BACKGROUND

The 171st Avenue FAST project area offers one of the more important development and redevelopment sites within the City of Elk River. With the strong orientation toward Highway 10/169 and the newly opened Northstar Commuter Rail Station in the fall of 2009, the dynamics of land use in this portion of the community are likely to evolve. In order to plan for the future of the FAST, background knowledge of the study area is vital in order to fully understand the potential of the site. This chapter begins with an overview of exiting land use and transportation conditions describing the starting point for the master plan. The chapter concludes with an analysis of the opportunities and challenges of these existing conditions.

BACKGROUND

SITE CONTEXT

Situated in the southeast portion of Elk River, the initial FAST project area comprised nearly 700 acres. With the addition of the second phase, the land west of Highway 10/169 totalling 230 acres the overall project area has grown to 930 acres.

The project area is bound by the Mississippi River to the west with State Highway 10/169 bisecting the study area running parallel to the river. Along the northern edge of the project area a range of land uses exist from office and industrial uses west of Twin Lakes Parkway to high and low density housing and parkland toward the northeast. Much of the land to the east and south of the project area is owned by Cargill Corporation, nearly 750 contiguous acres. About half of the land, mostly to the south, is currently utilized as agricultural research with the remaining land area comprised of a large wetland complex which defines the majority of the eastern edge of the project area and extends in to the site.

The Burlington Northern Santé-Fe rail line also bisects the site moving from northwest to southeast and carries a large number of heavy rail trains each day in addition to the Northstar commuter train. The Northstar station is located in the center of the study area, approximately two miles from Downtown Elk River to the northwest.

A number of community parks are adjacent to the study area. Hillside City Park, Kliever Marsh Park, Kliever Lake Fields, Babcock Memorial Park and the Youth Athletic Complex (YAC) are all

within close proximity. The Kelley Farm, a registered national historic landmark is located just south of the study area along the banks of the Mississippi River off of Highway 10/169.

Just north of the study area a large commercial center exists at the intersections of Highway 169 and Main Street and extends north to School Street and includes Wal-Mart and Home Depot as major retail anchors. Great River Energy has a power plant and satellite offices located northwest of the study area across Highway 169 and has an ongoing operation with the Refuse Derived Fuel (RDF) Plant in the southern portion of the study area to produce energy from pelletized waste created at the plant.

Site Context Map



Figure 2.1: Site Context Map

STUDY AREA

The 171st Avenue FAST project area comprises 930 acres of land, of which approximately 215 acres are wetlands or floodplains. The wetlands are essentially two large bands running east to west through the project area. There are nearly 100 acres of public right-of-way for streets and the rail line, and 160 acres are currently developed lands that are not anticipated to change. These developed lands include the built portions of the Northstar Business Park (9 acres), Elk River Station housing development (39 acres), the service/commercial areas west of Highway 10 (22 acres), the single family residential surrounding Kleiver's Marsh (40 acres) in the northeast corner of the study area, and the residential neighborhoods along the river (37 acres). The remaining land, approximately 455 acres, will be the focus of potential land use alterations for the

FAST project. Of these 455 acres, roughly 120 acres are northeast and 258 acres are southwest of the rail line on the east 76 acres are west of Highway 10.

The Gateway area is a 75 acre area of city owned land situated south of 171st Avenue. This land, acquired from Cargill via agreement, mandates no residential use on the property until 2020. The portion of land immediately east of the Gateway property, west of the railroad tracks is owned by Cargill. The agreement shows a roadway connection through the Cargill owned land to 165th which can occur anytime at the City's expense.

The Minnesota Department of Transportation also owns land in the FAST area. MN DOT is currently using the 20 acres of land just north of 175th Avenue for aggregate extraction.

The Northstar commuter rail station in Elk River opened in November of 2009, with commuter service to downtown Minneapolis. The commuter station will have an 800 car surface parking lot, drop-off and twin rail platforms for commuters. The station sits in the heart of the study area along the northern side of the rail line and along Twin Lakes Parkway the major roadway spine through the project area.

Twin Lakes Parkway is envisioned as a sub-regional collector for southeast Elk River. The four-lane road with median is newly constructed from the commuter station north, and is envisioned to continue to the southeast through the Gateway & Cargill property in the future serving the businesses and residents of east Elk River.

Major utility lines also run through the project area. A natural gas line with a 100"

STUDY AREA MAP

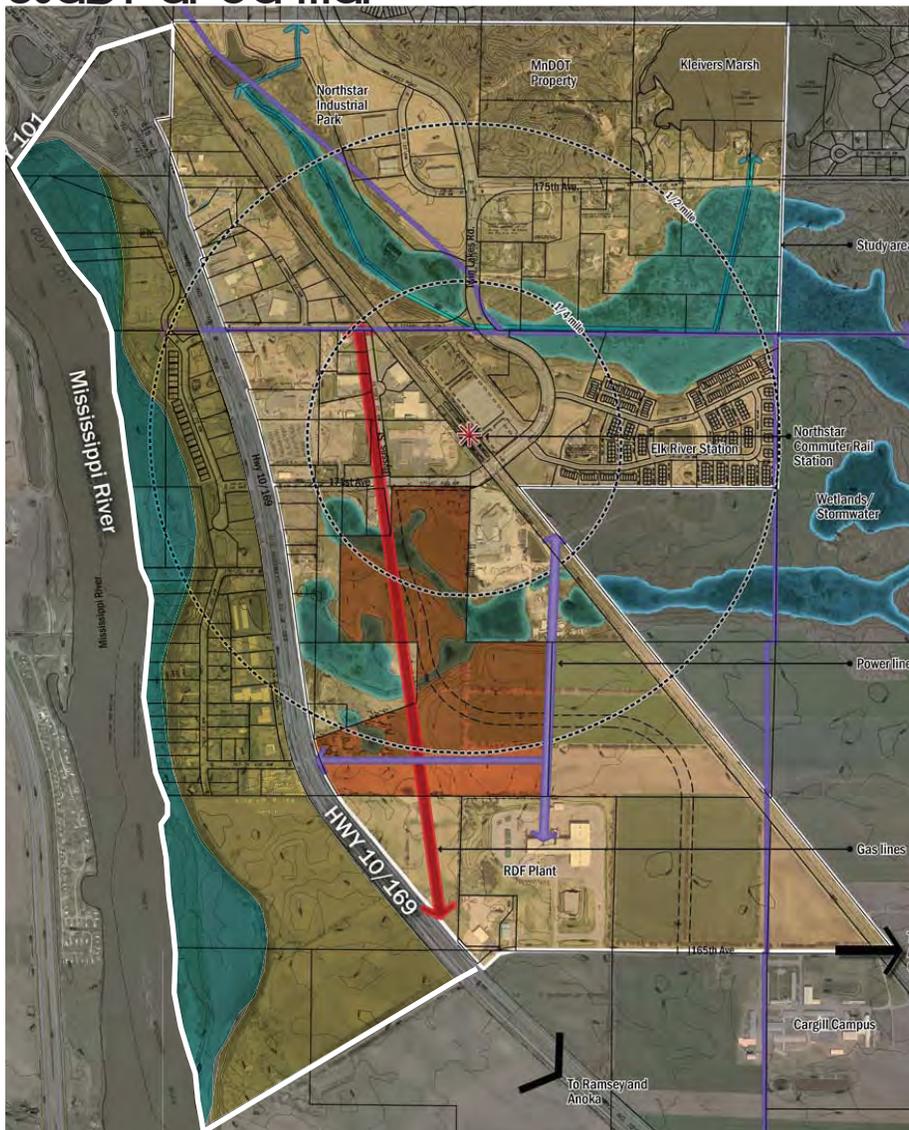


Figure 2.2: Study Area Map

BACKGROUND

easement runs north to south, essentially paralleling Ulysses Street through the southern portion of the project area. Large electric transmission lines extend from the Great River Energy (GRE) plant along the northern wetland corridor to the east. One line parallels the rail line near the Northstar station and extends south to the RDF plant.

EXISTING LAND USE

Residential

Residential land uses are generally located in the northeast portion of the project area and along the river edge as indicated in Figure 2.3. The most recent residential project, Elk River Station, was completed in 2007. The 39 acre high density development includes a mixture of senior rental and owner occupied townhomes and is located just east of the commuter rail station. Single family homes comprise the remaining residential uses, and are situated north and south of 175th Avenue around Kleivers Marsh and the northern wetland complex.

Commercial

Commercial uses are generally located along Highway 10/169 north of 171st Avenue. This land use primarily encompasses auto related uses, including a large auto dealership, auto repair and auto body shops. Small service related uses also exist within the commercial land use.

Industrial

Industrial uses include three primary areas, the Northstar Business Park, the RDF plant, and the industrial uses near the station and along Ulysses Street. The Northstar Business Park in the

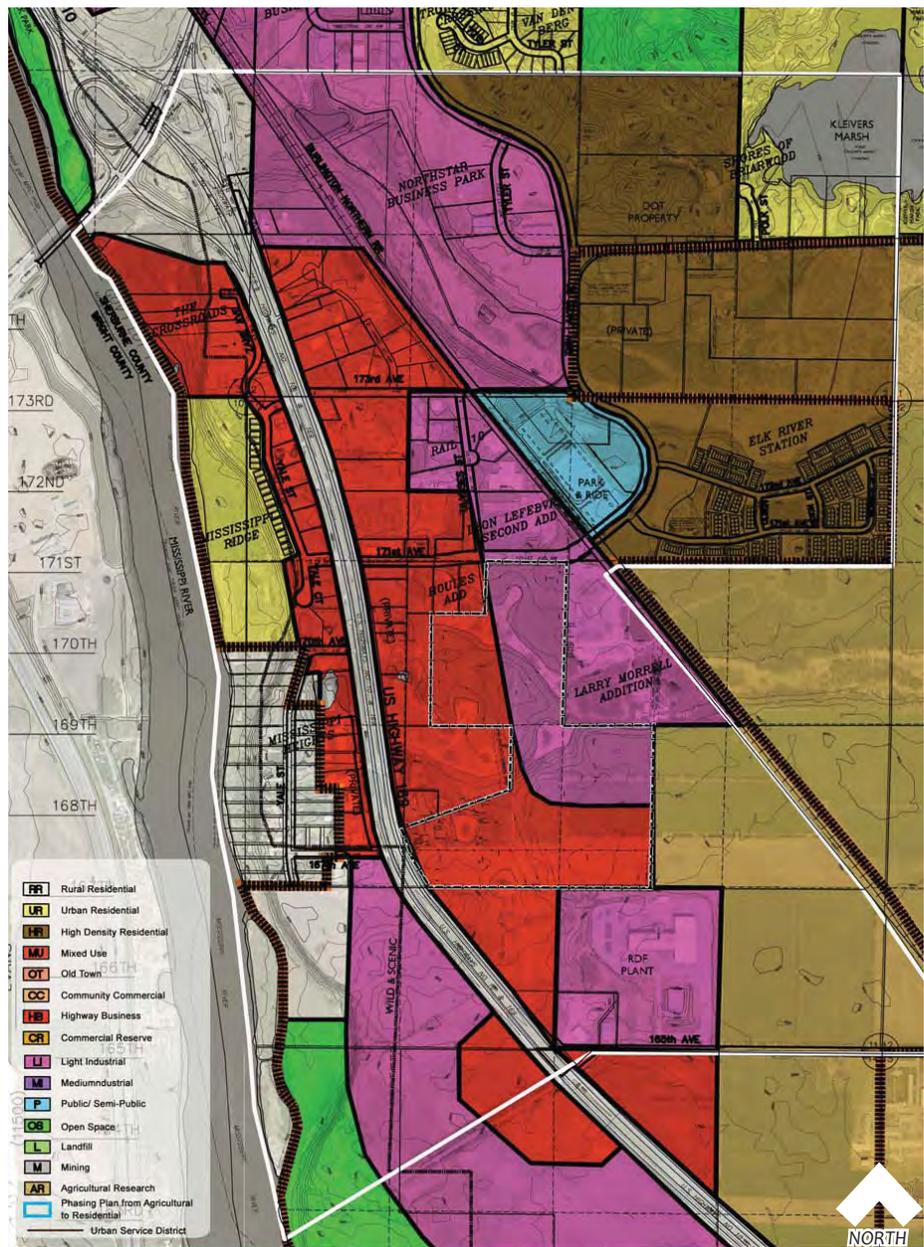


Figure 2.3: Land Use Map

northwest contains light industrial and light manufacturing uses. Much of the construction has occurred within the last three to five years, and only two parcels remain open for development. The RDF plant located along 165th Avenue is roughly 40 acres and includes a public recycling facility. The central portion of the study contains two large trucking

companies north and south of 171st on the south side of the rail line and small warehouse and manufacturing uses along Ulysses Street. An area north of 173rd Avenue has been improved with the construction of Vance Street, but has yet to see industrial development.

Undeveloped

Much of the land area between 171st Avenue and 165th Avenue is undeveloped. The city owns the 75 acre Gateway tract of land and Cargill owns an additional 80 acres being utilized for agricultural research.

EXISTING ZONING

As the influence of Highway 10/169 illustrates, much of the uses adjacent to the roadway today are zoned highway commercial. Light industrial zoning exists for portions of the Gateway area east of the natural gas line as well as for smaller parcels along Ulysses Street. The RDF plant has an underlying zoning of light industrial with solid waste facility overlay zone. Elk River Station and areas around the transit station are zoned planned unit development, including the two trucking facilities north and south of 171st Avenue. The Northstar Business Park has a business park zoning promoting a higher design and construction quality than traditional light industrial zones. In the northeast single family residential zoning is split between R1a south of 175th Avenue and R1c north of 175th Avenue. The Cargill owned land in the southeast portion of the project area is zoned agricultural research.

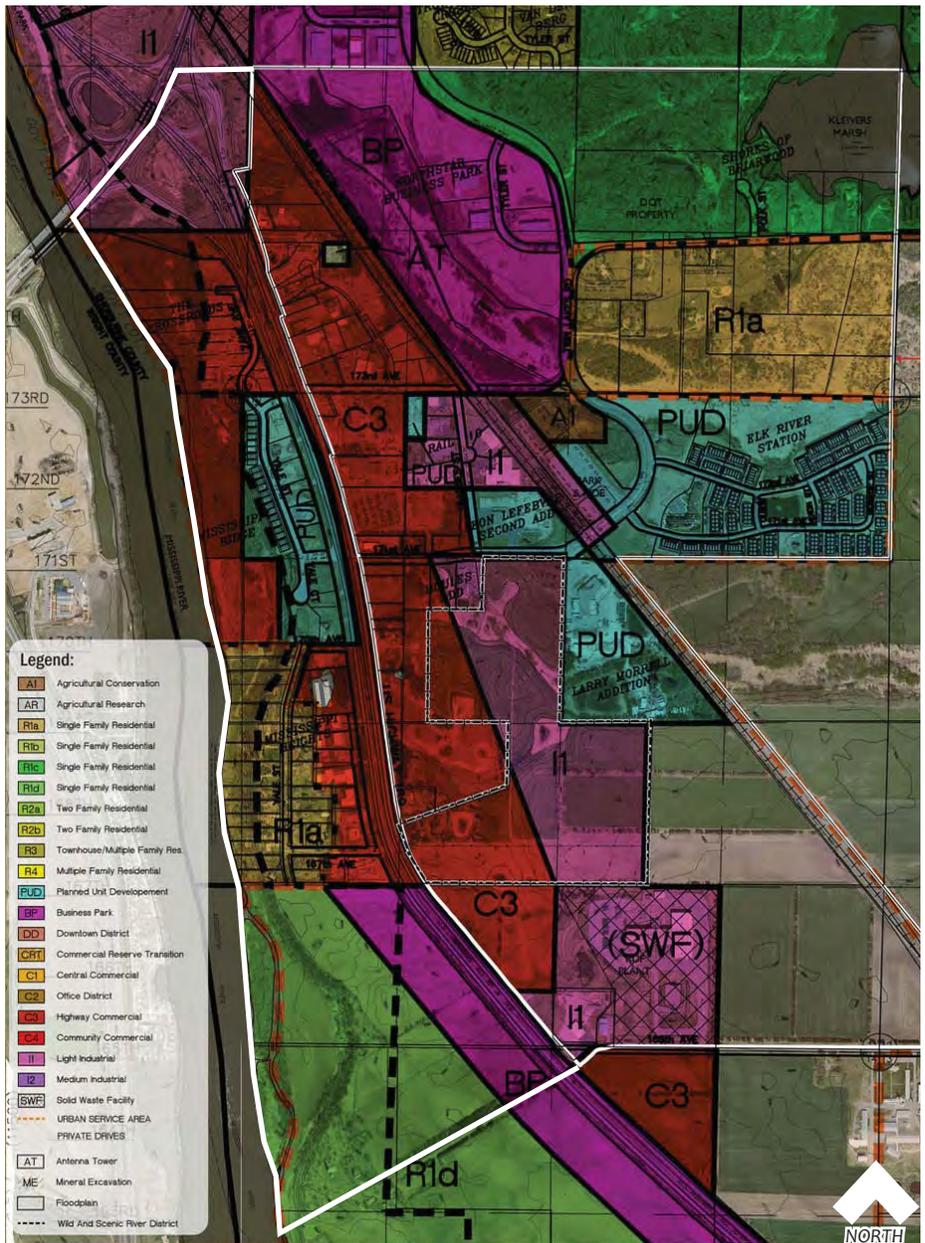


Figure 2.4: Zoning Map



BACKGROUND



View of Highway 10/169 through the study area



Photo: Northstar Commuter Rail

Northstar commuter rail train



Existing rail line crossing at study area



Existing trail along Twin Lakes Parkway

EXISTING TRANSPORTATION

Road Network

Highway 10/169 is the primary arterial running along the western boundary of the study area. Today the roadway is a four-lane, at grade regional highway and has average daily traffic counts (ADTs) of nearly 35,000 trips per day. Currently, the primary access point to the project area is the signalized intersection at 171st Avenue. Additional access points exist at two un-signalized intersections at 173rd Avenue and 165th Avenue and a handful of parcels have right-in, right-out access or additional median crossings for access. Some of these median will be closed with MnDOT'd mill and overlay project scheduled in 2013.

Twin Lakes Parkway serves as the primary collector for the FAST, as traffic from southeast Elk River is funneled south to Highway 10/169 to the signal at 171st Avenue. The roadway has been improved as a four-lane with a median from Main Street to the transit station, and as a four lane road with no median from the station to Highway 10/169. The roadway is anticipated to carry nearly 20,000 cars per day in the future and extend to the southeast through the study area to Jarvis Street in the southeast corner of Elk River. Twin Lakes Parkway represents the only rail crossing in the project area. A previous rail crossing was located at 173rd Avenue, but was relocated to the current location for the Northstar station development. Currently only a small portion of 173rd Street remains from Highway 10/169 to the rail line and then connects south with Ulysses Street to form the built internal road network west of the tracks. 175th Avenue in the northeast serves as a collector for the residential uses beyond the project area, bringing people to Twin Lakes Parkway. The only private streets exist within Elk River Station.

Transit

The Northstar commuter rail began operation in fall of 2009. The rail service provides five daily commuting trains to downtown Minneapolis with one reverse commute train per day. The average trip time from Elk River to downtown Minneapolis is approximately 35-38 minutes.

Rail

The two heavy rail lines are owned and operated by Burlington Northern / Santé-Fé and operates as a major corridor for cross country rail transport. On average, nearly 60 to 80 trains per day move through the project area with speeds in excess of 70mph. Noise and safety concerns will be significant considerations for land uses adjacent to the rail line.

Sidewalks & Trails

A limited number of sidewalks and trails exist within the project area. Those trails that have been built came with recent developments such as Elk River Station and the roadway improvements along Twin Lakes Parkway and 175th Avenue.

RELATED PLANNING EFFORTS

The master plan for the 171st Avenue FAST exists in the context of major transportation planning efforts for the primary transportation corridors through Elk River. These transportation planning studies and their outcomes are critical in defining the future land use direction for the 171st Avenue FAST. Key decisions on land use will likely be determined by the location of a future interchange for Highway 10/169, as over time the corridor transitions to a limited access freeway and all existing accesses are eliminated. The following is a review of the transportation and land use planning efforts related to the 171st Avenue FAST.

2002 Inter-Regional Corridor Management Plan

In 2002 MN DOT, working with input from the city of Elk River, completed an Inter-Regional Corridor Management Plan identifying alternative strategies for upgrading Highway 10/169 south of Highway 101 in Elk River to a limited access freeway. The study identified two options for a future six lane freeway alignment; 'Alignment A' essentially running parallel to the rail line roughly 400' away and 'Alignment B' the existing Highway 10/169 corridor. The study also identified two interchange locations within Elk River between Highway 101 and the eastern boundary of the community for either alignment. One would be located near Jarvis Street and the other near 165th Avenue. While the planning effort was completed in 2002, MN DOT still has not identified any funding for this project in their 30 year capital improvements program.

Highway 10&169 Preliminary Design and Environmental Documentation Study

Currently underway are two MN DOT studies funded by the City investigating ways to solve traffic bottlenecks in Elk River along Highway 10 heading west through historic downtown, Highway 169 heading north through a major commercial area of the community, and the 101 & 10/169 interchange. The two studies identify a preferred reconstruction plan for the major interchange at 101 and 10/169, the Main Street and School Street intersections along Highway 169 and the intersections along Highway 10 moving through the downtown area west to Lake Orono. A more detailed review of these regional transportation planning efforts are discussed in the assumptions chapter of this report.

Elk River Comprehensive Plan

In 2003 the city of Elk River completed a Comprehensive Plan update for the community. At the time of the update much of the land within the FAST project was undeveloped. In general, the City designated highway commercial uses along the Highway 10/169 corridor with light industrial uses beyond. North of the rail line high density housing was selected as the future land use. Two additional transportation initiatives were identified as part of the Comprehensive Plan update. The first initiative was to create a connection between 171st Avenue and 165th Avenue through the extension of Twin Lakes Parkway, and the second was to investigate a roadway connection between CSAH 12 and Highway 10/169 on the far eastern boundary of the community.



BACKGROUND

OPPORTUNITIES & CHALLENGES

Existing conditions for 171st Avenue FAST present terrific opportunities, as well as numerous challenges. This master plan looks to capitalize on the inherent opportunities within the study area and address the challenges that exist today. A summary of opportunities and challenges follows:

Opportunities

- » **Northstar Commuter Rail Station:** The Northstar Commuter Rail Station will likely bring additional traffic increasing development interest. In the long term, as the Northstar commuter rail continues to mature by adding trains, extending the line north to St. Cloud and providing more reverse commute trips, the Northstar line will continue to play a key role in the evolution of the study area.
- » **Orientation and access to Highway 10/169:** A primary transportation corridor in the northwest metro, Highway 10/169 has the potential to draw new office, retail and industrial uses within the FAST area. In the near term, smaller more service oriented uses could develop near the existing signal at 171st to help serve the commuter rail station and residents of southeast Elk River. Longer term with the transition of the roadway into a freeway section, larger retail and office users would likely be attracted to the new interchange location. The visibility provided by Highway 10/169 alone is a tremendous asset for the 171st Avenue FAST. The volume of traffic moving through the interchange at the Highway 101 & 10/169 provides high visibility for a potential iconic development in the north, while at the southern end of the study area the vast acres of agricultural land provide a threshold for another iconic

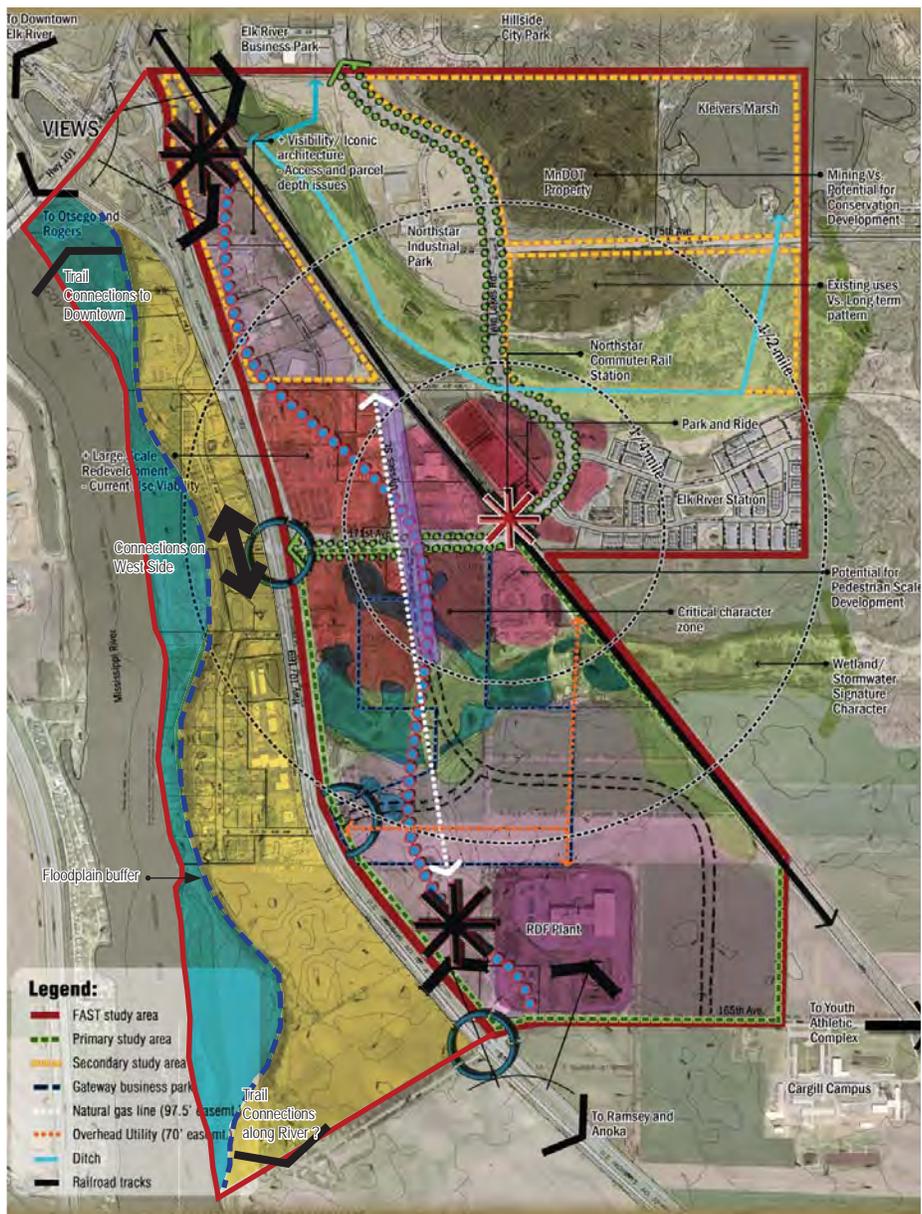


Figure 2.5 Opportunities and Challenges Map

bookend development and views deep into the site. The RDF plant may have the potential to reinvent itself as an iconic anchor for the area at the southern gateway to Energy City.

- » **Twin Lakes Parkway:** Envisioned as the sub-regional collector for east Elk River, Twin Lakes Parkway has the potential to be a strong community corridor. Nearly all businesses and residents of east Elk River will utilize Twin Lakes Parkway for access to and from the larger regional highway system. Streetscape enhancements, appropriate lighting, landscaping and pedestrian amenities along the corridor will help transform Twin Lakes Parkway into a complete street section for automobiles, bikes and pedestrians. The physical design and geometry of the roadway is an important consideration for establishing the development and transportation patterns and can



aid in better positioning land in the project area for development or redevelopment.

- » **Gateway Business Park:** The 75 acre city-owned gateway business park land is situated in the south central area of the FAST. The green field site allows flexibility for the city in determining transportation improvements and land use decisions for the broader area.
- » **Energy:** The excess steam generated at Great River Energy’s power plant facility could potentially provide portions of the FAST area with a district heating / cooling opportunity. Combining the RDF plant and the Energy City brand for Elk River could spawn economic development with a green energy production and green industry focus for in the FAST area.
- » **Natural Systems:** The Mississippi River provides the greatest natural amenity opportunity for residents for recreational use. The large wetland complex offers great amenity opportunities for residential and office development. The sweeping views over wetland and the preservation or enhancement of the existing natural wetland and woodland vegetation can help emphasize some of the distinct characteristics of Elk River. Combined with an integrated trail network to connecting these natural amenities with city parks and commercial nodes these broad natural systems can be a tremendous asset to the FAST project area.

Challenges

- » **Future transportation and access changes for Highway 10/169:** One of the biggest challenges for the 171st Avenue FAST will be understanding how future transportation shifts will affect access & circulation through the study area for existing uses and for any new development prior to Highway 10/169 becoming a limited access freeway. Finding a way to make intelligent investments in the near term without negatively impacting potential future investments will be crucial.
- » **Potential environmental issues:** In the near term, the environmental issues will likely surround wetland mitigation strategies in concert with green field development. However in the long term, with the abundance of automotive and trucking uses in the FAST potential issues with soil contamination may exist with redevelopment. Environmental clean-up of potentially contaminated sites could become costly endeavors, particularly in ex-urban communities with abundant green field development potential.
- » **Noise – Highway 10/169 and the rail line:** Noise levels from the freight trains as well as highway traffic on Highway 10/169 will likely have an impact on residential land uses in the study area. Finding the appropriate location for residential uses and determining the proper uses adjacent to the rail lines must consider noise levels and identify potential mitigation techniques.
- » **Major utilities:** An existing natural gas line bisects the southern half of the site constraining development potential, as no structures or significant grading can occur within the easement. The location will also have a larger impact on the internal roadway system and overall parcel configuration for the FAST. In addition to the gas line, large transmission lines run through the center of the study area between Great River Energy and the RDF plant.



Gateway area owned by the city



Elk River Resource Recovery Facility (RDF Plant)

Photo: Elk River Energy City



Great River Energy Power Plant Facility

Photo: Sherburne County



Existing wetland complex within the study area



OBJECTIVES and ASSUMPTIONS

OBJECTIVES

Before the planning effort commences with design alternatives, it is paramount that the core objectives for the project are understood. These project objectives help to ground the planning process ensuring the goals set forth by the City of Elk River are met. After discussion with the City Council, Planning Commission and Economic Development Authority (EDA) at the beginning of the phase one, and again at the start of the phase two planning effort, and continued evaluation throughout the process, the core objectives for the Elk River FAST are as follows:

Leverage commuter rail station and city-owned lands as triggers for development.

The Northstar commuter rail has attracted noticeable attention as the first commuter rail line to begin operation in the Twin Cities. Determining the appropriate level of development anticipated to follow the commuter rail must be strategic.

The city owned Gateway land represents the strongest opportunity for future development. The questions surrounding development in the Gateway focus on the appropriate uses and scales and what level of infrastructure investment will be needed to facilitate development. The central location of the Gateway affords the city significant influence over infrastructure and development investment giving the city broad control of the future of the FAST.

3

OBJECTIVES AND ASSUMPTIONS

Establish long-term vision for study area that will encourage practical and achievable development while optimizing community value.

Establishing a big-picture vision for the FAST that is practical and achievable is an important goal. The broad community vision must be in concert with the economic realities of infrastructure investment and achievable tax value, but at the same time provide a strong community image for the project. How can the FAST become both economically and environmentally sustainable while leveraging assets of the Gateway and the commuter rail station?

Identify ways to better link study area with broader community.

Addressing roadway connections, trails and potential transit options for both the near and long term must be identified as part of this plan in order to strengthen the economic ties to greater Elk River.

Suggest how study area can distinguish itself as prime development district.

In order to set the FAST area apart from other development areas in the region, the master plan should suggest the critical design criteria to establish the district. Opportunities exist with transit-oriented development, innovative energy initiatives and low-impact development.



GENERAL ASSUMPTIONS

In order to plan for appropriate land use and transportation investments for the 171st Avenue FAST, certain assumptions were made in order to focus the planning effort and set a distinct framework and vision for the future. General assumptions for the planning effort follow:

Major transportation improvements will be a primary development trigger.

The often familiar trend in commercial real estate will likely play out in the FAST, new development and redevelopment typically follow transportation and public infrastructure improvements. The first primary trigger for development will be the Northstar commuter rail station. The allure of the first commuter rail line in Minnesota will likely solicit interest from the development community. Additional roadway improvements through the Gateway will likely also trigger development in the area in the near term. In the future, the reconstruction of the 101/10/169 interchange and the conversion of Highway 10/169 to a limited access freeway will trigger significant land use and transportation pattern changes in the in the 171st Avenue FAST.

Twin Lakes Parkway will be extended to become a sub-regional collector for improved access for east Elk River.

The Elk River Transportation Plan identifies Twin Lakes Parkway as urbanizing collector from CSAH 12 to the signal at 171st Avenue. The transportation plan also indicates the continuation of Twin Lakes Parkway to 165th Avenue serving as the sub-regional collector for southeast Elk River.

Land uses will become more intensive over time.

As infrastructure improvements are made and ridership increases with the Northstar commuter rail it is likely more intensive development will occur throughout the FAST project area.

Future Highway 10/169 access to study area will be farther south than 171st Avenue intersection due to MN DOT spacing requirements.

The current intersection of 171st Avenue and Highway 10/169 is less than 1 mile from the major interchange at Highway 101 and Highway 10/169, a typical rule of thumb for interchange spacing. MN DOT mandates the future interchange must be at least 1 mile south of the Highway 101 & 10/169 interchange for safety purposes, allowing for proper construction of on ramps and off ramps. A location not supported by MN DOT will likely not be implemented.

Study area is in development competition with other districts in & outside Elk River.

Within Elk River a large commercial center exists just north of the project site along Highway 169 near Main Street and School Street, and captures much of the commercial business for the community. In the future a broad employment and commercial



OBJECTIVES AND ASSUMPTIONS

redevelopment area is planned for portions of the gravel mining area further north along Highway 169. Regionally, a new commercial center anchored by Super-Target (relocated from Elk River) was recently developed across the Mississippi River in Otsego. At the intersection of Highway 101 and Interstate 94 in Rogers a broad area of commercial and retail uses exists.

Existing transmission lines and gas main are likely fixed.

Due to the extensive costs of relocating major utilities and the lengths these utilities extend through the site the master plan assumes it is unfeasible to relocate these utilities through the project area.

Any new river crossing (bridge) in Dayton or Ramsey would not substantively change development strategies for the study area.

The location of the proposed future river crossing is situated too far south along Highway 10/169 to have any major development impact on the site.

REGIONAL TRANSPORTATION ASSUMPTIONS

The 171st Avenue FAST is situated at the nexus of major regional roadway corridors in the northwest metro which have a significant impact on the future of the study area and the community of Elk River. The following are the regional transportation assumptions for the master plan:

Highway improvements planned by the State will be key determinant in timing and type of redevelopment in the 171st Focused Area Study.

Understanding the timing and scope of future changes for the corridors will allow for the appropriate planning and level of investment relative to the future improvements in the corridor.

Transportation will guide development strategies and vice versa.

Location of a future interchange location will have the significant impacts land use surrounding the interchange.

Elk River can influence transportation investments with plans for development.

Through the preparation of this master plan and subsequent studies, the City has the ability to influence MN DOT for the locations and timing of transportation improvements which will have the broadest benefit for the FAST.

MN DOT has three key transportation studies:

» **Inter-regional Corridor Management Plan (2002):** This plan identifies alternatives for upgrading Highway 10/169 to a limited access freeway south of the Highway 101 & 10/169 interchange through Elk River, Ramsey and Anoka. Construction and funding are not currently in MN DOT's 30-year program.

» **Highway 169 Preliminary Design and Environmental Documentation Study (underway):** This study identifies preferred plan for 101/169 interchange as well as the preferred reconstruction plans for the Main Street and School Street interchanges north. Construction and funding are not currently in MN DOT's 30-year program.

» **Highway 10 Preliminary Design and Environmental Documentation Study (underway):** This study will identify a preferred plan for Highway 10 upgrades from just west of 10/101/169 interchange, through Downtown Elk River west to Lake Orono.



OBJECTIVES AND ASSUMPTIONS

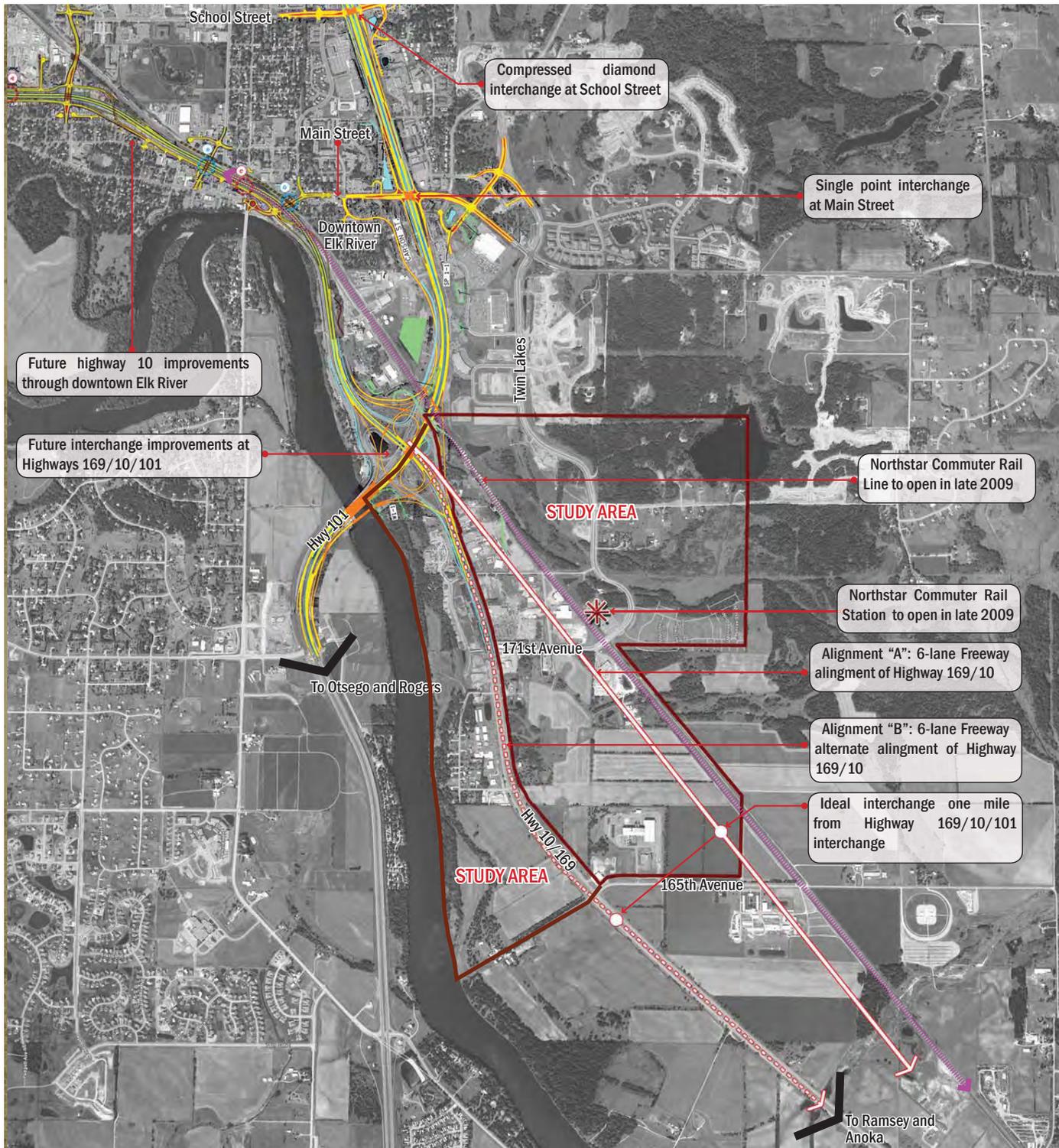


Figure 3.1: Regional Transportation Assumptions Map





concept evaluation

Continuing the evolution from the Phase One study, the Phase Two concept evaluation began with an exercise in determining the final stage of the infrastructure and transportation network for the study area. This focused the planning horizon and assisted in creating an approach for near-term, interim and long-term land use and transportation solutions for the study area to be further refined. Four concept alternatives were then explored for the 171st Avenue FAST, each with a different focus for land use, particularly from the rail line west to the river. Uses ranging from housing to industrial and business park uses along with commercial and retail uses were evaluated in conjunction with alternatives for the future interchange location and consequent local roadway network. Lastly, detailed options for an interim second signalized intersection and future interchange location were created to better assess the impacts to private property, natural features and broad cost comparisons.

4

CONCEPT EVALUATION

PHASE ONE PREFERRED DEVELOPMENT FRAMEWORK

Building off of the work completed in the Phase One Development Framework, many of the land use directions have remained the same for Phase Two. Uses north of the rail line have not changed. More intense mixed use development immediately adjacent to the station will also remain as well as the industrial uses proposed for the far northwest near Vance Street. Also unchanged are potential for industrial uses on the future Cargill property in the southwest

The changes from the Phase one plan result in transportation alterations affecting land use for primarily the area south of 171st Avenue. The extension of Twin Lakes Parkway and the configuration of the future interchange play a major role in the land uses that can exist on the available land surrounding the interchange.

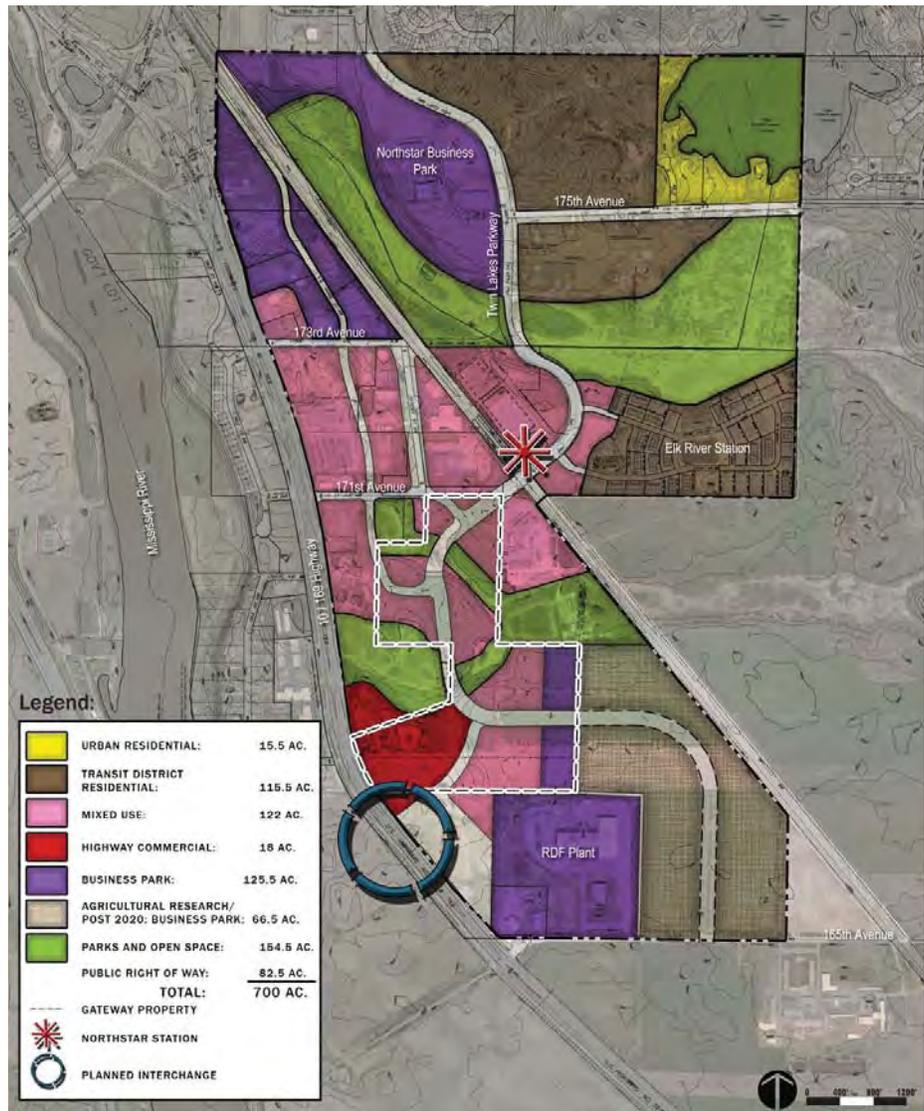
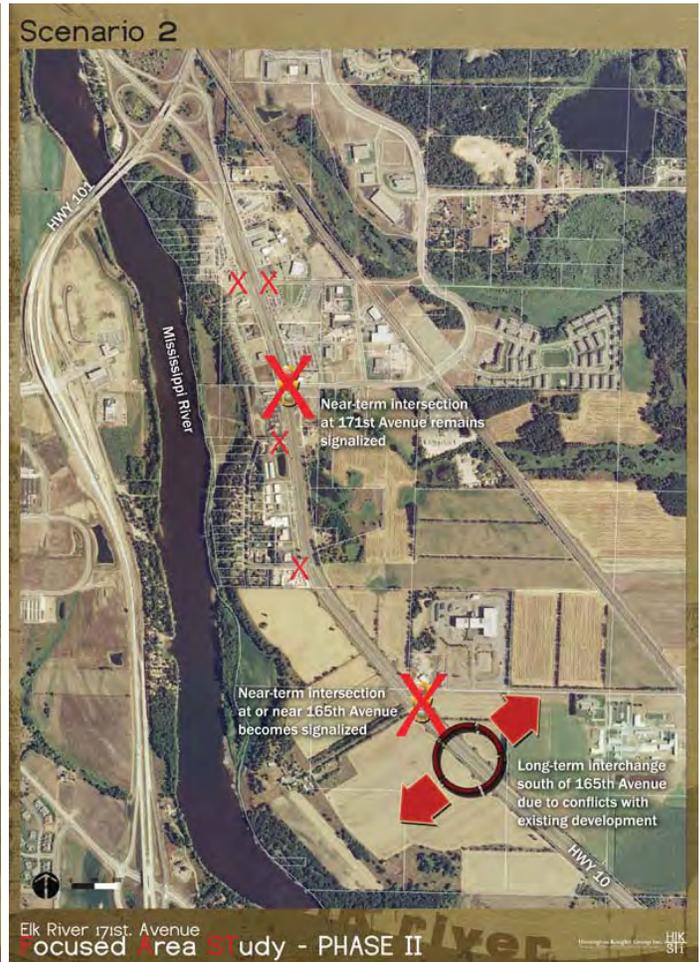


Fig. 4.1 Phase One Development Framework Plan, June 2009.

FUTURE ACCESS SCENARIOS

In order to better understand the preferred planning horizon envisioned for the 171st Avenue FAST the Economic Development Authority was asked as a kick-off to the second phase of the development planning to evaluate a range of scenarios that examined transportation strategies for the study area. These scenarios explored various interchange locations and the potential that a signalized option may be the ultimate transportation solution. The following scenarios were used to set a course for the more detailed land use and transportation planning to evolve in the second phase of the FAST project.





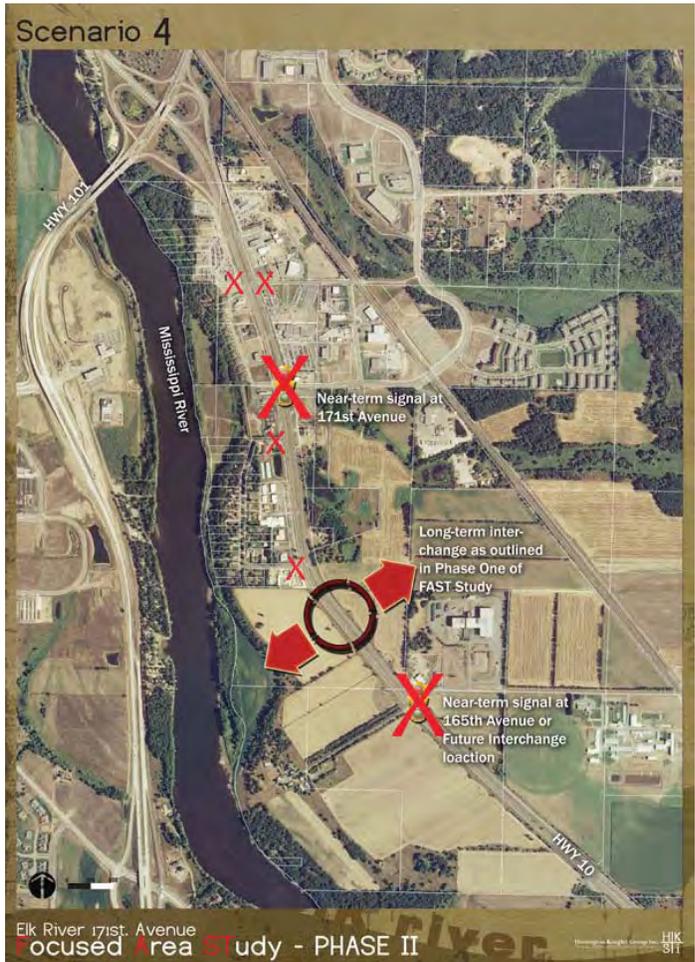
Scenario 1:

- » Signals as the long term access solution
- » Interchange is so far out that planning leaves development in limbo
- » Signals at existing 171st and existing 165th
- » Consensus of the City of Elk River was that planning for the “end-game” scenario of an interchange makes the most sense for the long term benefit of the community

Scenario 2:

- » Interim signals at 171st Avenue and 165th Avenue
- » Long term interchange located at the location identified in the IRC prepared by MNDOT
- » Conflicts with existing and near term development
- » Consensus of the City of Elk River was an interchange location south of 165th fails to benefit the existing business in the study area and is too far removed from the Northstar commuter rail station.
- » Long-term questions on whether or not Cargill would ever develop the adjacent land were another concern.

CONCEPT EVALUATION



Scenario 3:

- » Interim signals at 171st Avenue and 165th Avenue
- » Long term interchange located at existing 171st Avenue signal location.
- » Consensus of the City of Elk River was the interchange located here would be challenging. Dimensional constraints and existing developed properties would drive up the overall cost of the interchange, and may displace more business than attract new ones.

Scenario 4:

- » Interim signals at the existing 171st Avenue and 165th Avenue intersections.
- » Long-term interchange location similar to what was identified in the Phase One study for the FAST area, somewhere between 167th and 165th Avenue.
- » Consensus of the City of Elk River was that this approach to the long-term transportation patterns makes the most sense. The location is in close proximity to existing business and the Northstar commuter rail station and would be located in currently undeveloped land.
- » Options to explore further with this concept were also discussed. The potential to have a near term signal at 167th or at the future interchange location should be further explored in lieu of 165th Avenue to create a stronger near term connection to the existing business, the Gateway industrial park and a more direct, second access to Highway 10 from the Northstar commuter rail station.



LAND USE AND TRANSPORTATION ALTERNATIVES

Once a general approach to the future transportation patterns was agreed to, the consulting team explored a range of concept alternatives for land use and local transportation patterns. Since the land use patterns north of the rail road tracks were not anticipated to change from the phase one plan, the following concepts address land use, connectivity and transportation from the BNSF rail line, west across Highway 10/169 to the Mississippi River. The following are the four concept alternatives with corresponding pros and cons for each:

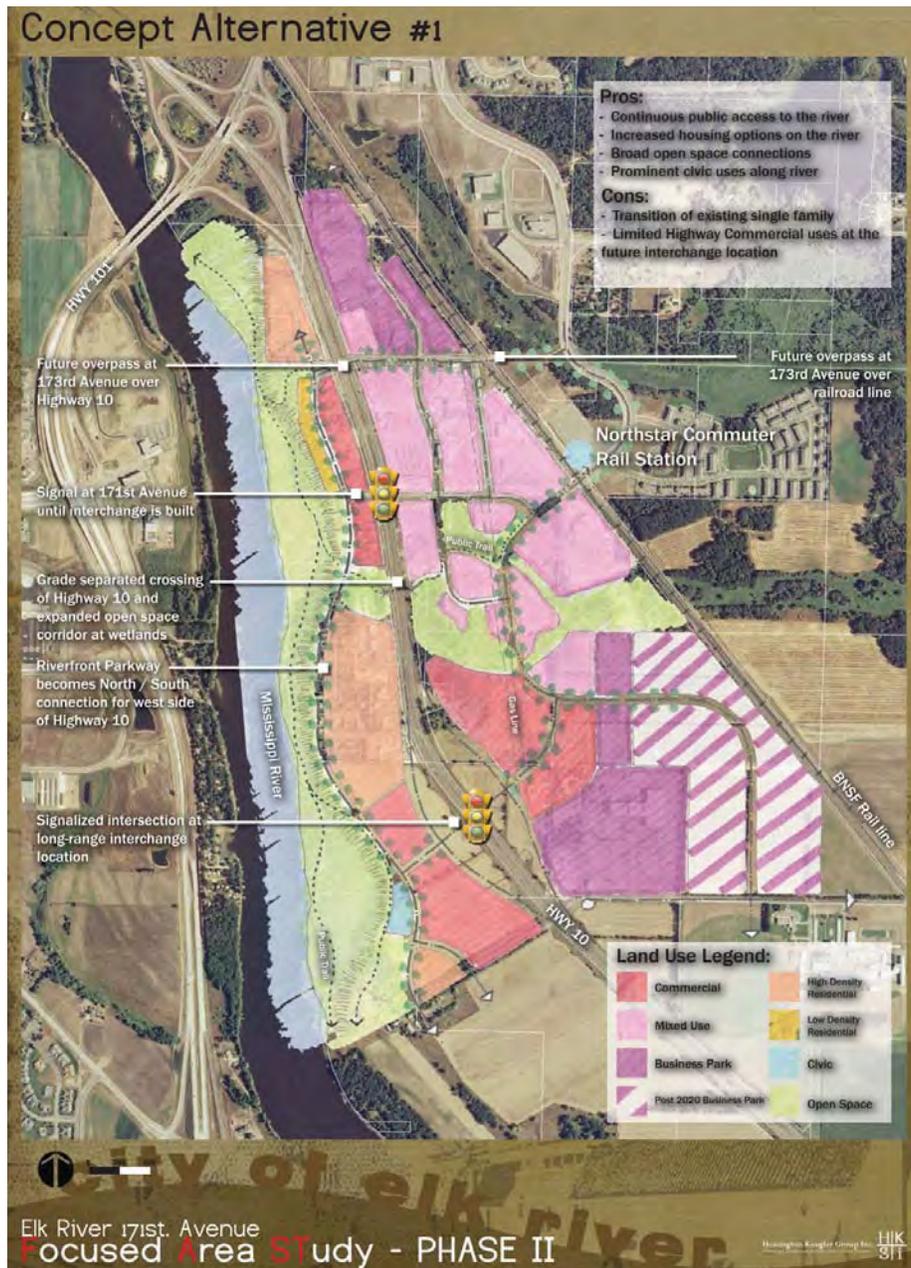
CONCEPT ALTERNATIVE #1

Pros

- » Continuous public access to the river
- » Increased housing options on the river
- » Broad open space connections
- » Prominent civic uses along the river

Cons

- » Transition of existing single family neighborhood
- » Limited highway commercial uses at the future interchange



CONCEPT EVALUATION

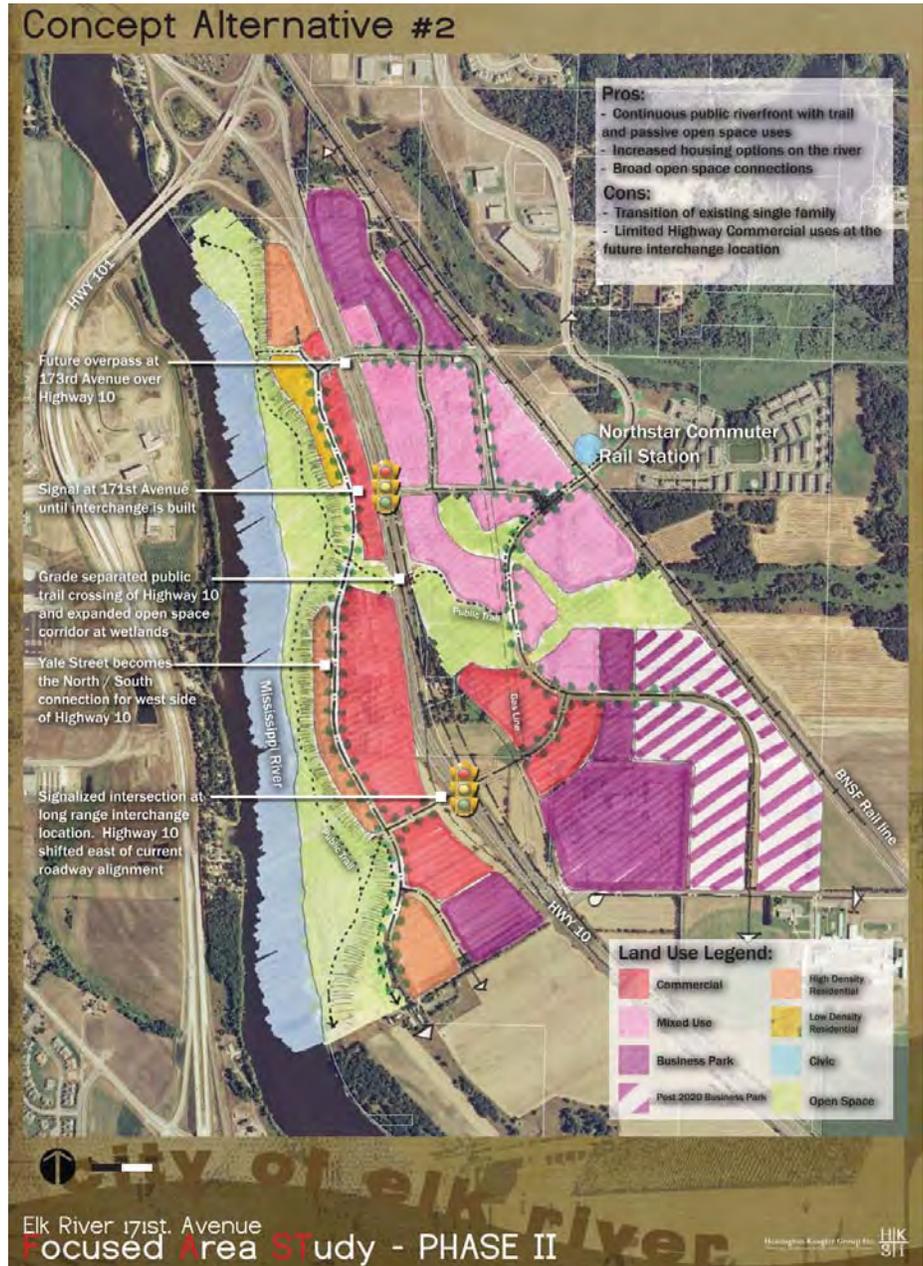
CONCEPT ALTERNATIVE #2:

Pros

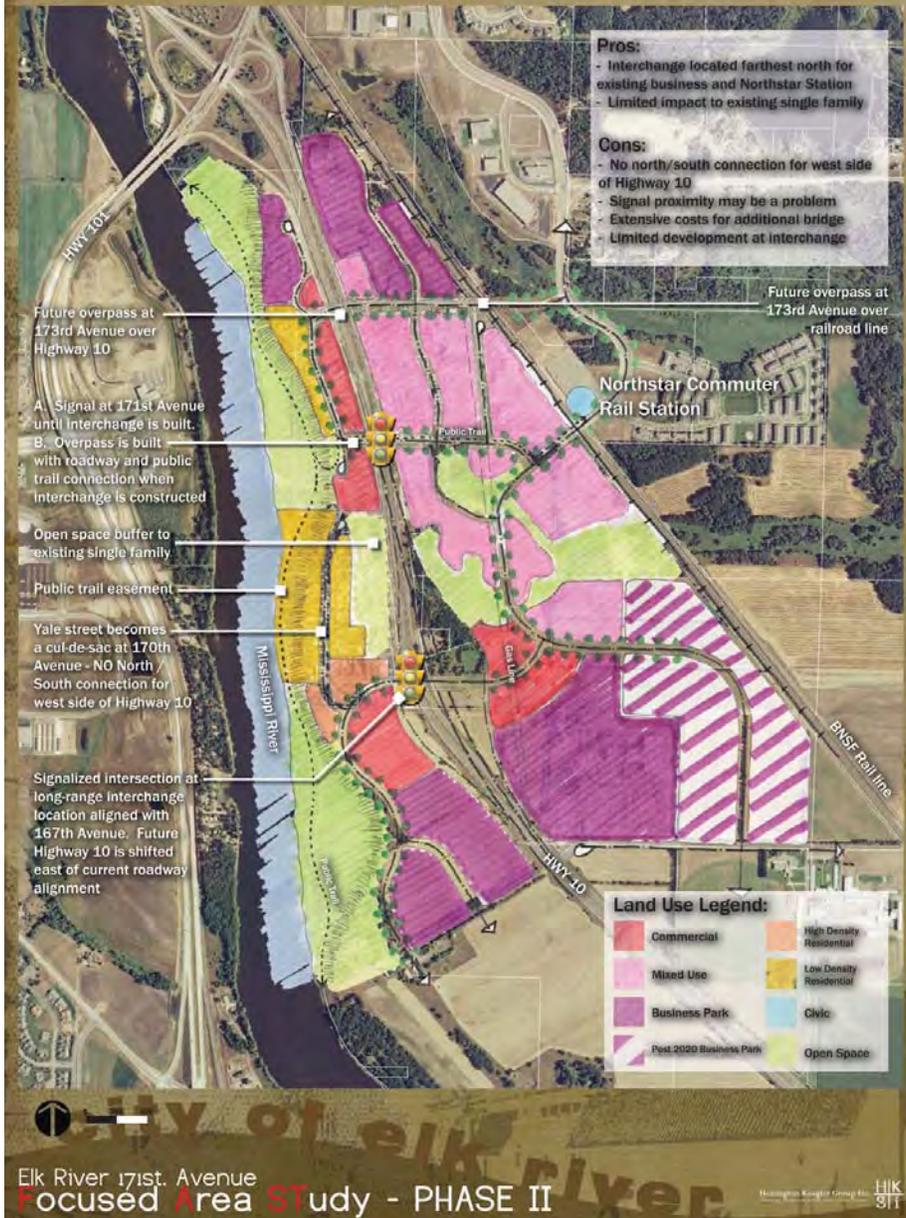
- » Continuous public riverfront with trail and passive open space
- » Increased housing options along the river
- » Broad open space connections

Cons

- » Transition of existing single family neighborhood
- » Limited highway commercial uses at future interchange location



Concept Alternative #3



CONCEPT ALTERNATIVE #3:

Pros

- » Interchange located furthest north for existing businesses and Northstar commuter rail station
- » Limited impact to existing single family neighborhood

Cons

- » No north/south connection for west side of Highway 10
- » Signal proximity may be a problem, less than preferred 1/2 mile spacing
- » Extensive costs for additional bridge crossing to connect to upper west side of Highway 10/169
- » Limited development capacity at future interchange location

CONCEPT EVALUATION

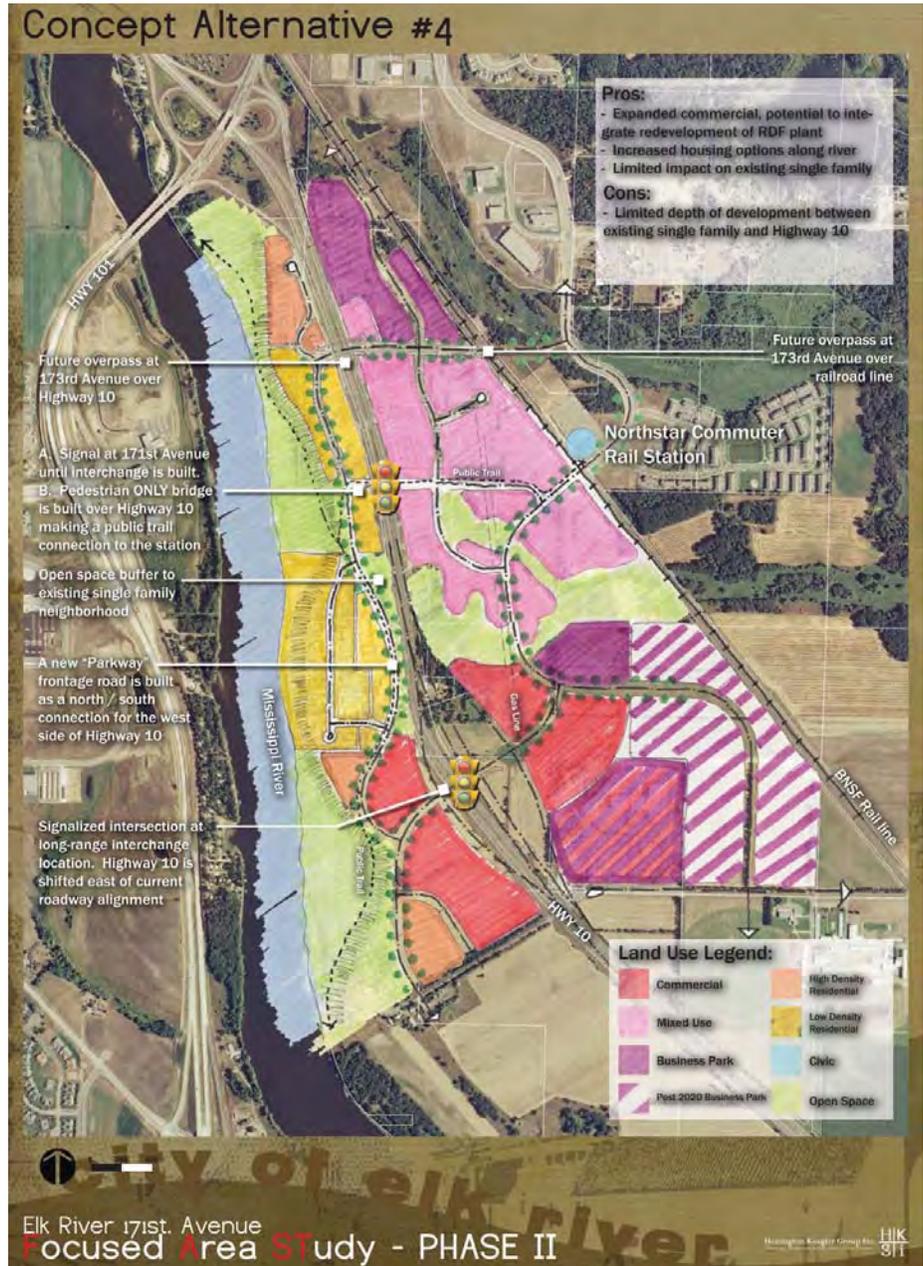
CONCEPT ALTERNATIVE #4:

Pros

- » Expanded commercial potential at interchange, potential to integrate redevelopment of RDF plant in the future
- » Increased housing options along the river

Cons

- » Limited impact on existing single family neighborhood
- » Limited depth of development between existing single family and Highway 10



LAND USE AND TRANSPORTATION RECOMMENDATIONS

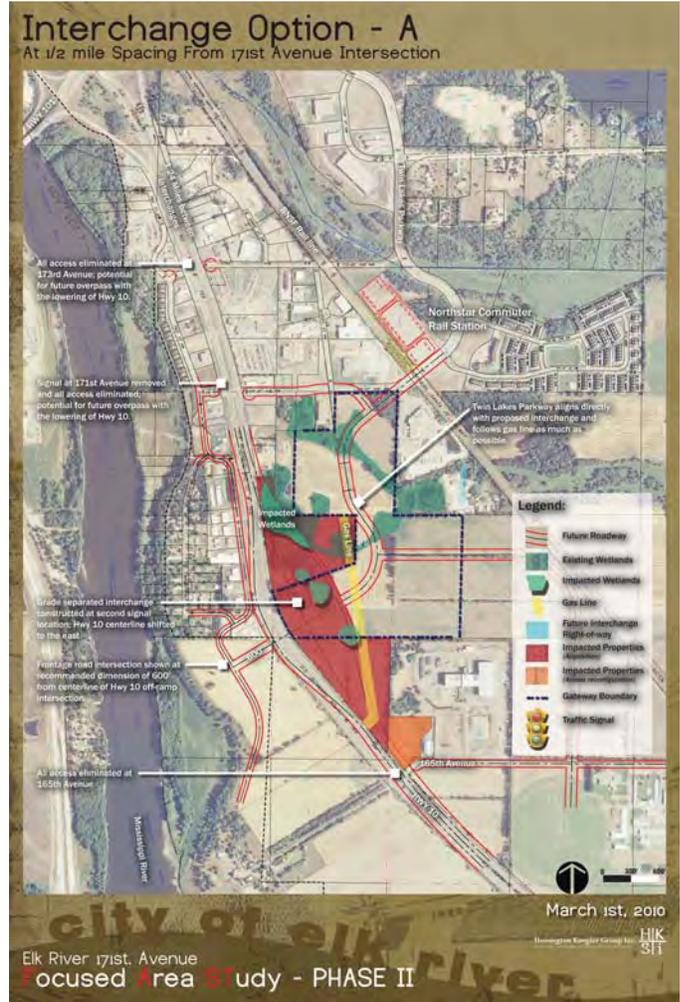
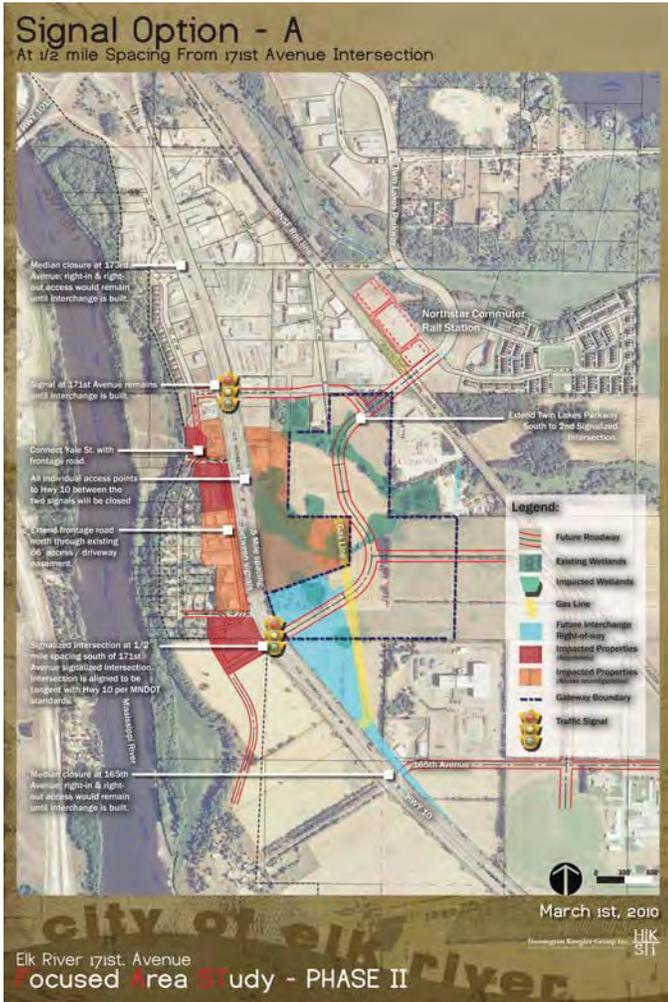
A public open house was held on the four concept alternatives to gauge reactions from residents and business owners. Many had concerns about redevelopment of the single family neighborhood along the river as well as a public riverfront trail through the backyards. Additionally, business owners were concerned about access long-term. Generally, a concept which includes a north south connection along Yale street at 170th Avenue to a newly created frontage road along Highway 10/169 in front of the existing business would be preferred, rather than connecting through the residential neighborhood or providing no north / south connection on the west side. The location of the interchange should be located as far north as possible and with limited impact on the existing residential neighborhood.

DETAILED SIGNAL AND INTERCHANGE OPTIONS

To better understand the impacts of the future interchange near 167th Avenue, the consultant team prepared three options for both a near-term signal approach and a corresponding long-term interchange design option. This approach allowed the members of the EDA and community to see the impacts on individual properties and allow for a discussion to ultimately pin down a preferred future interchange location. Each option contained a north south connection along the west side of Highway 10/169, a direct alignment of the extension of Twin Lakes Parkway with the future interchange and assumes a full diamond interchange, as directed by MNDOT. Differences in the options addressed the alignment long-term of Highway 10/169, potentially flattening the curve and pulling the roadway east to provide more dimensional space on the west side of the road for local roadways and development. The signal and interchange options looked at three locations for the interchange, right at 167th Avenue, one about 300' further south and a third roughly 800' south of 167th.



CONCEPT EVALUATION



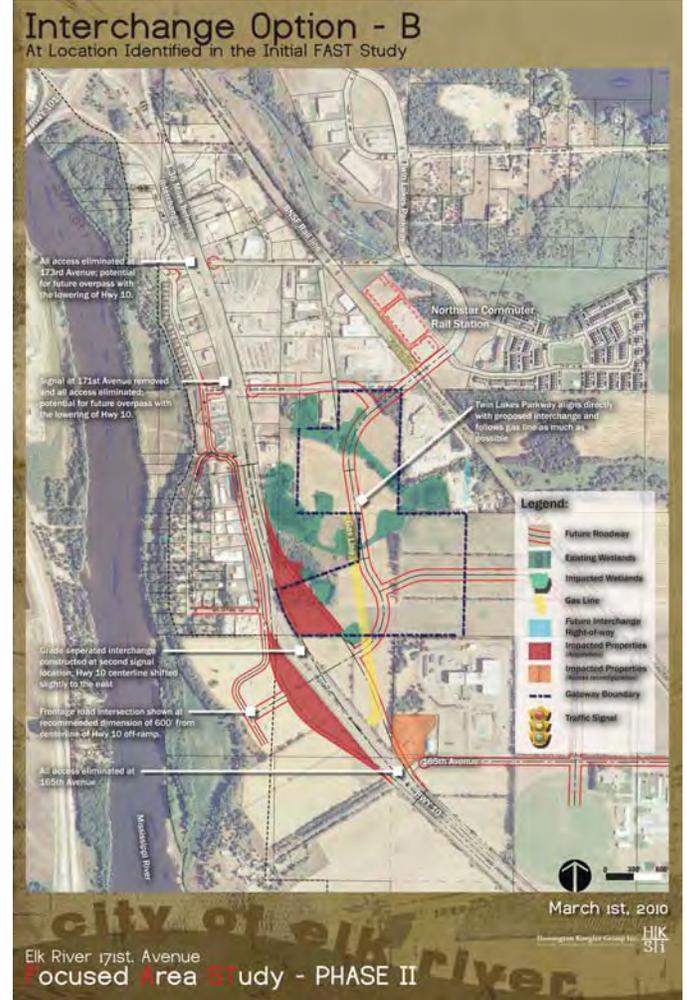
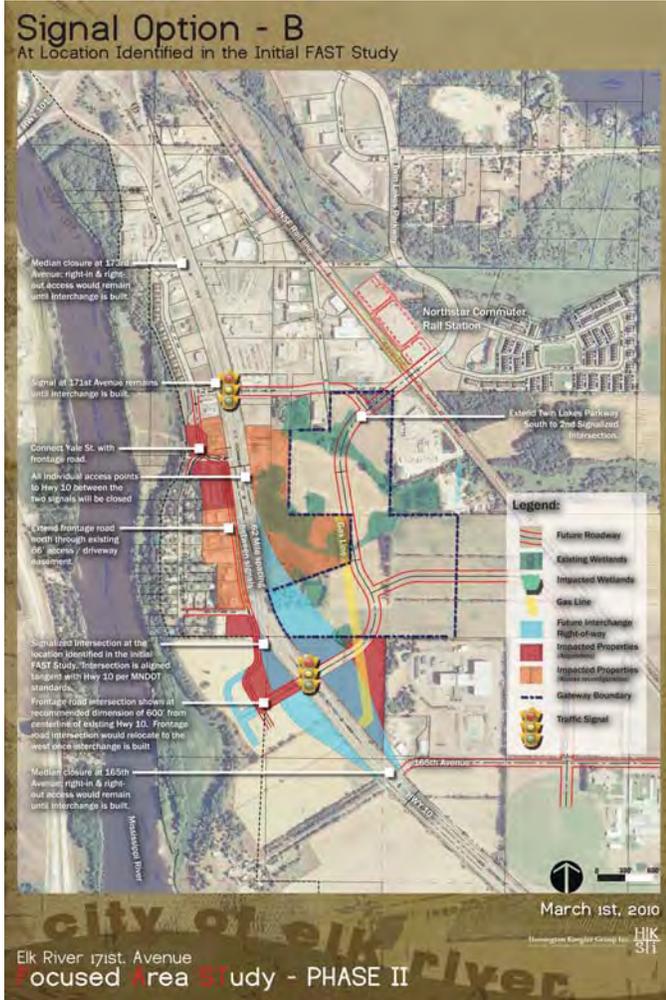
Signal Option A:

- » 300' south of 167th Avenue
- » Limited impact to existing residential neighborhood
- » Frontage road along Highway 10/169 in front of existing business in an existing drainage and utility easement

Interchange Option A:

- » 300' south of 167th Avenue
- » Limited impact to existing residential neighborhood
- » Frontage road along Highway 10/169 in front of existing business in an existing drainage and utility easement





Signal Option B:

- » 300' south of 167th Avenue
- » Limited impact to existing residential neighborhood
- » Frontage road along Highway 10/169 in front of existing business in an existing drainage and utility easement

Interchange Option B:

- » 300' south of 167th Avenue
- » Limited impact to existing residential neighborhood
- » Frontage road along Highway 10/169 in front of existing business in an existing drainage and utility easement

EVALUATION OF CONCEPT ALTERNATIVES AND SIGNAL & INTERCHANGE OPTIONS

As part of the evaluation of the planning process, each of the four concept alternatives went through a public and stakeholder review process. Newsletters were mailed to all landowners in the project area and individual meetings were conducted with key land owners. A public open house was held at Elk River City Hall in February 2010 and project web-site was created to review presented materials and to post comments. Additionally, the consulting team facilitated a panel of experts roundtable evaluation of the concepts. The round table provided expert professional opinions on a broad range of topics relative to the concepts and the FAST area in general. The following are summaries of the comments from the general public, key landowners, and panel of experts leading to the refinement of a single preferred master plan direction for the FAST:

Public Comments

Most of the comments from the public open house focused on the location of the interchange. Generally, a preference for signal and interchange option A with limited disturbance to existing single family neighborhood worked best as most felt it afforded a connection for existing & future businesses. However, some felt the roadway design in this concept had poor traffic flow to the new interchange. Most agreed that land uses along Highway 10/169 should remain commercial on both sides. Other comments suggested it was nice to have housing within walking distance of the station and at the intersection of the entry to the Northstar station and Twin Lakes Parkway traffic control and pedestrian safety is a priority. Additionally, consideration for bike facilities such as bike racks and bike lockers should be considered for commuters at the station and more trail connections to the station should be implemented. Residents and business owners both agreed there was a need for strong wayfinding and signage to direct patrons from Highway 10/169 to businesses not immediately adjacent to the highway.

Landowner Meetings Comments

The consulting team met with five of the larger landowners in the project area about the future plans for their property. All expressed a desire for their existing businesses to remain and expressed concerned about future transportation changes and impacts to their existing business. The consulting team also met with residential groups, the Elk River Station, Pulman place and the townhome association on Yale Avenue.

Panel of Expert Comments

Early in the phase one process, an effort to gain broader feedback from the professional development community outside of Elk River, the consulting team conducted a panel of experts round table meeting on the concept alternatives in order to gather input from a broad spectrum of expertise outside of Elk River, but familiar with the market conditions surrounding the FAST. Participants ranged from commercial and residential



CONCEPT EVALUATION

developers, transportation experts from MN DOT and the Northstar Rail Authority, as well as areas of expertise in public finance, market potential and energy. All panel members had no vested interest in the study area and allowed for a critical outside perspective on the three concept alternatives. The comments below were made by panel participants and are organized by transportation, land use, amenities and finance categories.

Comments in **BOLD** resonated with the group as critical elements.

Transportation:

- » Reconstruction of the 101/169 interchange as a comprehensive project will likely not happen within our planning horizon (20-30 years) due to funding realities. Alternatively, **“band-aid” transportation improvements necessitated by traffic and safety problems will be the norm.**
- » New Highway 10 interchange accessing the site is possible and would be looked at favorably by MN/DOT in order to clean up safety and traffic problems caused by current intersections. An interchange could happen independently of other highway improvements.
- » MN/DOT will likely close additional median crossings accessing the study area from Highway 10 in the next several years to improve safety. It will likely limit those access points to right-in/right-out only.
- » Northstar rail is expected to open in November 2009. The Elk River train station is projected to have 900 riders/day. Northstar information is at www.mn-GetOnBoard.com
- » Northstar Rail is planning one morning and one evening reverse-commute train per weekday. Ridership demand may pressure more.
- » Studies suggest that ¼ of employees/residents in the walking zone of an LRT station will use transit. Commuter rail capture rates will be less than LRT.
- » When choosing where to live, many people “drive” to the point they can afford.
- » There is some talk of legislatively limiting or surcharging “vehicle miles traveled”. This could create a market incentive for transit-oriented, compact development.

Land Use:

- » **Early in its evolution, the commuter rail station will have only a minor impact on large scale retail development in the study area but will drive relatively small amounts of convenience retail near the station. The commuter rail station is seen as a plus for office, industrial and residential uses.**
- » **Highway and train noise is a big issue for residential development – a land use buffer is needed between corridors and housing.**
- » Housing demand is built on job creation. Job creation in the study area should be key focus. The commuter train could be an office/industrial marketing bonus for the study area.
- » FHA financing of residential development is dependent on noise levels.



- » *Job-based commercial development market is currently declining.*
- » **Development objectives outlined in the three alternatives could not be realized without Highway 10 interchange.**
- » **Long-term market assessment:**
 - **Easiest: senior & rental housing, industrial**
 - **Moderate challenge: office, residential condos**
 - **Tough: retail (interchange would impact this), strict eco-focused industrial**
- » *Absorption of the amount of office shown in some concepts would be long-term (more than a decade)*
- » **Existing and adjacent uses make the study area an opportunity for “eco-focused” development – especially eco-industrial. Even as few as 5 synergistic uses would be a great success.**
- » *Need to think about development that could occur on the river-side of Highway 10 in order to put the study area in better context.*
- » *RDF plant could be beneficial use. Its visual character should be revamped.*
- » **The study area seems like a place that could play to the market niche of low impact, eco-based.**
- » *Maybe two development scenarios need to be explored, one that assumes rapid economic recovery with business as usual in real estate development and another with protracted recovery and an altered real estate/transit climate.*

Amenities:

- » *Rail station will be a residential and commercial development marketing bonus.*
- » *It will be in the study area’s best interest to get more reverse-commute trains.*
- » *Excess steam from GRE could stimulate commercial market interest.*
- » **Creating a pedestrian environment and trail/sidewalk links will be critical.**

Finance:

- » *City will likely need to subsidize development in some form.*
- » *In today’s dollars, a new Highway 10 interchange budget would be roughly \$15 million. This would likely need City financial involvement to occur.*





DEVELOPMENT FRAMEWORK

The master plan for the 171st Avenue FAST outlines a course for change over a 25 year planning horizon. The FAST will ultimately become a series of unique districts showcasing residential, office, retail and industrial uses within the naturalized setting of Elk River. The master plan acknowledges significant transportation pattern changes and respects uses adjacent to the study area. The master plan guides land use and transportation changes for the area allowing near term investment always with an eye toward the future vision.

5

DEVELOPMENT FRAMEWORK

HIGHLIGHTS

- » **Intensified mixed-use at transit station:** Over time, as the Northstar line matures and more people are looking for convenient access to transit, the area around the transit station will emerge as a prime location for housing, office and neighborhood retail with a compelling village atmosphere.
- » **Diverse employment base:** The master plan suggests a focus on creating a range of job opportunities beyond a living wage for Elk River. Industrial uses will promote a focus on manufacturing, energy and green business and commercial and office uses will create for opportunities from science and technology to research and development.
- » **Eco-business park:** An ecological focus for the future industrial uses leverages the “Energy City” brand of Elk River. Opportunities for shared facilities, reduced energy and emissions and re-use of manufacturing by-products will position the area as one of Minnesota’s first “Zero Waste” business park.
- » **Residential villages:** Building on the success of Elk River Station, the master plan suggests areas for a dense, compact and urban form of residential development, These distinctive villages uniquely responding to the site by taking advantage of natural amenities and topography and supply residents with a range of housing options and lifestyle choices.
- » **Strengthened pedestrian connections:** A network of recreational trails and comfortable sidewalks will knit together the study area with enhanced walking and biking experiences. This system of public, highly pedestrian spaces and facilities will provide a crucial amenity framework for high-quality development and redevelopment.
- » **Enhanced natural systems & open space amenities:** Building on the framework established by the large wetlands and surrounding city parks, the master plan suggests opportunities for additional public parks, plazas and urban spaces. Preservation of significant landscape features are critical steps to ensuring the essence of the FAST and the Elk River scenic landscape.
- » **Near term & long term focus:** With the impending transportation changes to the adjacent regional highways, the master plan suggests ways for development to occur in a shorter window of time while at the same time outlining the necessary steps to ensure near term development blends with the future development and transportation patterns.

Land Use:

The Future Development Framework Plan, Figure 5.2, illustrates the major patterns of development, transportation and open spaces shaping the vision for the 171st Avenue FAST.

The Future Development Framework Plan prescribes land use categories ranging from commercial and industrial uses to a new mixed-use transit center with density ranges from 24-32 units per acre. Figure 5.3 depicts ranges of density and intensity for each land use type. This land use typology, more clearly articulates the development intensity, building scale, and general character for each of the land uses.

In general, land use designations vary slightly from the 2003 Comprehensive Plan. The mixed-use designation becomes more prevalent and depending on specific areas within the project area, certain mixed-use designated areas are targeted toward commercial or retail use, while other areas guide office or residential uses. Figure 5.1, the Development Yield Summary, outlines the projected level of development for each land use.

For the purposes of further discussing land use and development character, the 171st Avenue FAST has been divided into sub-area as illustrated in the following chapter. Figure 6.1, highlights the various sub-areas within the development framework plan.

Land Use	Acres	Units	Retail Sq. Ft.	Office Sq. Ft.	Industrial Sq. Ft.
Existing Residential	55	52			
Higher Density Residential	155	1,675 - 2,230			
Transit Center	120	400 - 530	35,000	1,450,000	
Service / Commercial	35		15,000	15,000	
Destination Retail	45		810,000		
Temporary Destination Retail	25		65,000		
Jobs Area	245			430,000	3,632,000
Open Space	250				
Totals:	930	2,127 - 2,812	925,000	1,895,000	3,632,000

Figure 5.1: Development Yield Summary

FUTURE DEVELOPMENT FRAMEWORK PLAN

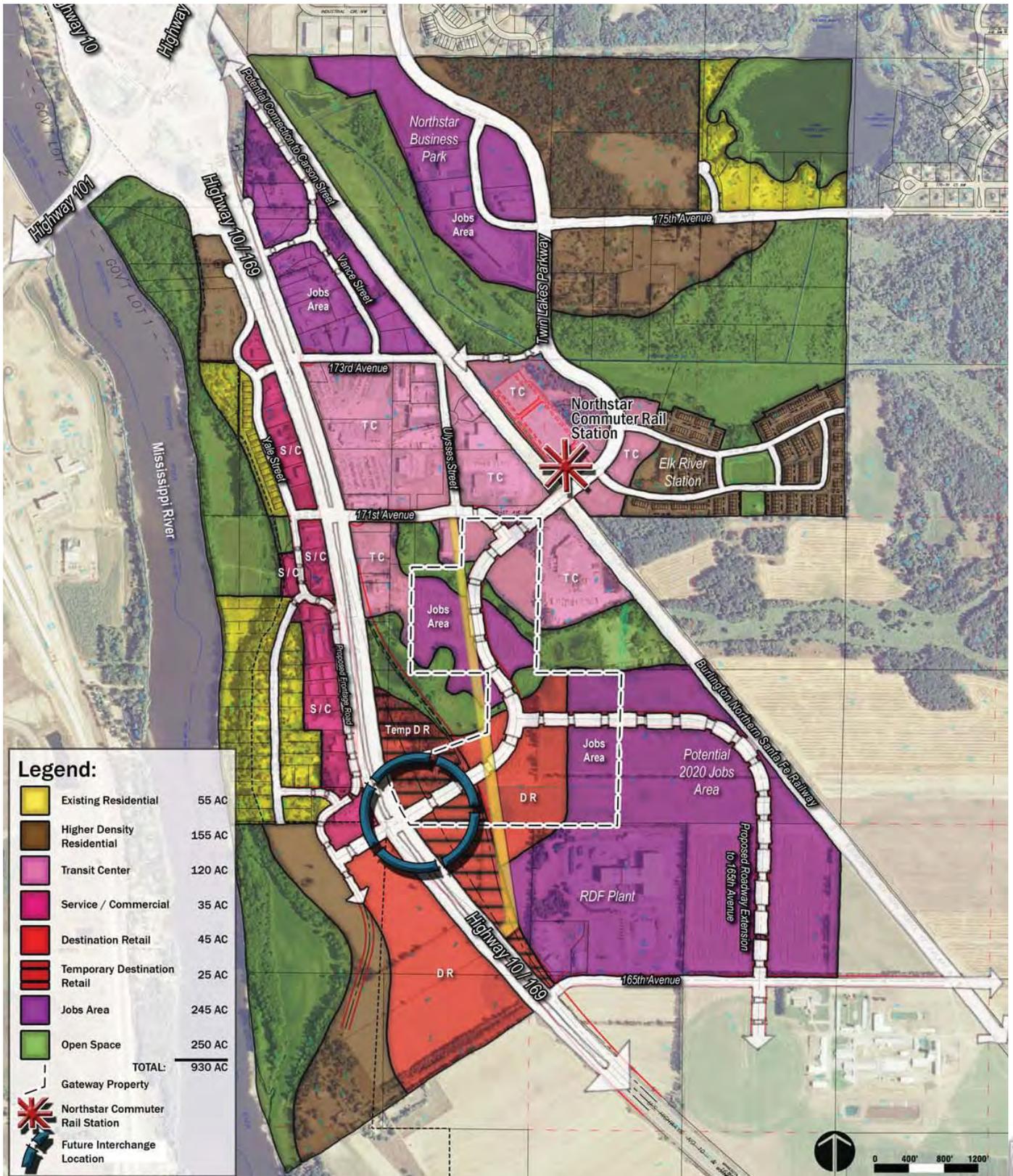


Figure 5.2: Future Development Framework Plan

DEVELOPMENT FRAMEWORK

LAND USE TYPES

			<p>Existing Residential: 55 AC.</p> <ul style="list-style-type: none"> * Single family, duplexes, townhomes and multiple-family dwellings * Average density range: 3 - 4 du/ac
			<p>Higher Density Residential: 155 AC.</p> <ul style="list-style-type: none"> * 3 - 4 Story Buildings * Surface Parking, Structured Parking * Housing Types: Apartments, Condominiums, Lofts, Senior Housing * Density Range: 24 - 32 du/ac
			<p>Transit Center: 120 AC.</p> <ul style="list-style-type: none"> * 2 - 5 Story Buildings * On-Street / Structured Parking * Ground Level Retail/Office/Industrial * Upper Level/Office/Residential * Density Range: 24 - 32 du/ac
			<p>Service/Commercial: 35 AC.</p> <ul style="list-style-type: none"> * 1 - 2 Story Buildings * Surface Parking * Retail/Office uses
			<p>Destination Retail: 45 AC.</p> <ul style="list-style-type: none"> * 1 - 2 Story Buildings * Surface Parking
			<p>Temporary Destination Retail: 25 AC.</p> <ul style="list-style-type: none"> * 1 Story Buildings * Surface Parking * Long Term Lease - Notice of timeline for future interchange
			<p>Jobs Area: 245 AC.</p> <ul style="list-style-type: none"> * 1 - 3 Story Buildings * Surface Parking
			<p>Open Space: 250 AC.</p> <ul style="list-style-type: none"> * Natural Features, Visual Amenity * Stormwater Filtration * Wildlife Habitat and Movement Corridors * Agriculture Production and Research * View sheds * Trails

Figure 5.3: Land Use Types

TRANSPORTATION INFRASTRUCTURE:

Highway 10/169

As the expert panel indicated early on in the master plan process, Highway 10/169 is the key for success of the 171st Avenue FAST. The presence of the regional highway provides the traffic and visibility making retail, commercial, office and industrial development possible. The transition of Highway 10/169 to a freeway will be a significant trigger for development and redevelopment and integral to the roadway change will be the placement of the future interchange.

Future Interchange

The location of the future interchange has significant land use impacts. The master plan examined numerous scenarios for the interchange. Option A worked the best to balance the desires of the existing businesses for the interchange to be as far north as possible without compromising the existing single family neighborhood to the west. This location coupled with the direct routing of Twin Lakes Parkway to the interchange provide a direct route to the Northstar commuter station. Ultimately, the location of the interchange is closer to the built environment and will likely increase property values further into the built area and increase the chances of broader development areas benefiting from the interchange.

Additional Considerations for Highway 10/169

In 2012, MN DOT plans a resurfacing of Highway 10/169. As part of this project, it is understood that MN DOT will be closing all medians except for 171st and 165th Avenue for safety reasons. Altering access points in this manner will likely initiate some turnover for uses along Highway 10/169 and strengthen the need for more internal roadway connectedness. In the future, the city should work with MN DOT to further investigate overpass options near 171st Avenue to better connect the land uses west of Highway 10/169 to the study area.

Rail Line

The master plan suggests providing an additional crossing of the BNSF rail line near 173rd Avenue. This additional crossing will allow for improved traffic flow for the commercial and industrial uses in the north of the study, rather than funneling all traffic to Twin Lakes Parkway to cross the rail line. As the city lobbies to shift the rail line north near downtown, the city should investigate the feasibility of either an at-grade or grade separated crossing in this location. While creating an additional crossing is challenging, it is still worthwhile as something to strive for to create better and more intensive development.



An additional rail crossing should be considered at 173rd Avenue

The opportunity for a rail spur off of a major freight rail corridor could be significant for industrial uses in the FAST. The master plan suggests a parallel spur line to serve the industrial uses surrounding the RDF plant.



DEVELOPMENT FRAMEWORK

TRANSPORTATION INFRASTRUCTURE DIAGRAM

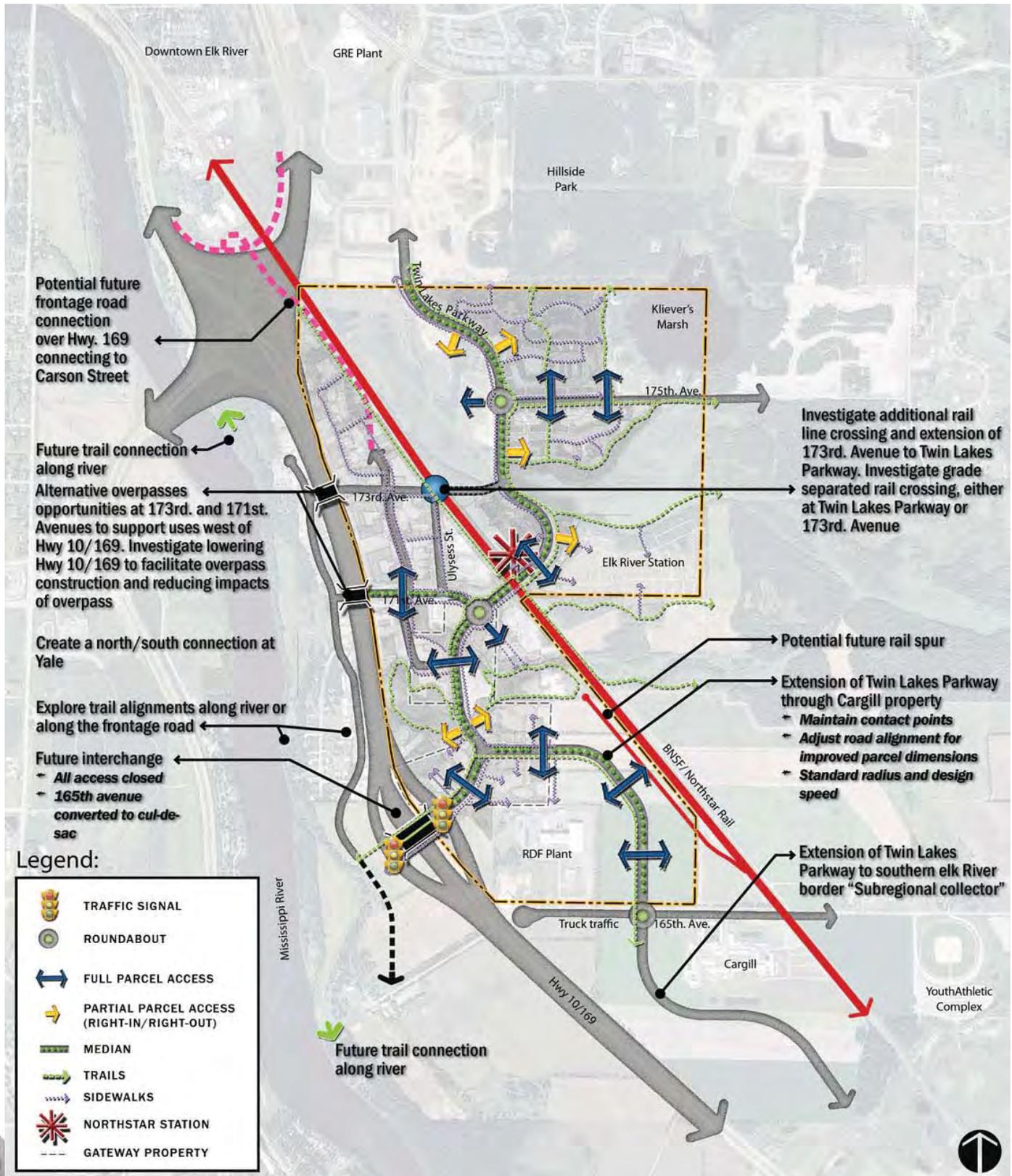


Figure 5.4: Transportation Infrastructure Diagram

GREEN INFRASTRUCTURE:

The Mississippi River, expansive wetlands, native oaks, and pine groves provide a distinct character for the project area. The protection and enhancement of these landscape features are important elements to retain as development occurs in the district. These natural features provide added value to surrounding development and provide recreational opportunities when public trails are integrated to the open space network. This master plan suggest establishing a framework for development patterns centered around existing natural systems, stormwater treatment, parks and open space and trails, or green infrastructure.

Open Space, Wetlands, Natural Features

The development pattern in the FAST is truly shaped by natural features. With almost 25% of the land area in the wetlands or floodplains, these natural systems are highly visible and contribute to the scenic character of the area. The northern and southern wetland reaches provide natural breaks between development zones, and the plan promotes providing increased public access to the edges of these natural systems. The plan also encourages the preservation native vegetation. As development occurs and where appropriate, existing topography and larger stands of existing trees should be preserved to maintain the scenic character for the FAST.

Parks

The master plan suggests the potential creation public park space along the river front and in the Northern Heights sub-area and a strong connection north to Hillside City Park. A number of public parks are adjacent to the site and connections to these parks are important to attract residents and employment to the study area.

Viewsheds

Viewsheds into the site from along Highway 10/169 are important to signify the FAST project area. Site designs reflective of the natural setting of Elk River should be considered. Internally, the large wetlands afford sweeping views of the natural landscape and development should take advantage of these assets.

Stormwater Treatment

The master plan encourages the stormwater infrastructure features such as stormwater ponds, infiltration basins and bio-swales are designed as natural open space amenities for the surrounding development. Furthermore, these features should be interconnected to the broader system of wetlands and natural areas as illustrated through the Pinnacle and Office Village sub-areas.

Urban Forest

The master plan encourages the preservation of existing vegetation and establishing a strong canopy of urban street trees throughout the FAST.



The natural systems are highly visible and contribute to the scenic character of the site.



Wetlands occupy 25% of the land area



Connections to nearby parks are important



Stormwater treatment as an amenity

DEVELOPMENT FRAMEWORK

Green Infrastructure Diagram

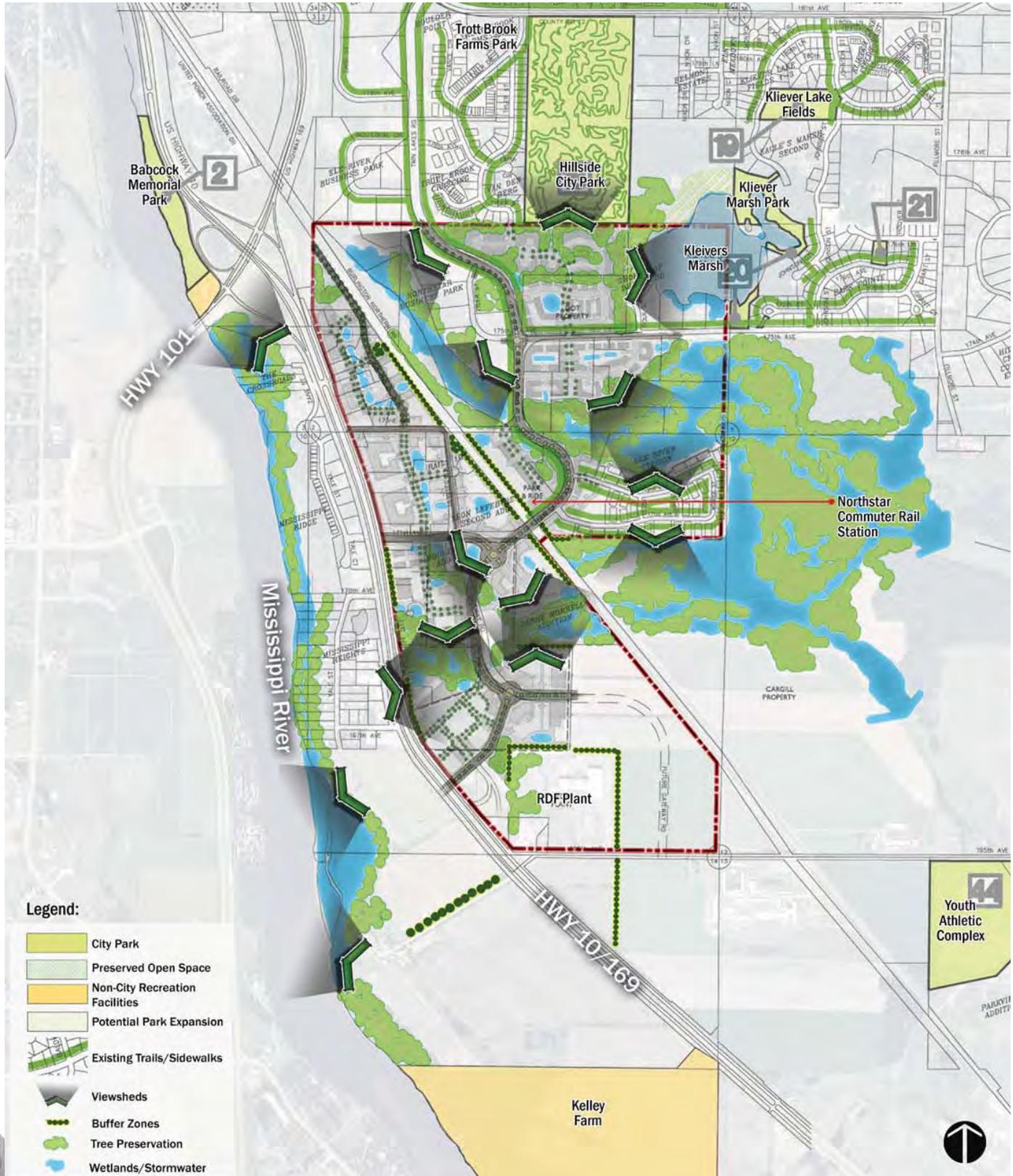


Figure 5.5: Green Infrastructure Diagram

TRANSIT SYSTEM:

Northstar Commuter Rail Station

The Northstar commuter rail is a plus for growth in the FAST area, but not a primary driver for change. As the system matures and ridership grows it is important the station meets the demands of the patrons. Adequate parking will be a necessity. While the current lot provides 700 spaces, additional space may be needed in the future. A parking deck or ramp structure should be considered for the station in consideration with mixed-use development before more surface parking spaces are added since little land exists for development immediately adjacent to the station. Providing adequate facilities for bike commuting are also suggested. Bike lockers allow a safe, secure location for commuters to store their bikes. A well integrated trail system will further promote bike commuting to the Northstar station.

Community Circulator Bus

With the potential for more increased reverse commute trains, the city of Elk River should examine the feasibility of a community circulator bus to work in concert with the Northstar schedule. The circulator would connect community employment centers, downtown and commercial centers to the Northstar station eliminating the need for the automobile for some commuters.

IMPACT ANALYSIS:

A fully developed plan for the 171st Avenue FAST will impact the existing public infrastructure systems in the area. With the introduction of development and redevelopment in portions of the project area, improvements to the public systems will be necessary and advantageous to foster more intensive development.

Roadway and Traffic Analysis

As the master plan for the 171st Avenue FAST indicates, the road network is critical to the long-term success of all uses within the plan, especially when access restrictions are implemented along Highway 10/169. It is anticipated that upgrades to the intersection at 171st Avenue and Highway 10/169 addressing grading, sightlines and stacking will be needed as development occurs in the FAST. Additionally, internal roadway connections from development areas will need to be designed to mesh with the extension of Twin Lakes Parkway to the south through the Gateway in order to facilitate traffic flow through the area.

Infrastructure

Initial analysis by City staff of the sewer and water indicates that upgrades to major infrastructure systems will be needed at some point during the development time line. Most impacts will come from realignment of sanitary sewer and water lines with roadway improvements. The overall capacity for sanitary sewer and water flows will need to be further studied as development proposals come forward. Additionally, further electrical network planning will need to occur in the project area.



A parking deck or ramp may be needed in the future to accommodate increased demand for the Northstar commuter rail.



Bike lockers allow a secure location for commuters to store their bikes



A circulator bus would connect other key activity centers in Elk River with the Northstar station





DEVELOPMENT CHARACTER

The FAST will ultimately become a series of unique districts or sub-areas showcasing residential, office, retail and industrial uses within the naturalized setting of Elk River. As part of this chapter, the development character of each of these sub-areas is examined further. While certain areas will likely see little or no significant change, much of the FAST will undergo a transformation into vibrant places to live, work and shop within the community.

6



DEVELOPMENT CHARACTER

DEVELOPMENT CHARACTER - SUB AREA DIAGRAM

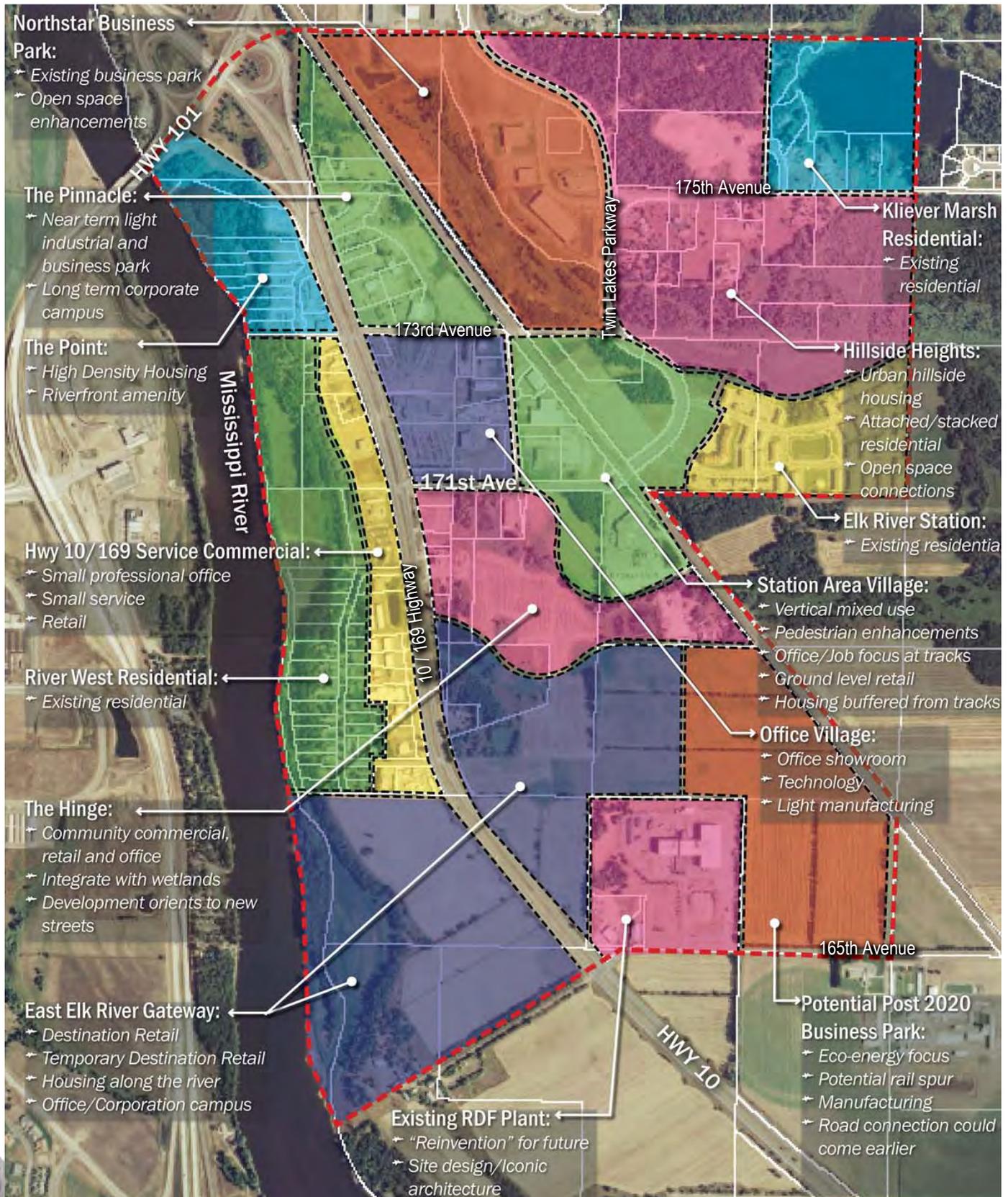


Figure 6.1: Development Character - Sub Area Diagram

SUB-AREA DESIGN CHARACTER

The sub-area design character approach for the master plan looks at multiple aspects of development character and prescribes the key urban design principles to follow for each sub-area. These key principles include identification of building, parking, loading and service zones and the relationship between the enhanced street network and access to development parcels. Zones for stormwater treatment, critical buffer areas and areas for preservation of natural vegetation and wetlands are also illustrated. Each sub-area is analyzed around these key urban design principles, and highlighted in the text are the individual design criteria for development in each district. This vignette study approach organizes and aligns all of the unique districts in the project, matching the overall development framework for the 171st Avenue FAST master plan.

Mixed Use and Commercial Sub-Areas STATION AREA VILLAGE

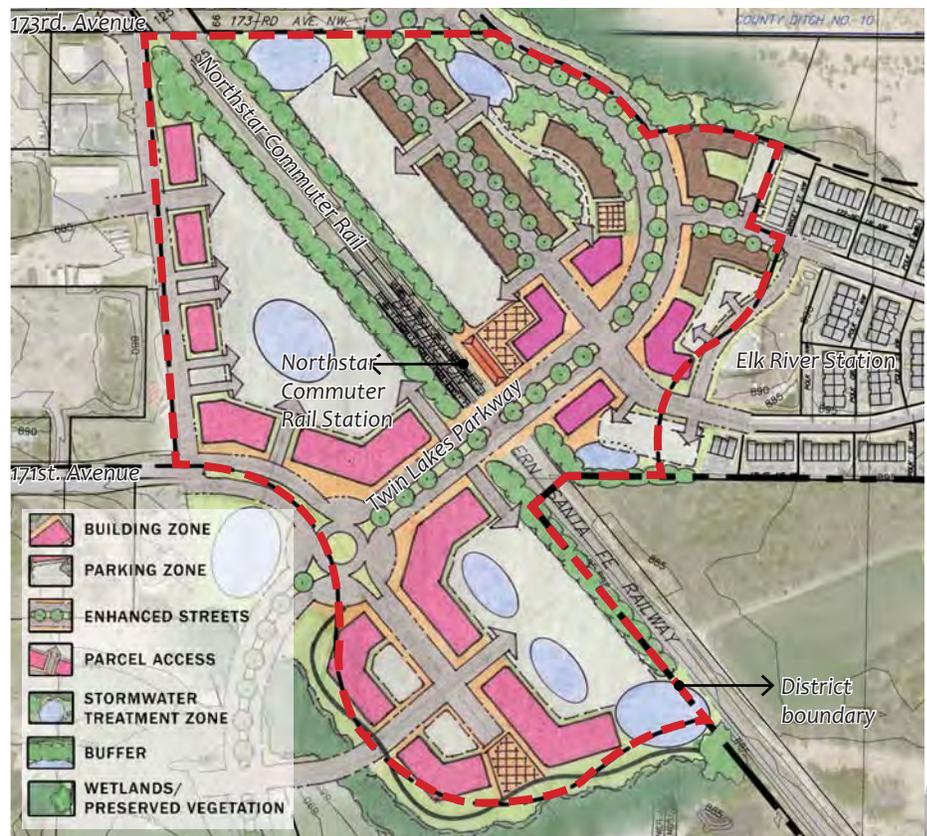


The area immediately adjacent to the Northstar station is envisioned as vibrant mixed-use district.

As intensification of development occurs over time, this district will include **vertical mixed-use at the primary intersection to the transit station**. Residential uses are envisioned north of the station on both sides of Twin Lakes Parkway and adjacent to the park and ride lot. Long term, **housing could develop in conjunction with a parking structure as development intensifies and ridership increases**. Office is the along Twin Lakes Parkway south of the transit station, with larger mid-rise buildings framing the street and smaller

buildings further from Twin Lakes Parkway. The development is organized to **promote internal circulation for streets and drives and easy pedestrian navigation**. Connections between sidewalks, trails and public gathering places are vital to maintaining the success of commercial uses and attracting residents to the district.

The **character of Twin Lakes Parkway is distinctly urban throughout the entire district** combining an attractive, comfortable streetscape, while still functioning as a collector roadway. The round-a-bout at the re-aligned intersection of 171st and Twin Lakes Parkway facilitates the turning movements of the projected traffic volumes. **Along the street storefronts and business occupy the ground level**, while amenities such as broad sidewalks and outdoor plazas with benches and landscaping and properly scaled lighting create a safe and comfortable environment for pedestrians. **Trails along the wetland edges tie together with sidewalks and outdoor plazas**. **On-street parking exists** for small segments of Twin Lakes Parkway **in front of retail uses**. In general, **parking and loading areas should be located internal** to the larger development blocks utilizing **shared or district parking** to maximize development along the street frontage and further distance buildings from the rail line noise. In addition, **extensive landscape buffers** should be planted and maintained on both sides of the rail line for noise attenuation. A **strategic approach for stormwater** allows for building orientation toward both natural amenities and internal stormwater treatment systems, bringing increased value to development.



Future Station Area Village Vignette Study

DEVELOPMENT CHARACTER

THE HINGE



This district offers some potential for **retail development in the near-term** due to the signalized intersection at 171st Avenue. The challenge for this district

will be maintaining successful near-term development once the interchange is constructed and access from Highway 10/169 is shifted away from the current intersection.

The intersection at Highway 10/169 and 171st Avenue will likely remain the primary access for the FAST for some time into the future. As residential uses develop north and the commuter rail begins operation, it is likely developers will become interested in **smaller, convenience retail and commercial uses at this location.**

With the inevitable closure of the 171st intersection, the key for continued success of **commercial or retail uses in this area will center on building orientation and connectivity.** Buildings must be designed to **have a “front” toward 171st Avenue and toward Twin Lakes Parkway** anticipating the transportation shift.

Additionally, **an internal street connection should be south of 171st Avenue through the Gateway land to Twin Lakes Parkway.** This roadway will help ensure viability **long-term and adequate vehicular circulation near term as a solitary access point out to 171st will not allow for left hand turns** due to stacking issues at peak times. Thus, **the integration of the northern portion of the Gateway property for design considerations of this district is critical** to ensuring successful



Future Hinge Sub Area Vignette Study

development.

Wetlands provide significant development constraints for individual landowners, but district wide they provide the opportunity to better organize the development pattern through a **strategic wetland mitigation approach to optimize development potential for both private and City owned land.** Jointly, with the wetland mitigation, a **district wide stormwater treatment approach** will help minimize stormwater infrastructure. Last, a trail network along the periphery showcases the natural systems and provided additional connectivity.

HIGHWAY 10/169 SERVICE & COMMERCIAL



This area represents a narrow strip of existing commercial properties running along the western edge of Highway 10/169. Limited change is envisioned for this area. The parcel sizes are narrow and are well situated for smaller, service related commercial uses that can benefit from the highway visibility.

EAST ELK RIVER GATEWAY



This district responds to the preferred location of the future interchange along Highway 10/169 and suggests a large area of **highway commercial land use** (18 acres) on the southwestern side of the interchange and **transitioning to residential overlooking the river**. On the east side, there is a small area of retail adjacent to the RDF plant as well as land designated as “Temporary Destination Retail.” This areas, roughly 15 acres, falls within the future right-of-way for the interchanges. Here the city must balance the level of near-term public infrastructure and private investments, knowing the future interchange will be built one day. The City owns a large portion of this area and could utilize a land lease approach for development in this future right-of-way area. This district will ultimately become the gateway to the commuter rail station and East Elk River.

(WEST OF HIGHWAY 10/169)

The land configuration on the west side of Highway 10/169 is better suited for larger commercial users due to larger parcel size and limited utility / wetland obstructions that are found on the east side.

Additionally, this portion of the sub-area depicts an **organized development approach** for parcel access, placement of buildings, parking, loading, and stormwater treatment. All of which are **established by the access and spacing requirements for the future interchange and envisioned parkway containing south bisecting the residential and the commercial uses.**



East Elk River Gateway Sub Area Vignette Study

(EAST OF HIGHWAY 10/169)

One of the major changes from the Phase One plan shows a direct connection of Twin Lakes Parkway to the new signal and future interchange location. The roadway has been configured to create larger development parcels to the southeast for destination retail and office users. A collector road is envisioned to connect to the east through the Cargill property and beyond the retail visibility off of Twin Lakes Parkway, more industrial and business park uses would be developed. **If the access to 165th were to be replaced with a new signal at the future interchange location, the City would need to construct this segment of road to connect to Cargill and the Youth Athletic.**

DEVELOPMENT CHARACTER

Employment Districts

NORTHSTAR BUSINESS PARK



Only two parcels remain for development in the Northstar Business Park and **marketing efforts should continue to complete the business park**. The remaining sites are smaller, irregular shaped and bisected by the natural gas line. **Simple site studies illustrating development potential** could allow prospective buyers to better visualize the site potential. **Further subdivision of the larger lot may help attract smaller buyers.**

POTENTIAL POST 2020 BUSINESS PARK



This sub-area is situated on Cargill owned land and is planned for light industrial use with the eco industrial brand. **Development will not occur on this land until 2020**, unless Cargill's plans change. A collector road continues to the south through the sub-area and establishes the development pattern. **Parcels would range in size from roughly 5 to 10 acres** and would have an organized development pattern between all of the parcels of building location & expansion area, parcel access, parking &

loading and stormwater treatment.



Example of a typical Business Park building

Generally, **buildings are located toward the street with parking at the side and loading in the rear**. **Access for loading and stormwater treatment facilities could be shared between parcels**. **The streetscape of the collector road unifies the industrial / business park setting** with appropriate lighting, signage, boulevard trees and sidewalks connecting employees north and west to the retail uses and commuter rail station. **A heavy rail spur** could exist for the industrial uses running parallel to the existing rail line, but no negotiations with BNSF have occurred as part of this plan.

RDF PLANT



As the eco-industrial park concept evolves for the southern portion of the FAST, a reinvented RDF plant could play a large role in the success of the overall area. **The city should work closely with the RDF plant on future planning to refurbish the facility as anchor for the eco-industrial park**. As the waste to energy industry continues to grow, **the addition of the rail spur may become integral to the future of the RDF plant**. Finally, with the sweeping views across the agricultural lands from the south there is a tremendous opportunity for the facility to **become the**

marquee signaling the entry to the eco-industrial park, and iconic gateway to "Energy City" along Highway 10/169. The architecture and site design of the 40 acre parcel should announce the presence of something special, rather than a non descript industrial use. Conversely, if the RDF Plant goes away, the site could transition in the long term to retail use, based on the size and location of the parcel adjacent to the interchange.



Faribault Energy Park - An example of an iconic building site for the RDF Plant.

OFFICE VILLAGE (LONG-TERM)

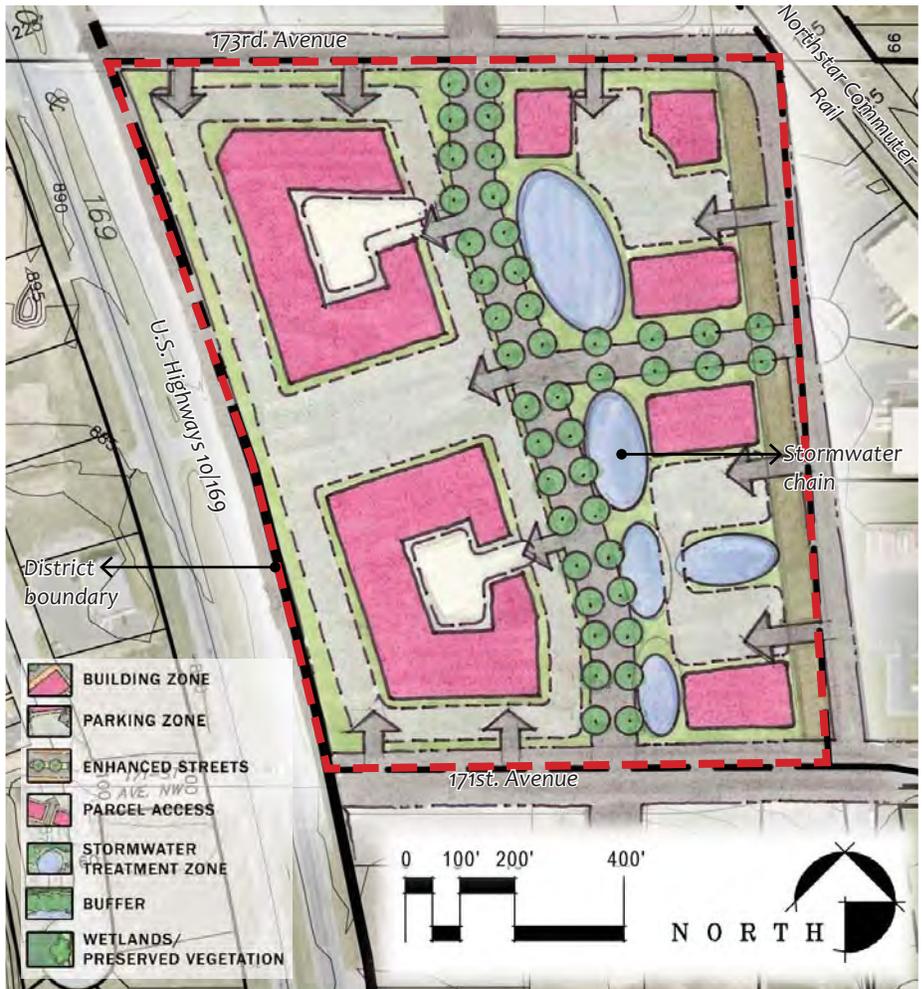


Any redevelopment within this district would likely not occur until major transportation patterns change. The redevelopment would occur within the boundary of the existing road network and natural gas line.

Generally, **larger office / office showroom uses** would exist along Highway 10/169 taking advantage of visibility and the relatively flat topography. **Smaller, flexible office uses** would locate along Ulysses Street where topography and the natural gas line pose challenges for larger building footprints. At the center of this district are **strong roadway connections linking adjacent districts to the north and south**.

This new **central roadway provides more direct access to Twin Lakes Parkway via 171st Street and connects employees to the commercial areas in the Hinge and around the commuter rail station**. Again, a **collective stormwater treatment approach** maximizes development efficiency and **serves as an amenity for development**.

Overall, an organized district development pattern is implemented across parcel boundaries and takes into consideration building placement, the internal street network and parking & loading access to ensure a district wide pattern that functions for surrounding sub-areas as well.



Office Village Sub Area Vignette Study



Small office / office showroom design character

DEVELOPMENT CHARACTER

THE PINNACLE

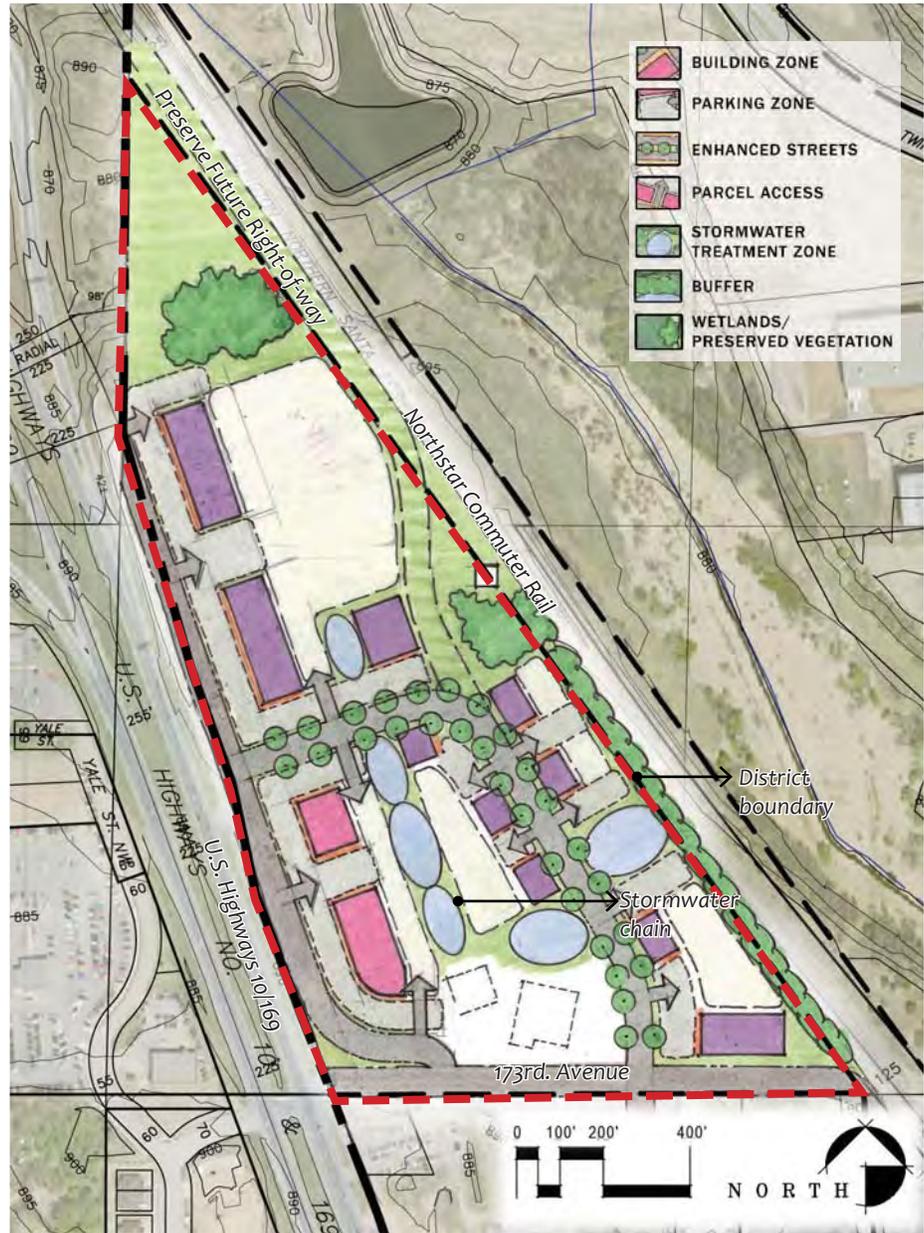


The Pinnacle sub-area is the narrow, under-utilized area in the far northwest of the study area between the rail line and Highway 10/169. Access is challenging for much of the site, but an opportunity exists with strong highway visibility. The timing of access changes along Highway 10/169 will have large effect on development and redevelopment in this district.

(NEAR-TERM)

With limited access and numerous small parcels it is unlikely major redevelopment will occur in this sub-area in the near-term. Rather, **capitalizing on recent investments** with the extension of Vance Avenue, **select small industrial users with limited access needs and relatively limited investment fit for the undeveloped portion of the district.** **Redevelopment of the two vacant sites north of 173rd Avenue could allow for office or office showroom uses,** however, a median crossing will be closed at 173rd Avenue with the planned 2013 MN DOT resurfacing project could impact any high traffic uses.

The frontage road will remain as the primary access for uses along Highway 10/169, **but the intersection at 173rd Avenue should be reconstructed further east with any redevelopment for additional safety measures.** **Extending Vance Avenue to the frontage road and the addition of district signage icons will help increase visibility for small business behind the frontage road users.** As these uses evolve, steps should be taken to



The Pinnacle Sub Area - Near Term Vignette Study

create **attractive building fronts** and **organizing the development pattern.** The organization must include **well landscaped parking to the front or side of the building,** and **well screened loading and storage areas located behind the buildings.** **Stormwater treatment can take on an entire sub-area approach and become internal to the larger blocks of development.** **This framework of streets, utilities and stormwater treatment sets the stage for broader long term redevelopment which could occur with an additional access to the north.**

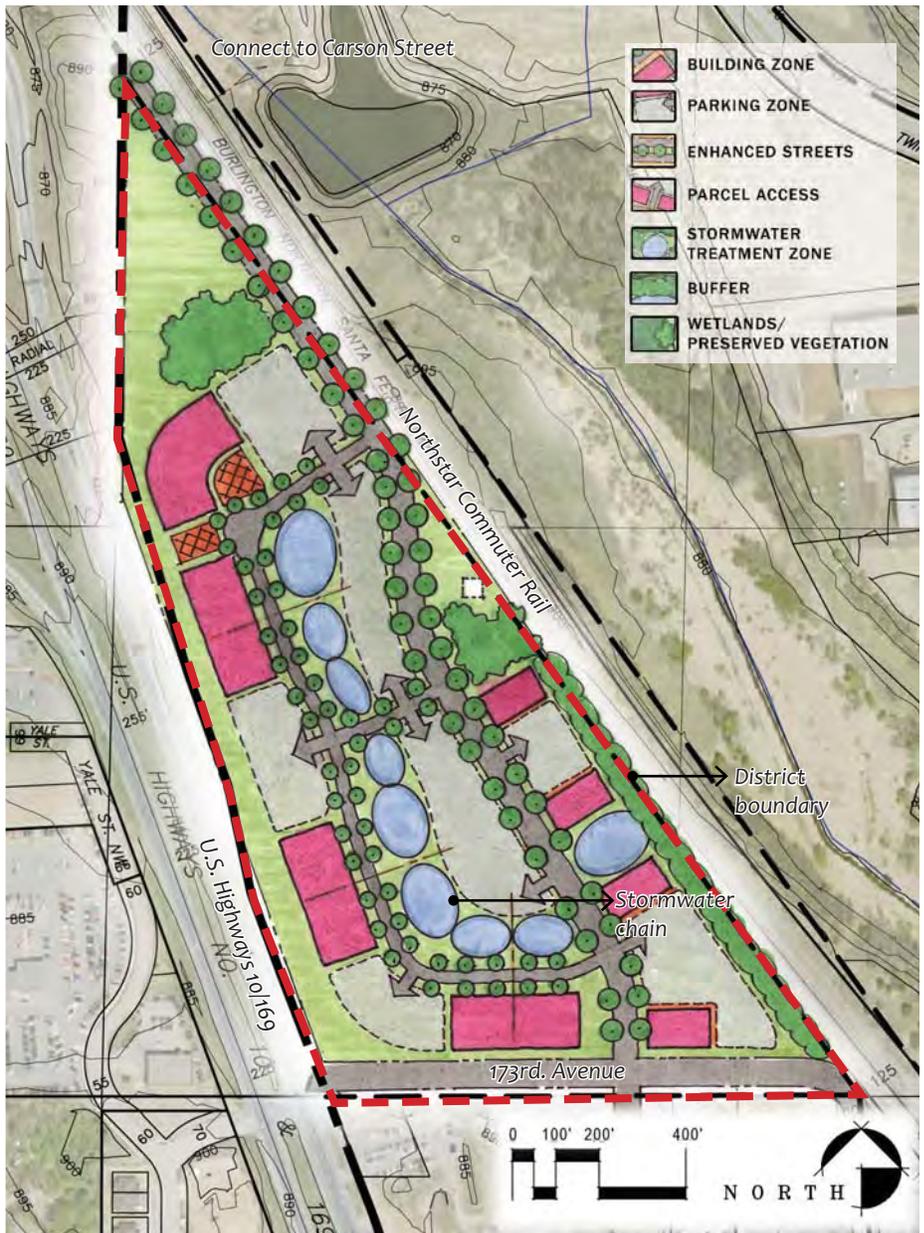
DEVELOPMENT CHARACTER

(LONG-TERM)

With the reconstruction of the Highway 101 and 10/169 interchange and proposed access road connecting to Carson Street, an **opportunity exists for corporate campus site taking advantage of the highway visibility and river views**. This additional access in conjunction with the opportunity for an additional railroad crossing at 173rd Avenue will provide greater chances for this sub-area to redevelopment at a more intense level.

The long-term development **intensifies around the earlier pattern of infrastructure investments from streets & utilities to stormwater**. Vance Street becomes the **primary spine** heading north to the Carson Street connection and the existing **frontage road is removed**, but still contains the utilities and serves as a **fire lane for the development**.

Buildings are oriented toward the highway to capture the visibility and the central stormwater treatment area is treated as an enhanced amenity for the employees. A buffer is maintained along the rail line and smaller office users fill in near the tracks. Parking is internalized and interconnected between the buildings and strong, more direct roadway and sidewalk connections back to the commercial and retail areas at the Hinge and Station Area Village sub-area are constructed.



The Pinnacle Sub Area - Long Term Vignette Study

DEVELOPMENT CHARACTER

Residential Neighborhood Districts



KLIEVER'S MARSH AND RIVER WEST RESIDENTIAL NEIGHBORHOODS

The existing residential uses surrounding Kliever's Marsh and nestled along Yale Street along the Mississippi River are not anticipated to see and significant change as a part of the FAST study.



Existing Single Family Homes Surrounding Kliever's Marsh

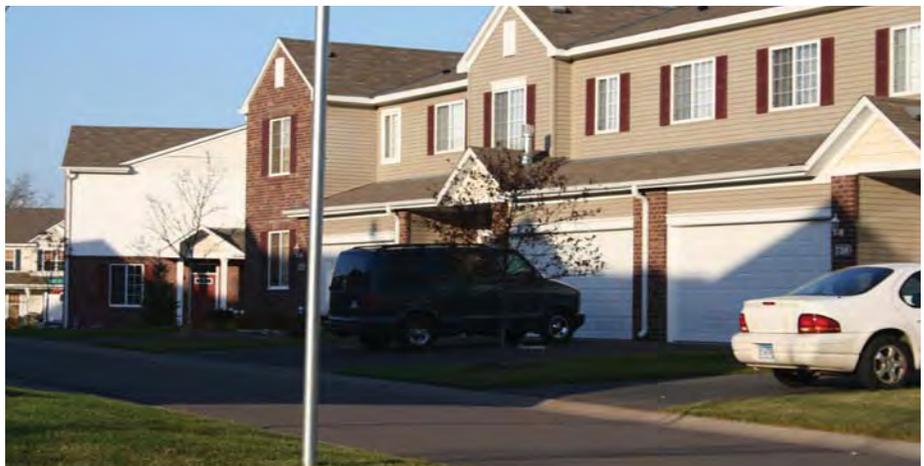
ELK RIVER STATION



Elk River Station is a successful model for higher density housing near the transit station. The development provides multiple housing options, in a well organized, compact development pattern.



Existing Elk River Station with a range of housing types



HILLSIDE HEIGHTS



This district showcases a range of housing options and takes advantage of wetland views and wooded rolling topography. A design priority will be creating a physical connection between

Hillside City Park to the north and the large wetland complex on the southern boundary and developing park spaces and a continuous public trail network along the periphery of the wetland.

The internal street network connects with the existing street network on adjacent property and establishes smaller organized development parcels within the district. **Housing types respect adjacent uses by scaling down** from larger stacked housing near the intersection of 175th Avenue and Twin Lakes Parkway to more detached villa & townhome housing types near the existing single-family uses to the east.

Building placement emphasizes the street within the center of the district, taking advantage of long views across the wetland and preserving existing woodlands in the north. High quality streetscapes with sidewalks, boulevard trees and pedestrian scaled lighting should be considered on all streets of the district.



Hillside Heights District Vignette Study

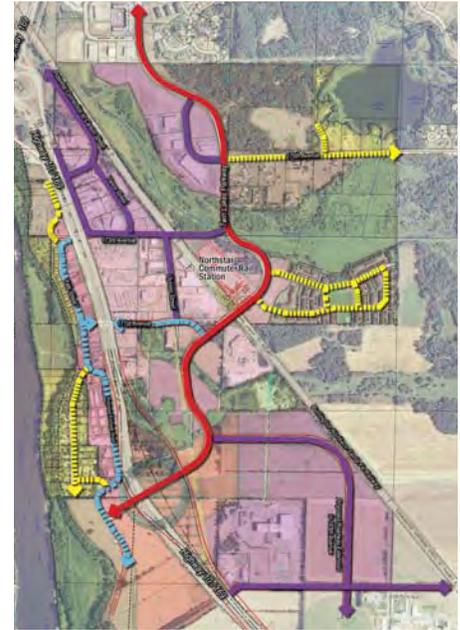
DEVELOPMENT CHARACTER

LOCAL STREET NETWORK CHARACTER

The street system changes in the master plan are suggested in order to improve traffic circulation and pedestrian connectivity to the rest of the community. The majority of roadway alterations are integrated to extension of Twin Lakes Parkway south to the future interchange and the conversion of Highway 10/169 to a freeway.

Twin Lakes Parkway

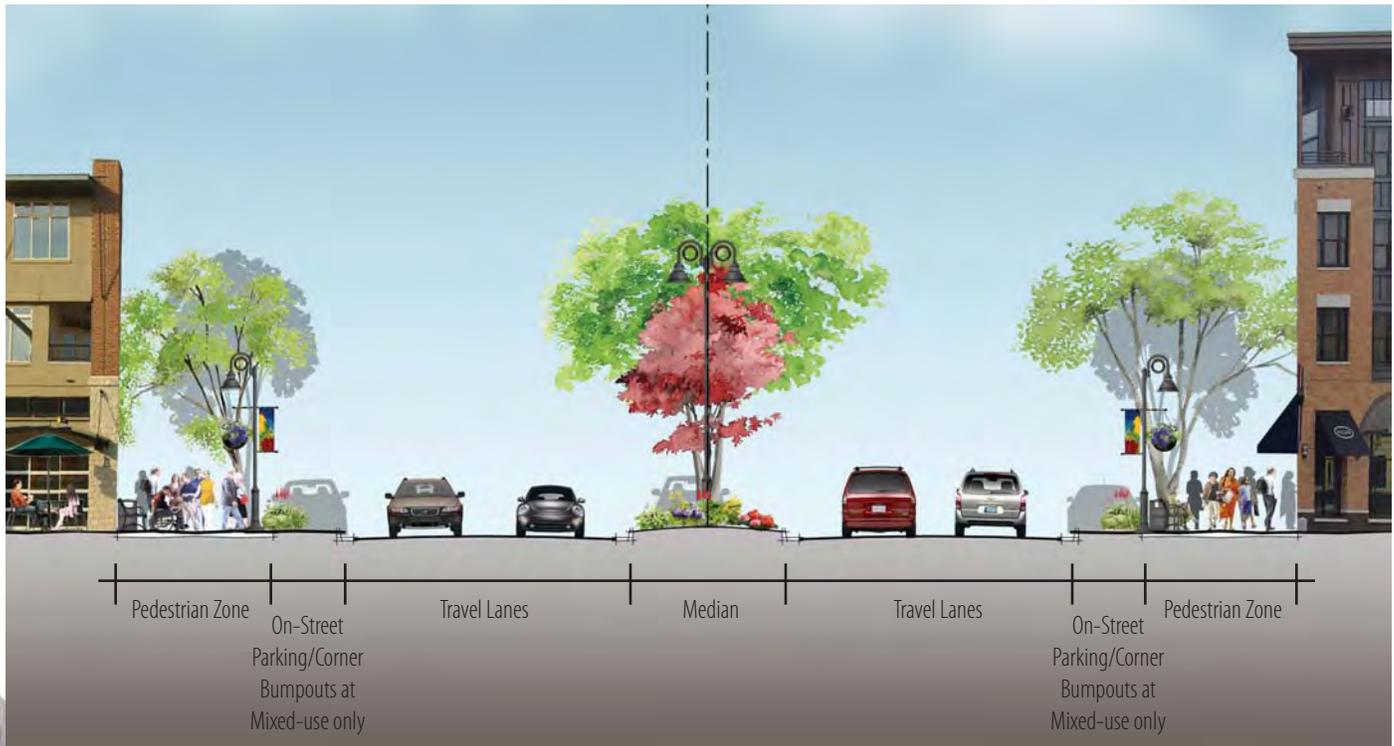
Twin Lakes Parkway provides the infrastructure framework for organizing future development and redevelopment in the study area. The master plan envisions the roadway as a four lane collector with a planted median with a 40 mile an hour design speed, and lower speeds through the Station Area Village sub-area. Access management along the roadway defines the development pattern and general parcel configurations for numerous uses. Full intersections require a minimum of one-eighth mile between them, while right-in, right-out access occurs at roughly 300 feet intervals. The master plan suggests the use of round-a-bouts at major intersections along Twin Lakes Parkway through the study area; 175th Avenue and 171st Avenue. Round-a-bouts in these locations will aid in traffic flow and will be designed with large radius and roll-up aprons to accommodate truck traffic. A traffic signal is suggested for the intersection at the transit station providing a safe crossing and to benefit the retail uses in the mixed use district. The 120' right-of-way for Twin Lakes Parkway should continue throughout the project area.



Streetscape typology diagram

- Twin Lakes Parkway
- Commercial Street
- Residential Street
- Office/Industrial Street

TWIN LAKES PARKWAY SECTION (mixed use District)

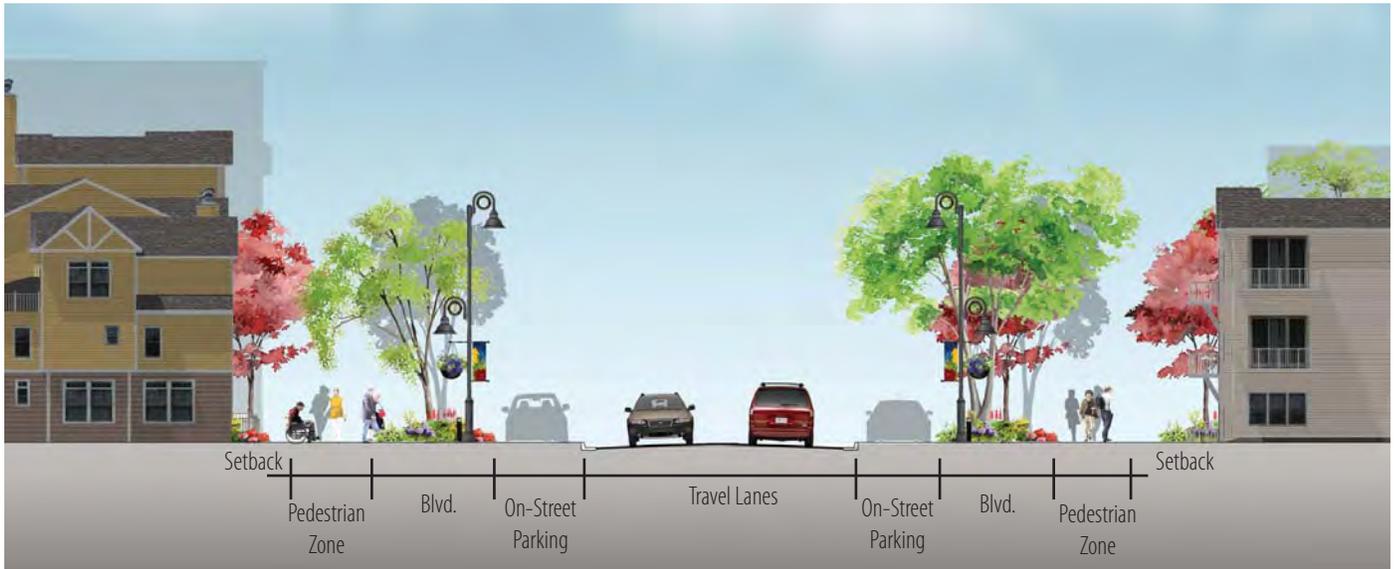


Pedestrian Zone
On-Street Parking/Corner Bumpouts at Mixed-use only
Travel Lanes
Median
Travel Lanes
On-Street Parking/Corner Bumpouts at Mixed-use only
Pedestrian Zone

DEVELOPMENT CHARACTER

Residential Streets

Streets within residential districts organize the development pattern into a curvilinear grid responding to natural systems & topography. These streets are traditional in character with opposing drive lanes, on-street parallel parking, turf boulevards, sidewalks, street trees and lighting. Residential streets have a 60' right-of-way.



Residential section



Commercial street section

Commercial Streets

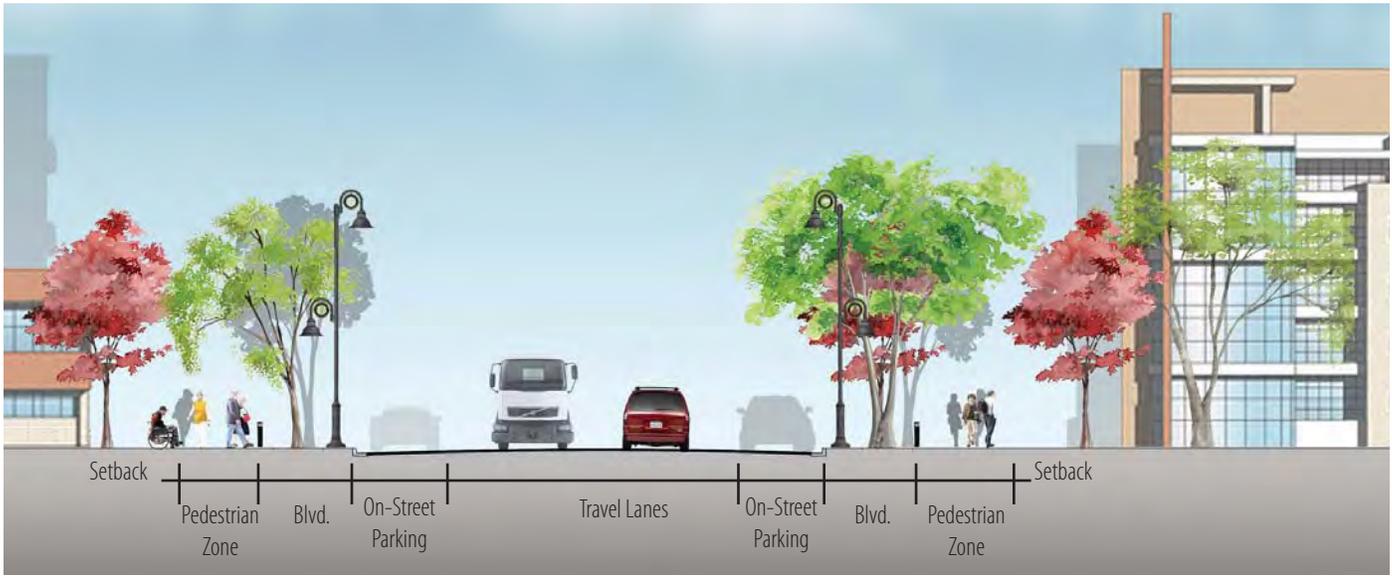
Commercial streets in mixed-use and retail areas have extensive streetscape elements. Site furnishings such as benches, bike racks and trash receptacles should be installed on wide sidewalks. Pedestrian scaled street lighting and boulevard trees will provide separation from the street. Commercial streets have a 70' right-of-way.



DEVELOPMENT CHARACTER

Office & Industrial Streets

Streets through office and industrial districts are wider to accommodate truck traffic and include parallel parking, turf boulevards, sidewalks, street lights and boulevard trees. Office and Industrial Streets have a 70' right-of-way.

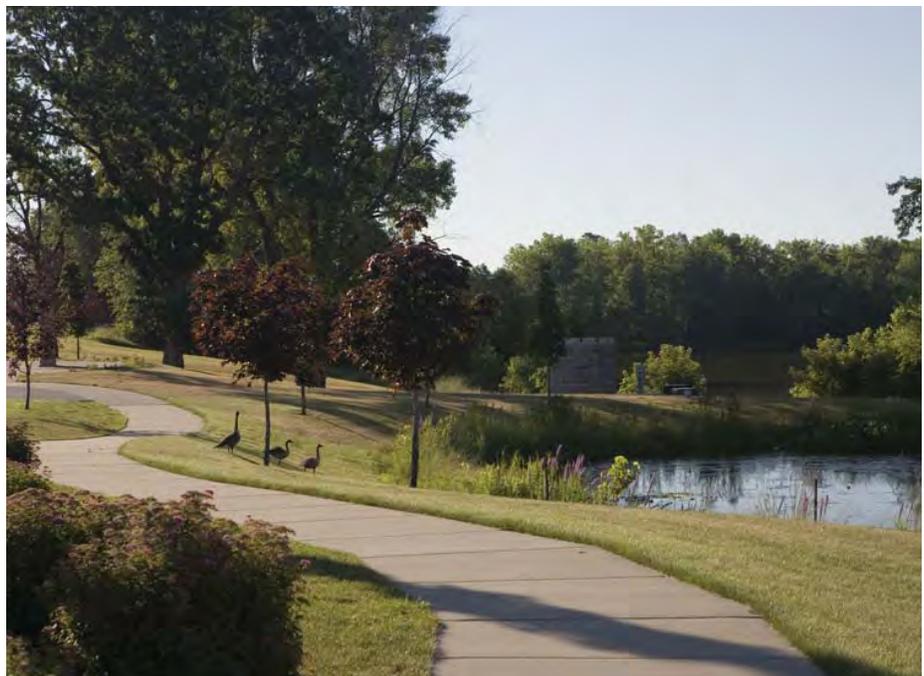


OFFICE/INDUSTRIAL street section

Trails

Trails support two equally important functions within the FAST, the first for recreational use and the second to support bicycle commuting to the Northstar station. The plan calls for trails along the extension of Twin Lakes Parkway, trail connections to surrounding city parks, and trails along edges of natural open space amenities.

Trails are also envisioned to connect across Highway 10/169 to the Mississippi River creating linkages to Historic Downtown and to the Kelley Farm.



Trails provide a recreational and commuting function in the FAST



SUSTAINABLE DEVELOPMENT

Throughout all sub-areas in the 171st Avenue FAST, sustainable development is a fundamental goal. The following are aspects of sustainable design focus for the master plan:

Energy Generation: In addition to utilizing excess steam from the GRE facility to reduce energy demand for the study area, potential for on-site or district wide energy generation initiatives are a focus of the master plan. Solar, wind and geo-thermal are all viable options for alternative energy sources. Solar panels could be used for operation of solar hot water systems or photovoltaics could be installed converting the sun's rays captured by the solar panels into direct current energy. Smaller helical wind turbines could line the rail line capture wind energy created by trains, and larger wind turbines could be implemented in the industrial zones. Geothermal technologies such as ground source heat pumps can function as heat source or heat sink depending on the season providing climate control for various building types.

Toward Zero Waste: A goal for the industrial and commercial districts outlined in the plan is striving for zero waste or recycled by-products from manufacturing operations. The city should promote and seek out groups of business that could share in the eco-industrial park model of recycling industrial by-products to eliminate waste.

LEED Building certification: LEED building certification should be considered for buildings in the FAST, and be utilized as a benchmark for new development. The Leadership in Energy and Environmental Design (LEED) program under the U.S. Green Building Council certifies buildings for energy efficiency, waste reduction, use of recycled materials and other sustainable construction practices. Architectural features and non-mechanical systems such as window placement, high ceilings, overhangs and natural ventilation are passive design strategies which can be utilized to warm buildings in the winter and promote healthy indoor air quality.

Dark-sky friendly lighting: The master plan promotes reducing light pollution and reducing energy consumption of outdoor lighting and suggests that outdoor lighting in both private and public spaces include full cut-off optic light fixtures for "dark-sky friendly".

Innovative stormwater practices: All districts described in the master plan outline collective and integrated approaches for stormwater treatment. Opportunities range from stormwater retention ponds and created wetland to bio-swales and rain gardens. In more intensely developed districts, cisterns, green roofs and porous and permeable paving are all recognized stormwater treatment alternatives in the master plan.



Solar energy for heating water and direct current energy



Smaller helical wind turbines fit individual developments



LEED is used as a benchmark for new development



Full cut-off optics provide dark sky friendly lighting



Rain gardens and infiltration swales should be considered for stormwater treatment



7

Implementation

Implementing the master plan for the 171st Avenue FAST is not a single step. Achieving the vision established in this plan involves a series of interrelated actions spanning a number of years. The vision may have to adjust reflecting changes in market dynamics, land ownership, community goals, economic prospects, or consumer preference, yet at the same time it is important to protect the vision against short-term opportunities that undermine the long term vision. With good planning, consistent policy implementation, and adherence to the vision, development will eventually reach the critical mass that leads to success. This chapter provides a guide for actions and investments required to implement the master plan and realize the vision for the 171st Avenue FAST.

KEYS TO IMPLEMENTATION

Several factors will be crucial in successfully realizing the vision set forth by the community and the EDA within this master plan. These keys apply regardless of the actual form and timing of redevelopment:

- » *Patience & Commitment to Vision. Commitment to the plan and patience go hand-in-hand. This plan does more than simply seek to attract new development to southeast Elk River; it seeks to move the area toward a vision for the future. Commitment to the plan means the willingness to actively promote public and private investments that achieve the vision, and to deter developments that do not meet the objectives of the plan. Not all of these decisions will be easy.*
- » *Strategic Investments. If financial support for the plan was unlimited, the need for strategic decisions would be less important. With limited funds, every expenditure is crucial. It is not possible to immediately undertake all of the initiatives described in this plan. Needs and opportunities not contemplated in the plan may arise in the future. Every investment must be evaluated for its impact on achieving the vision for the future of the 171st Avenue FAST.*
- » *Public & Private Partnerships. Removal of the physical and economic barriers to development and redevelopment for the 171st Avenue FAST may require public finance assistance. The complexity of development and redevelopment envisioned for the area clearly demonstrates the need for public financial participation. Private investment will not be sufficient to pay for all costs associated with redevelopment. A strong public/private partnership is required to make development and redevelopment financially feasible and promote the desired development. The need established in this plan does not make public financial assistance an entitlement, and on-going planning will define and substantiate the nature of assistance for each step of implementation. This approach ensures that public monies are used to achieve desired public outcomes and not simply make development more affordable (or profitable) for the developer.*
- » *Financial Planning. The ability to make strategic investments relies on the continued evolution of financial planning. Implementing the plan cannot be viewed as a series of independent projects but rather a series of interrelated actions. Some public improvements serve a broader area and not a single project. Revenues will come from multiple projects. Some public investments will be required prior to private redevelopment. The ability to coordinate public actions with the revenues from private development will be key to the success of the plan. Failure to consider the implementation relationships between elements of the plan will lead to missed opportunities and increased risk for the City.*

ROLES & RESPONSIBILITIES

Implementing this plan will rest with many entities in the community that share a vision for the future for the 171st Avenue FAST. A clear understanding of implementation roles and responsibilities promotes the effective use of limited resources.



City of Elk River

The ultimate responsibility for implementing the plan rests with the City of Elk River. The Planning Commission and the City Council will provide direction on staff resources, development project review and public investment. Managing development and redevelopment for the 171st Avenue FAST will primarily fall to the Planning and Engineering Departments of the city. The lead role in managing implementation for the City falls to the Planning Department. The actions to be taken by the Planning Department to implement the plan include:

- » *Application of land use controls to guide private development.*
- » *Review of development plans and proposals.*
- » *Coordination of planning for capital improvements needed to facilitate redevelopment.*
- » *Creation of plans to finance for public redevelopment investments.*

The Engineering Department leads the design of public infrastructure improvements needed to support development and redevelopment for the 171st Avenue FAST. The Engineering Department is a key player in planning for future roadway and transportation improvements, including on-going conversations with MN DOT on regional highway improvement projects affecting the project area.

The Park and Recreation Board is responsible for planning, building and maintaining parks and trails through the project area.

Economic Development Authority (EDA)

The 171st Avenue FAST is important location for economic development in the City of Elk River. It is the EDA that will keep the momentum of development and redevelopment moving in a direction envisioned by the plan and adopted by the City. Several EDA actions make them an important player in the successful implementation of the plan:

- » *Provide a framework for coordinating efforts of the community. With limited resources, it is essential that the community work in unison to undertake redevelopment. The knowledge and experience gained from the planning process allows EDA members to efficiently and effectively take steps needed to implement the plan.*
- » *Work to ensure that development and redevelopment initiatives in 171st Avenue FAST are a recognized priority for City Council members representing the area.*
- » *Take on a more active role than in the past. Actively perusing critical properties for redevelopment or utilizing land leasing opportunities for near term investments could be new roles for the EDA.*
- » *Create an annual redevelopment “action plan” to monitor progress toward implementation. This action plan would outline key steps to occur during the year, including descriptions of actions, responsible parties and funding. It forces the parties to not only consider what needs to be done in the coming year, but also why identified steps were not taken in the prior year.*



IMPLEMENTATION

- » *Work with property owners to promote the maintenance and revitalization of existing buildings.*
- » *Provide guidance to the City to ensure that proposed development projects and public improvements are consistent with the plan.*
- » *Promote development projects with sustainable design practices.*
- » *Work to find the appropriate funding options for development and redevelopment.*

Community at Large

The community of Elk River must stay involved as the development of the FAST area continues over time. The community must work together with decision makers and provide the necessary input for any new development to respect existing land-owners and meet the vision of the 171st Avenue FAST.

- » *Provide a singular focus for the plan. The knowledge gained from the planning process will allow members of the community to efficiently and effectively comment on development and redevelopment proposals.*
- » *Continue public involvement. Open House comments and review of development proposals.*

LAND USE CONTROLS

The initial focus of implementation will be on actions needed to establish the master plan as the official guide for development for the 171st Avenue FAST. These procedural steps in implementation involve the adoption of key policy documents and updated development controls.

Approve the Master Plan

The first implementation step is City Council action to approve this master plan. City Council approval sets the stage for subsequent actions. The master plan is used to inform subsequent planning efforts such as comprehensive plans, zoning and allocation of resources.

Amend Land Use Controls

Plan approval is the trigger for taking other actions needed to guide land use for the 171st Avenue FAST in accordance with this master plan. Land use controls not only promote the desired development outcomes, they also prevent development that is not consistent with the plan.

Comprehensive Plan

Step one is to update the City's Comprehensive Plan with the new "Future Development Framework Plan", Figure 6.1 and the new land use plan designations consistent with the vision of this master plan. Amending the Comprehensive Plan creates the foundation for all other implementation actions. Consistency with the Comprehensive Plan is a statutory requirement for zoning regulations, capital



improvements and redevelopment projects.

Zoning Regulations

More direct control of development comes from zoning regulations. Existing regulations will require modification to conform to this plan. Part of the necessary modification is enabling, allowing the type and form of development proposed in this master plan. Other regulation changes are restrictive, forming a barrier for private investment that is inconsistent with the plan.

Zoning changes are likely needed in order to implement the Land Use Plan. Detailed analysis and formal recommendation of any zoning changes will be handled by the City of Elk River along with adoption of this master plan.

Design Guidelines

Design guidelines serve as a communication tool between the EDA, the City, property owners and developers. Aspects of the design guidelines could be incorporated into a pedestrian overlay zoning district for portions of the FAST. Design guidelines should become a standard tool in evaluating proposed development. Design guidelines should be rooted in the district vignette studies established in the master plan chapter of this document.



STRATEGIES FOR DEVELOPMENT & REDEVELOPMENT

Implementation of the master plan is not a single action, but a series of steps. These steps will be taken over time in phases. Initial focus should be on several implementation initiatives that lay the foundation for change. Initially, public investments such as street and infrastructure improvements will play a key role in setting the table for private development to occur in the FAST. Part of this strategy becomes the effective use of finance tools available to the City.

Phasing

To act as a basis for analyzing implementation issues and to focus in on first steps needed to begin development and redevelopment, a phasing plan has been created (see Figure 7.1). The phasing plan builds from other known investments and responds to site readiness.

It is anticipated that full development of the 171st Avenue FAST will take roughly 25 years to accomplish assuming a return to a relatively stable & growing real estate marketplace. The phasing plan suggests two general phases marked by the transition of Highway 10/169 to a limited access freeway, and remaining areas suggested as retain/infill areas.

Earlier Phases :

There are three sub areas suggested for earlier phase development totaling roughly 80 acres. They are the East Elk River Gateway sub area (east of Highway 10/169), the Hinge sub area immediately north and the Point sub area where the vacant Saxon auto dealership and Americ inn Hotel exist. Development here possess the most financial and market feasibility. However, development in these areas must follow the new infrastructure investments which will establish the framework for future development.

Later Phase :

The later phases of evolution will likely occur with the transition of Highway 10/169 from it's current access configuration, to a two signal access configuration, to ultimately a freeway configuration and as ridership builds on the commuter rail line. Before these areas "ripen" for redevelopment, they will need to respond to the shift in transportation patterns and build on the financial infusion of earlier phase projects.

Retain / Infill:

There are three areas of the FAST labeled in the phasing plan as "retain/infill". These areas are not suggested for active pursuit of redevelopment because of the quality of development. These areas include the Northstar Business Park, Elk River Station and the small pocket of single family housing around Kleivers Marsh and the housing along the river. These areas of infill are independent of the phasing schedule.



PHASING Diagram

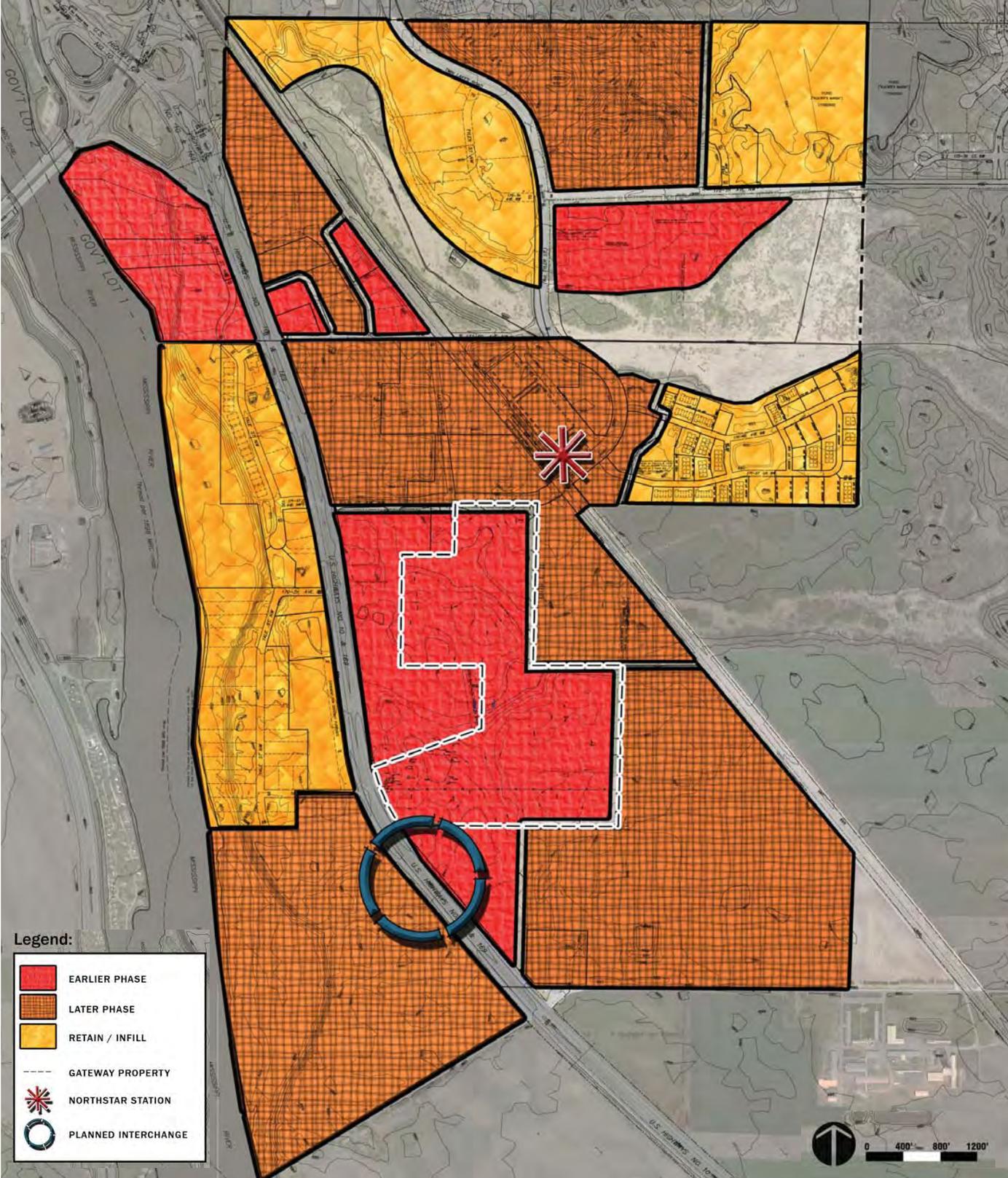


Figure 7.1: Phasing Diagram



IMPLEMENTATION

Implementation Initiatives

Implementation of the master plan for the 171st Avenue FAST will span many years and include many complex activities. It will likely be more than twenty-five years before the vision for the FAST is fully realized. There are, however, many actions to be taken in the near term - the next one to ten years. These actions (identified in Figure 7.2) are critical to development success for the FAST.

The initial focus of implementation will be on actions needed to establish the master plan as the official guide for development for the 171st Avenue FAST. The first implementation step is City Council adoption of the master plan. City Council approval sets the stage for all subsequent public actions and the confidence needed for private redevelopment activities.

During the early years of the FAST development, there are several critical actions that can be taken to reduce development constraints, allow for greater investment in public amenities and enhance the creation of a sustainable neighborhood. Pre-interchange development with an additional signalized access can be used to set the stage for the post-interchange development with enhanced financial opportunities. Suggested activities to enhance project success include:

- » *Strategically stage development so that it builds market momentum and early projects act as positive demonstrations of great things to come in the FAST.*
- » *Build high-quality streetscapes, natural areas and pedestrian links because these amenities will drive future market interest.*
- » *Create convenient, safe linkages between various trail routes for bike commuting.*

Key initial activities are identified in Figure 7.2 and are further described below.

Twin Lakes Parkway & 171st Avenue

Congruent with the East Elk River Gateway and Hinge sub area development, the construction of Twin Lakes Parkway will begin to establish future transportation patterns for the FAST. The re-alignment of the intersection at 171st Avenue and the extended Twin Lakes Parkway combined with an enhanced streetscape for both roadways will help attract new development to Gateway Business Park and other properties south of 171st Avenue. Official mapping of Twin Lakes Parkway should also be considered. Official mapping is an official platting process to secure right-of-way for future roadway improvements. The roadway is platted with the county and will be transferred to the city at the time of development.

A Second Signalized Intersection - Interim Access

Additionally, MN DOT would consider a proposal to create a signal at the proposed interchange location. The second signal would trigger closing all individual property access points and focus access to 171st Avenue, the new signal and right-in / right-out access points at 173rd Avenue and 165th Avenue. This new signal and intersection



would allow for more near-term development in the East Elk River Gateway sub area to the east of Highway 10/169. This new signal would also mean the construction of additional supporting roadways. The first, on the east side of Highway 10/169 would be the extension of a collector roadway from Twin Lakes Parkway through the Cargill property to connect with 165th Avenue to provide full access to Cargill's operations and the Youth Athletic Complex. On the west side of the highway, a frontage road would be constructed adjacent to the right-of-way of Highway 10/169 within a existing access easement. Additionally, a connection running north and south along the west side of Highway 10/169 is needed for access to business, residents and fire safety.

East Elk River Gateway

The city-owned Gateway land is green field land offers the greatest opportunity for early development in the FAST. Significant investment will be need for utilities and roadway infrastructure. A development goal will be to creating enough development intensity required to generate financial resources to assist in achieving the vision here in other parts of the FAST. Other districts will involve challenging but necessary acquisition and demolition, as well as infrastructure and amenity investments. The East Elk River Gateway sub area east of Highway 10/169 will establish the future development pattern and character for the 171st Avenue FAST.

The Hinge

The Hinge sub area is the likely location for commercial and retail uses to development in the immediate future. Establishing an internal roadway network through the sub area will facilitate the proper traffic circulation between the extended Twin Lakes Parkway and 171st Avenue. The organization and design of the development here will set the tone for the future development character throughout much of the FAST and will include streetscape identity, trails and wetland mitigation.



IMPLEMENTATION

Implementation initiatives

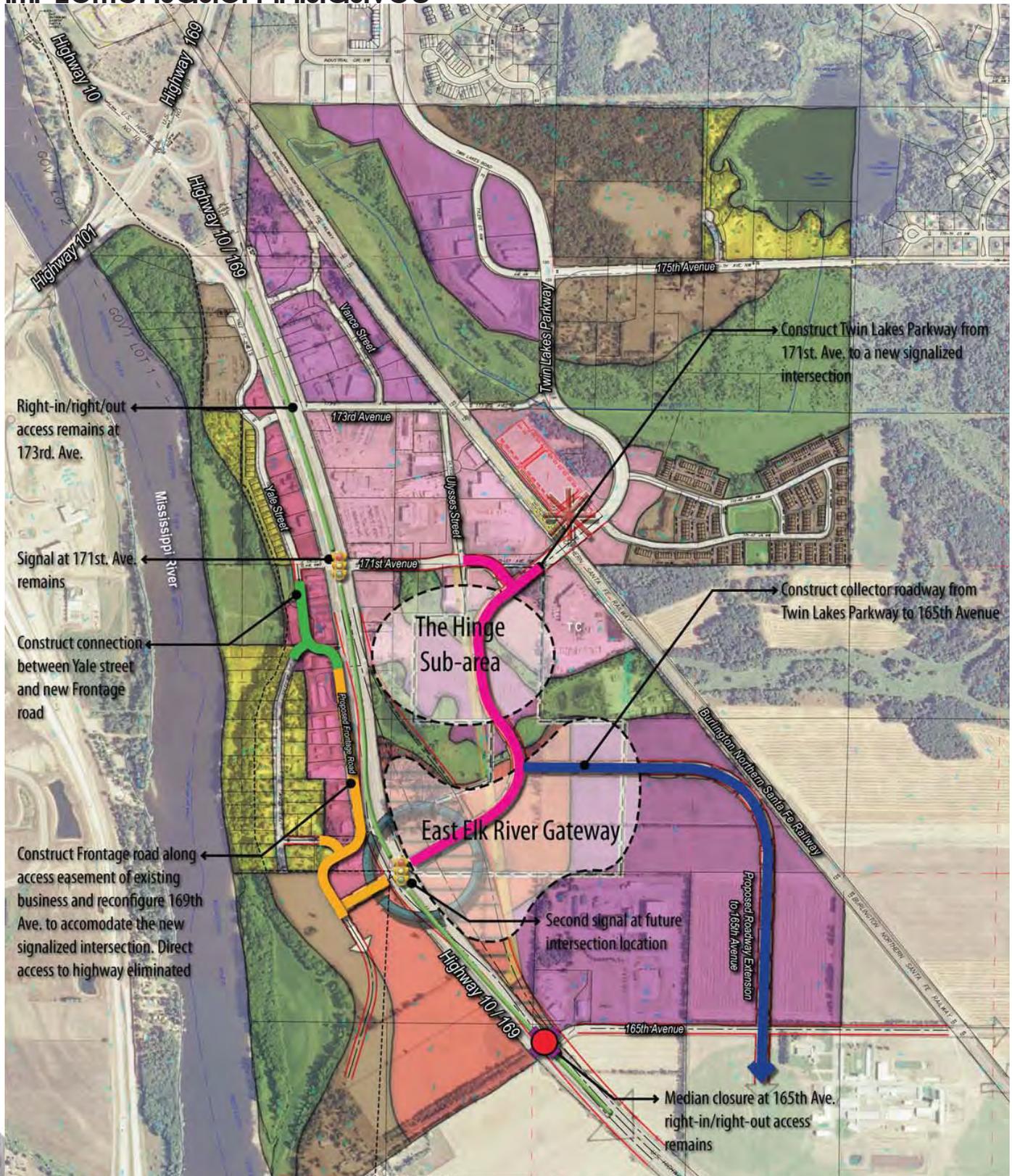


Figure 7.2: Implementation Initiatives Diagram

FINANCING

A detailed financial analysis was not performed as part of the planning process. There are many financial variables involved with complex development planning projects. The following information highlights the key tools currently available to finance implementation of the master plan.

Tax Increment Financing

The costs of development and redevelopment may be too great to allow new projects to be financially feasible. The situation poses the classic “but for” situation in State law governing tax increment financing. “But for” the use of TIF, the development as proposed would not occur. It is clear that the desired redevelopment will not take place without the removal of physical and economic barriers by the City. Tax increment financing is the only tool with the capacity to accomplish these objectives.

As with other elements of the master plan, projections for the use of TIF are both comprehensive and conservative. The plan seeks to provide a clear understanding of what might be required with the goal of reducing public financial commitments as the plan is implemented. The result can be found in other large redevelopment settings. As redevelopment begins to transform an area, market forces improve. As the potential income from rents and sales grow, private development can carry more costs of redevelopment.

This master plan assumes that all of the redevelopment projects will be included in TIF districts. In simplest terms, TIF allows the City to capture the property taxes from redevelopment and use these monies to pay for the investments required to undertake the development. Financial analysis conducted through the planning process clearly shows that private development will not alone support the investments required for implementing the master plan. The costs of desired development and redevelopment are likely too great to consider all new projects to be financially feasible.

This plan does not offer a primer on the use of TIF since the City is familiar with the intricacies of TIF from its use on other redevelopment projects. Instead, implementation of the plan requires attention to the key issues that influence the use of TIF:

Project Area:

TIF relies on two types of areas. The “project area” is a broader area with common development goals. The “tax increment financing district” is the specific parcels from which tax increment is collected. The project area is important because it defines where tax increments can be used (see discussion of “Pooling” that follows). The project area defined for this master plan should also be designated as the project area for the purpose of establishing TIF districts.



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District Criteria:

The plan assumes that the TIF districts in the 171st Avenue FAST will be classified as “redevelopment” under state law. The establishment of a redevelopment TIF district relies on three basic criteria (Minnesota Statutes Section 469.174, Subd. 10):

1. *Parcels consisting of 70% of the area of the TIF district are occupied by buildings, streets, utilities, or other improvements.*
2. *More than 50% of the buildings, not including outbuildings, are structurally substandard to a degree requiring substantial renovation or clearance.*
3. *These conditions are reasonably distributed throughout the district.*

The presence of improved parcels should not pose a constraint. The majority of the redevelopment sites in the FAST include properties that meet these criteria. The existence and distribution of structurally substandard buildings has not been studied. The inspection of buildings and the related analysis of identified deficiencies are typically used to determine the ability to meet these statutory criteria. This work is not included in the current master planning process for the 171st Avenue FAST.

The City should immediately undertake an analysis of buildings in the “Phase 1” portion of the project area. This information is essential to decision making about the use of TIF. There is little doubt that some buildings in the project area will be found structurally substandard. The location of these buildings will influence the configuration of TIF districts. The analysis should include all parcels in the project area where redevelopment is desired. Conducting this analysis removes one step needed to undertake redevelopment. The City can offer potential developers certainty about the ability to create TIF districts.

Pooling:

Some aspects of the redevelopment plan may be financially feasible (estimated revenues exceed expenditures) while some projects must close a financial gap before they occur. Ideally, projects that produce financial surpluses should be used to support those with gaps. This distribution of financial recourses can occur if the projects are located within the same TIF district. If not, then State law limits the flow of funds between TIF districts.

The need to carefully plan the boundaries of the project area and TIF districts is tied to the issue of pooling. The term refers to the statutory limitation on spending tax



increment beyond the boundaries of the TIF district. Items to be funded by TIF must be located within the TIF district or be an amount that falls within pooling limits. For redevelopment TIF districts, not more than 25% of tax increment may be spent outside of the district. The actual application of pooling limits is often more restrictive. Administrative expenses of the TIF district count against the 25% maximum. The amount of revenue available to support eligible costs outside of the district may fall in the 15% to 20% range.

Time Constraints:

In a perfect world, the City would establish a TIF district and wait for redevelopment. Current State law makes this approach a risky proposition. TIF districts are subject to several time limitations. The most important of these limitations is the five-year rule.

After five years from the date of certification of the TIF district, the use of tax increment is subject to new restrictions. Generally, tax increment can only be used to satisfy existing debt and contractual obligations after this date. This rule creates a five year window to make commitments for the use of TIF. Additionally, the geographic area of the TIF district can be reduced, but not enlarged, after five years from the date of certification. Therefore, if a TIF district is established without a specific plan for development, there should be reasonable certainty that development will occur within five years.

The City has the ability to decertify all or part of a district and create a new one. This action sets a new five year clock. There is a risk that the conditions used to establish the original district will not be present in the future.

Use Limits

Several specific statutory limitations will influence the use of tax increments on implementation of the plan.

State law requires that at least 90% of revenues from a redevelopment TIF district be used to finance “the cost of correcting conditions that allow designation” of the district. The majority of redevelopment and public improvement expenditures in this plan meet this criteria. Several important limitations must be noted:

- » *Tax increments cannot be used for “a commons area used as a public park”. The plan takes a conservative position and assumes that this limitation precludes using TIF for proposed open space improvements. The statute does not define the term “public park”. The City may wish to explore this issue with appropriate legal counsel.*
- » *Tax increments cannot be used for public facilities used for “social, recreational, or conference” purposes. As with parks, the statute does not define these terms. Special rules apply to public*



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improvements, equipment, or other items located outside of the TIF district.

- » *Tax increments cannot be used for these costs if their purpose is primarily decorative or aesthetic. If the items serve a functional purpose, tax increments can be used unless “their cost is increased by more than 100 percent as a result of the selection of materials, design, or type as compared with more commonly used materials, designs, or types for similar improvements, equipment or items”. To avoid this restriction, the right-of-way of street to be improved should be included within the boundaries of a TIF district.*

Other Public Finance Tools

Although the planning process focused on tax increment financing, it is likely that other public finance tools will be needed to make long term redevelopment investments within the 171st Avenue FAST. This section highlights potential tools and their application. Additional investigations will be undertaken as finance plans are prepared by specific public improvement and redevelopment projects.

Tax Abatement

The name “tax abatement” is misleading. No taxes are abated using this tool. In reality, tax abatement functions similar to TIF (see Minnesota Statutes Sections 469.1812 to 469.1815). Each taxing jurisdiction (city, county, school district) has the ability to levy a property tax equivalent to taxes paid by a parcel of property. The proceeds of this levy can be used to finance any of the public improvements and other redevelopment activities discussed in this plan. Since tax abatement cannot be used for property in a TIF district, the best opportunity for this tool lies with locations that do not qualify for a TIF district.

Special Service Districts

A special service district has the capacity to finance the construction and maintenance of the public improvements for the 171st Avenue FAST. In simplest terms, a special service district is a special taxing district. It allows the City to collect money to support services and improvements in commercial areas.

The general statutory authority (Minnesota Statutes, Chapter 428A) contains few limits on the potential uses of special service districts. The nature of the improvements that can be funded with a special service district are not defined (or limited) by statute. The special service district cannot be used to finance services that the City provides through the general fund throughout Elk River, unless the services are provided at a higher level. The statute does not impose any other limitation on the nature of services.

Potential applications of special service districts for implementation of this master plan include:

- » *Construction and maintenance of streetscape.*
- » *Construction and maintenance of the wetland trails and other public open space.*



- » *Construction of sidewalks, trails, bridges and other improvements to enhance pedestrian movement.*
- » *Construction and maintenance of public parking facilities.*
- » *Other services and improvements can be undertaken and financed by a special service district if authorized by the enabling ordinance.*

Grants

DEED

The Minnesota Department of Employment and Economic Development (DEED) offers grants, loans and technical assistance for redevelopment projects and activities for communities. Qualifying projects include housing and commercial rehabilitation, wastewater treatment facilities and drinking water systems, and contaminated site clean-up. Eligibility of financing through DEED depends on a number of factors including the type of business, size, location and type of financing needed.

The Business Development Public Infrastructure Program is a potential grant through DEED which provides funding for infrastructure projects in support of economic development. This program would be a great fit for the infrastructure improvements for Twin Lakes Parkway. The DEED website (<http://www.deed.state.mn.us>) provides a number of potential financial resources for development and redevelopment projects in the FAST area to spur business growth.

MPCA

The Minnesota Pollution Control Agency has various opportunities available for receiving grants and other financial assistance for environmental projects in Minnesota.

Environmental Assistance (EA) Grant

The Minnesota Legislature established the EA grant program to provide financial assistance for the development of environmentally sustainable practices in Minnesota through voluntary partnerships and goal-oriented, economically driven approaches to pollution prevention and resource conservation. The Environmental Assistance Grant Program consists of a competitive, two-stage application process used to identify and assist projects that will be most beneficial in furthering the Agency's mission of working with Minnesotans to protect, conserve, and improve our environment and enhance our quality of life, particularly within the focus areas identified each fiscal year.

Small Business Environmental Loan Program

This program could be an option for business within the FAST. It provides

