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# 1. Study Purpose

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## 1.1 Introduction

The *TH 169 Corridor Belle Plaine Area Access Plan* has been prepared and funded through the Minnesota Department of Transportation (Mn/DOT) Interregional Corridor Partnership program established to encourage state and local cooperation to ensure the long-term performance of Minnesota's Interregional Corridor system. The partnership for this study includes Mn/DOT – Metro District, the City of Belle Plaine, Scott County and Belle Plaine, Blakely and St. Lawrence Townships.

The Belle Plaine area extends along TH 169 from County Road (CR) 66 in St. Lawrence Township to CR 53 in Blakely Township (See Figure 1). The majority of the corridor falls within the municipality of Belle Plaine or an area planned for orderly annexation as agreed to by the City and Belle Plaine Township. The Orderly Annexation Area extends along the current south and east borders of the City of Belle Plaine. The area is also situated within an area that is planned for long term urban expansion by Scott County and the Metropolitan Council.

## 1.2 Background

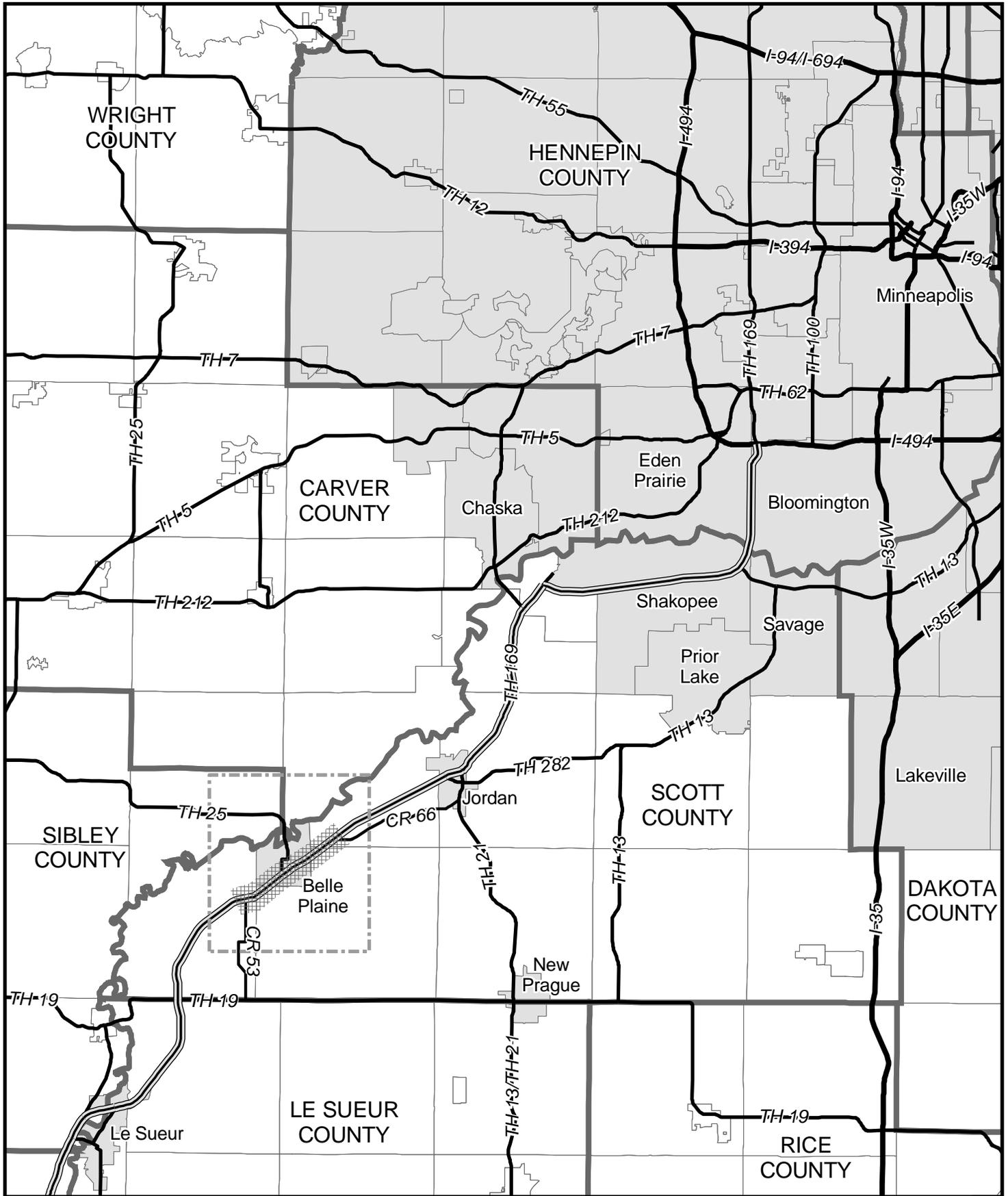
### 1.2.1 Interregional Corridor System

In 1999, the Minnesota Department of Transportation (Mn/DOT) adopted the Interregional Corridor (IRC) System. The IRC system was developed to support statewide economic activity by maintaining safe, timely and efficient transportation between regional trade centers. Following the adoption of the IRC System, Mn/DOT began to develop corridor management plans (CMPs) to address operation and safety concerns on the IRCs. One of the corridors selected for a CMP was the 73 mile section of Trunk Highway (TH) 169 from Interstate 494 in the Twin Cities to TH 60 south of Mankato.

Due to the anticipated increase in traffic volumes and the corresponding safety and mobility problems, the TH 169 CMP recommended transitioning TH 169 to a freeway facility (limited access, no at-grade intersections) from Interstate 494 to the City of Belle Plaine (Figure 1). In order to achieve the goal of transitioning TH 169 to a freeway, Mn/DOT undertook this study to assist local agencies in further defining interchange locations and frontage/backage road connections along both sides of TH 169 between CR 53 and CR 66.

The identification of a local road network and interchange system, including land needed for future public uses, permits both public and private property owners to adjust their building plans equitably and conveniently before future investments are made. If major developments and investments in commercial and retail businesses are made without considering long-term access to TH 169, the ability of the local agencies and Mn/DOT to implement the recommendations of the TH 169 CMP may be seriously hampered. Having a long-term transportation and access plan in place will provide local agencies with a tool to guide development and redevelopment in the area in order to optimize both public and private investments.

**FIGURE 1**  
**Belle Plaine Area Study Location**



### **1.2.2 TH 169 Corridor and Funding**

TH 169 is designated a high-priority interregional highway in the State. Its primary function is to provide a high level of mobility with limited and controlled access, along its corridor from Mankato to the Twin Cities. Currently, the highway is designated as a principal arterial and functions as an expressway in the Belle Plaine area. The 2002 *State Highway 169 Corridor Management Plan*, reported that highway performance and safety was expected to significantly decline from I-494 to Mankato over the next 20 years due to increasing traffic volumes, and delays caused by the potential addition of traffic signal lights.

The performance based goal adopted as part of the *State Highway 169 Corridor Management Plan* sets a target speed of 65 mph for the entire corridor. The plan states that to achieve the vision, the following is needed:

- investment of significant capital resources into major projects,
- spot improvements to address operational and safety issues,
- planning and implementation of supporting transportation routes, and the
- implementation of land use and access management strategies to preserve right of way, and protect roadway integrity.

The long term improvement strategy for TH 169 is to plan for the transition of the highway to a freeway type facility from Belle Plaine to I-494. To the south of Belle Plaine, TH 169 is to continue as a rural expressway.

Within the Belle Plaine area, the major projects that have been identified and prioritized for TH 169 include the construction of the CSAH 6/CR 64 interchange, and the TH 25/CSAH 3 interchange to replace on-grade accesses. Both projects are identified as Priority B capital projects. Funding has been allocated by Mn/DOT for right of way acquisition at the CSAH 6/CR 64 interchange with construction planned for FY 2010.

### **1.3 Study Goal**

The goal of this study, is to develop a local Corridor Vision that includes a transportation plan with land use considerations for the Belle Plaine area that is consistent with the recommendations of the *State Highway 169 Corridor Management Plan*. Additionally, this study includes a variety of cooperative implementation strategies that are specifically tailored for the Belle Plaine corridor area to allow for the eventual implementation of the area plan.

A long-range planning horizon of 25+ years was utilized for the anticipating future development that served as the basis to determine the needs for the local roadway network.

#### **1.3.1 Need for Area Study**

A number of overall and specific issues were identified as part of the planning process for the study as follows:

- The City is expected to continue to experience residential and business growth because of its location within the metropolitan region.
- There are limited areas remaining within the City's municipal boundaries for growth to

occur. The number of requests for annexation and City services is anticipated to continue to increase.

- It is anticipated that requests for new development will be in locations on the east and west sides of TH 169 largely within the townships.
- The rate and location of new development will contribute to the growing capacity and safety problems associated with TH 169.
- The ability of residents and businesses to obtain reasonable access to and across TH 169 will continue to diminish unless alternative and safe access is provided.
- There are limited and competing sources of funding for roadway improvements.

#### **1.4 Agency Participation and Public Involvement**

This study was conducted as a partnership with oversight and policy direction provided by a Project Advisory Committee (PAC) comprised of elected representatives and staff of Belle Plaine, Scott County, the townships and Mn/DOT Metro District. Individual members of the PAC also served as liaisons to their respective jurisdictions or constituencies. Appendix A lists the PAC members.

The PAC established policies to guide future decisions regarding growth and development within the corridor. The policies were aimed at protecting the future functional roadway system for the area and allowing development to occur in a manner that complements and supports the corridor transportation system.

The PAC established a set of overall objectives to provide guidance for review of the major corridor roadway alternatives. The overall objectives are:

- 1 – Improve performance of the regional roadway network
- 2 – Reasonable land use, development and access management
- 3 – Minimize environmental impacts
- 4 – Minimize construction and right of way costs
- 5 – Develop options for pedestrians and bicyclists
- 6 – Develop a responsible solution

##### **1.4.1 Business/Property Owner Interviews**

Business and property owners within the TH 169 corridor of the area were consulted early in the plan development process. The PAC informed the business/property owners of the process to adopt the plan and obtained feedback regarding impacts that may result from potential changes to property accesses from TH 169 and frontage road improvements.

##### **1.4.2 Open Houses**

Four public open houses were held to gather input and provide information about the plan and concepts for roadway improvements as follows:

Date	Topic
June 2001	Study Process, CSAH 6/CR 64 Interchange Concepts
October 2001	Revised Concepts for CSAH 6/CR 64 Interchange, Frontage Road Concepts, and Forecasts
September 2002	TH 25/CSAH 3 Interchange and Frontage Road Concepts
July 2003	Final Plan

Other meetings including Belle Plaine City Council and Planning Commission workshops and business/property owner meetings were held at key points in the plan development process. The City Council adopted this plan on September 2, 2003. The meeting agendas and handouts for these meetings are included in Appendices B, C, and D respectively.

## 2. Background Information

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### 2.1 Introduction

The City of Belle Plaine and the surrounding study area is located alongside the floodplain of the Minnesota River on a relatively level terrain. However, a wooded ridge aligns the south side of the corridor and has historically served as a natural transition between the development area associated with Belle Plaine and long term agricultural uses. The presence of topographical changes and creeks present challenges to plan a connected local roadway system. Three creeks cross TH 169 in the study area.

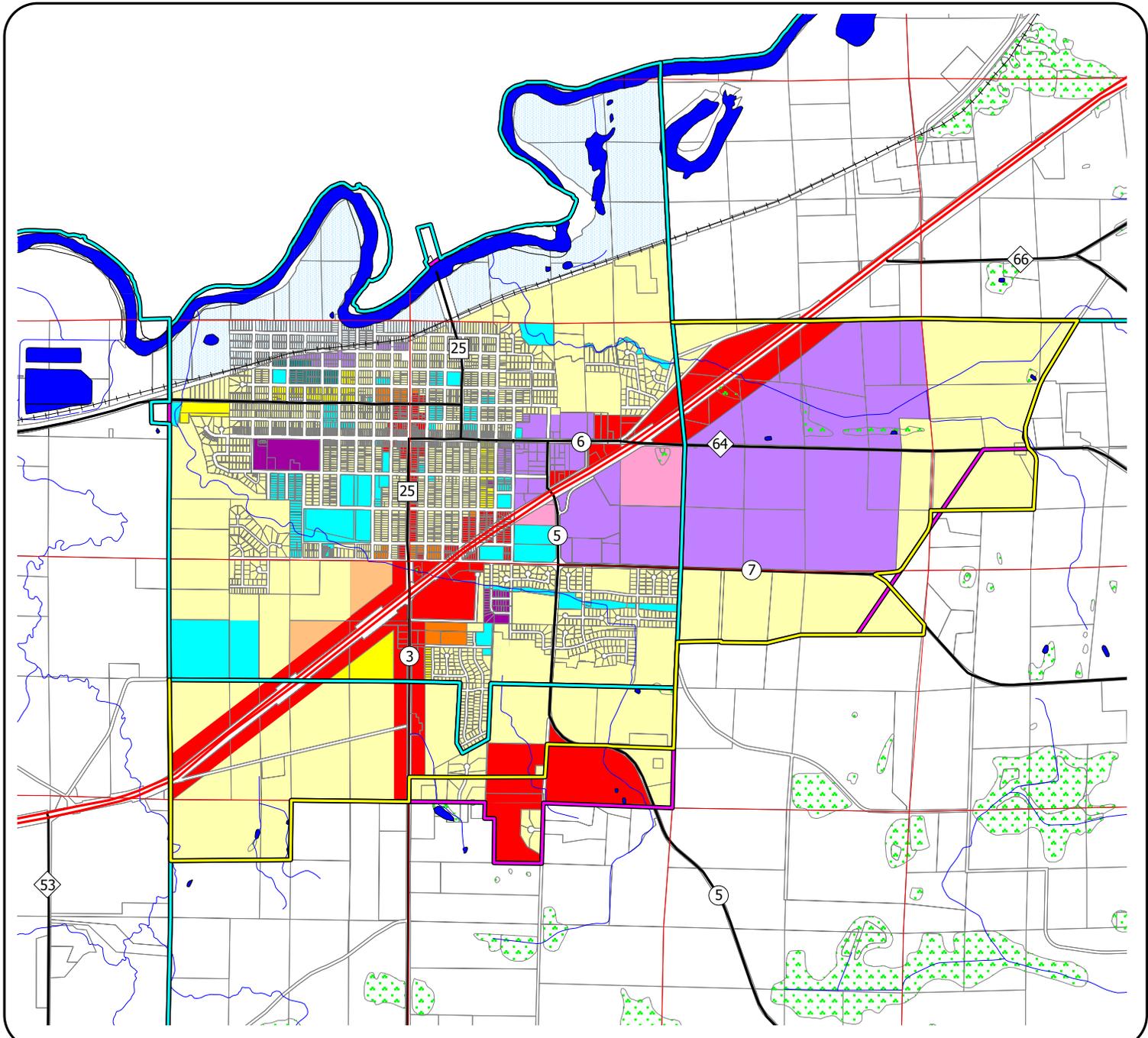
As the older portions of the City became fully developed, newer residential development has located to the south of TH 169 and west side of the City on former agricultural lands. Recently, commercial and business growth has occurred along the TH 169 corridor without associated improvements to allow for a connecting roadway system. The convergence of the grid system with the diagonal highway has created challenges for the design of safe intersections, the placement of frontage roads, and connections between the two areas of the City. A detailed analysis of land use and transportation trends is included in Appendix E.

#### 2.1.1 City of Belle Plaine

The *1999 City of Belle Plaine Comprehensive Plan* provides a framework for accommodating growth and development within the general Belle Plaine area. As part of the plan, a future land use plan map (Figure 2) was adopted and is designed to accommodate new households and employment to 2020. The map identifies lands within and outside of the Metropolitan Urban Service Area (MUSA) boundary and identifies the Orderly Annexation Area within Belle Plaine Township. The following describes the location of growth within the general land use categories:

- |             |  |
|-------------|--|
| Residential | Generally, the new low density development is occurring south of TH 169 and within subdivisions to the east and west of the downtown on the north side of TH 169. Medium and high density residential land designations have allowed for the construction of new townhome and multi-family developments near the CSAH 3/TH 169 intersection.   |
| Commercial  | A 300-foot-wide strip of property along the entire length of the north side of the TH 169 corridor within the Orderly Annexation Area boundary is designated for commercial land uses and is fully developed. Likewise, a similar area is designated along the south side of TH 169 and is partially developed. A commercial strip exists along CSAH 3 to the southern border of the Orderly Annexation Area boundary. New commercial development and business expansions are occurring in the downtown and along the TH 169 frontage. |
| Industrial  | An abundance of commercial-industrial and industrial land uses are designated near the CSAH 6/CR 64 intersection with TH 169. The designation of a significant amount of land to industrial land uses is reflective of the City's policy to promote business development opportunities near major municipal capital investments.   |

**FIGURE 2**  
**City of Belle Plaine 1999 Comprehensive Plan Future Land Use**



- Low Density Residential
- Medium Density Residential
- Medium-High Density Residential
- High Density Residential
- Manufactured Housing
- Planned Unit Development
- Commercial
- Commercial-Industrial
- Industrial

- Public Use
- Floodplain
- Wetlands
- U.S. Highway 169
- State Highway
- County/State Aid Highway
- County Road
- Section Line
- Parcel Line

- Current Jurisdictional Boundary
- Orderly Annexation Area Boundary
- 2020 MUSA
- Stream, Ditch
- Lake

Miles

N

**Resource  
Strategies  
Corporation**  
July 10, 2003

### 2.1.2 Scott County

Scott County serves as the planning authority for Belle Plaine, Blakely, and St. Lawrence Townships. The overall growth strategy of the County is:

- to concentrate growth and development within the cities,
- to allow a reasonable amount of land to be designated for staged expansion of municipal limits, and
- to preserve agricultural lands.

There are three general categories established in the County’s plan to guide land uses in accordance with the overall growth strategy including agriculture, rural residential, and urban expansion/transition.

The area planned for urban expansion/transition in the Scott County plan is intended to limit density to a rural level so that future services may be provided in an economical manner. Urban Expansion surrounds the Orderly Annexation Area and extends along the TH 169 corridor northward to Shakopee.

## 2.2 Growth Trends and Land Use Forecasts

An analysis of the vacant land supply within the current City limits, the Orderly Annexation Area and MUSA boundary was prepared to anticipate land consumption to 2030 if past trends continue. Over the last three years, single-family housing demand has ranged from 30 acres in 1999 to 81 acres in 2001. It is expected that low-density residential land demand will continue as evidenced by developer interest and purchase agreements on undeveloped lands in the Belle Plaine area.

Table 1 depicts the acreage needed in ten-year increments for new development based upon the 2030 forecasts.

Table 1  
Land Demand Forecasts (Net Acreage)

	2000-2010	2010 – 2020	2020-2030	Total Demand
<b>Residential</b>				
Low Density	400	400	400	1200
Medium Density	31	30	30	91
High Density	0	6	4	10
Subtotal	431 acres	436 acres	434 acres	1301 acres
<b>Other</b>				
Institutional	30	0	0	30
Commercial	22.50	24	24	70.5
Industrial	60	64	64	188
Subtotal	112.5 acres	88 acres	88 acres	288.5 acres
<b>Total</b>	543.5 acres	524 acres	522 acres	1,589.5 acres

Source: Residential Building Permit Data from 1999-2001 and 1999 *Comprehensive Plan*

It is anticipated that if the rate of single family housing development continues, available land for low density residential uses within the City and Orderly Annexation Area will be completely utilized shortly after 2020. Sufficient land exists within the City for commercial and industrial development until 2015. After this time, land within the Orderly Annexation Area will be needed for further commercial and industrial development based upon the forecasts.

Table 2 depicts the number of new households and employees that may be accommodated within the appropriately designated vacant land in the Belle Plaine area according to the future land use map.

Table 2  
Vacant Land: Households and Employees

City Limits	Inside MUSA			Outside MUSA
	Orderly Annexation Area	County	Total	Orderly Annexation Area
Households				
1,226	1,477	23	2,726	124
Employment				
2,136	7,511	844	10,491	0

### 2.3 Traffic and Roadway Characteristics

TH 169 is a four-lane rural expressway that connects the study area with Mankato and the Twin Cities metropolitan areas. This principal arterial includes 2-twelve foot driving lanes, a ten foot right shoulder, and a four foot left shoulder in each direction. The direction of travel is separated by a 43’ depressed grass median. At select at-grade intersections, right and/or left turn lanes are provided. Right-of-way width varies along the corridor but is typically 225’ total width. In the year 2000, the Average Annual Daily Traffic (AADT) on TH 169 in Belle Plaine was 18,400 vehicles per day (vpd). With anticipated regional growth, AADT volumes are anticipated to grow to 25,500 vpd within Belle Plaine and 33,000 vpd north of CSAH 6/CR 64. There are 19 intersections on TH 169 within the 4½-mile study area. Figure 3 and Table 3 summarizes the existing access locations.

The intersecting roadways serve an array of functions in the local and regional roadway system. TH 25 is a north-south A Minor Arterial that connects TH 169 across the Minnesota River to rural Sibley and Carver Counties as well as to TH 212 near Norwood Young America. It provides one of six Minnesota River crossings in Scott County. TH 25 also links TH 169 with downtown Belle Plaine.

CSAH 3, CSAH 6, and CSAH 7 are B Minor Arterials. CSAH 3 is a north-south roadway that intersects TH 169 at TH 25. CSAH 3 connects Belle Plaine to TH 19 and continues into Le Sueur County as CR 11 to Le Center. CSAH 3 connects developing residential and commercial areas within Belle Plaine to TH 169 and the western portion of the City. CSAH 6 is an east-west roadway that connects TH 169 with TH 25 in downtown Belle Plaine and ultimately continues west along the Minnesota River to Blakely. CSAH 7 runs southeast from CSAH 6, crosses TH 169, and connects Belle Plaine with TH 19 in Union Hill. CSAH 7, joined with CSAH 5, establishes the Laredo Street intersection on TH 169, the only signalized intersection on TH 169 within the study area.

**Figure 3 -  
TH 169 Existing  
Access in Belle Plaine**

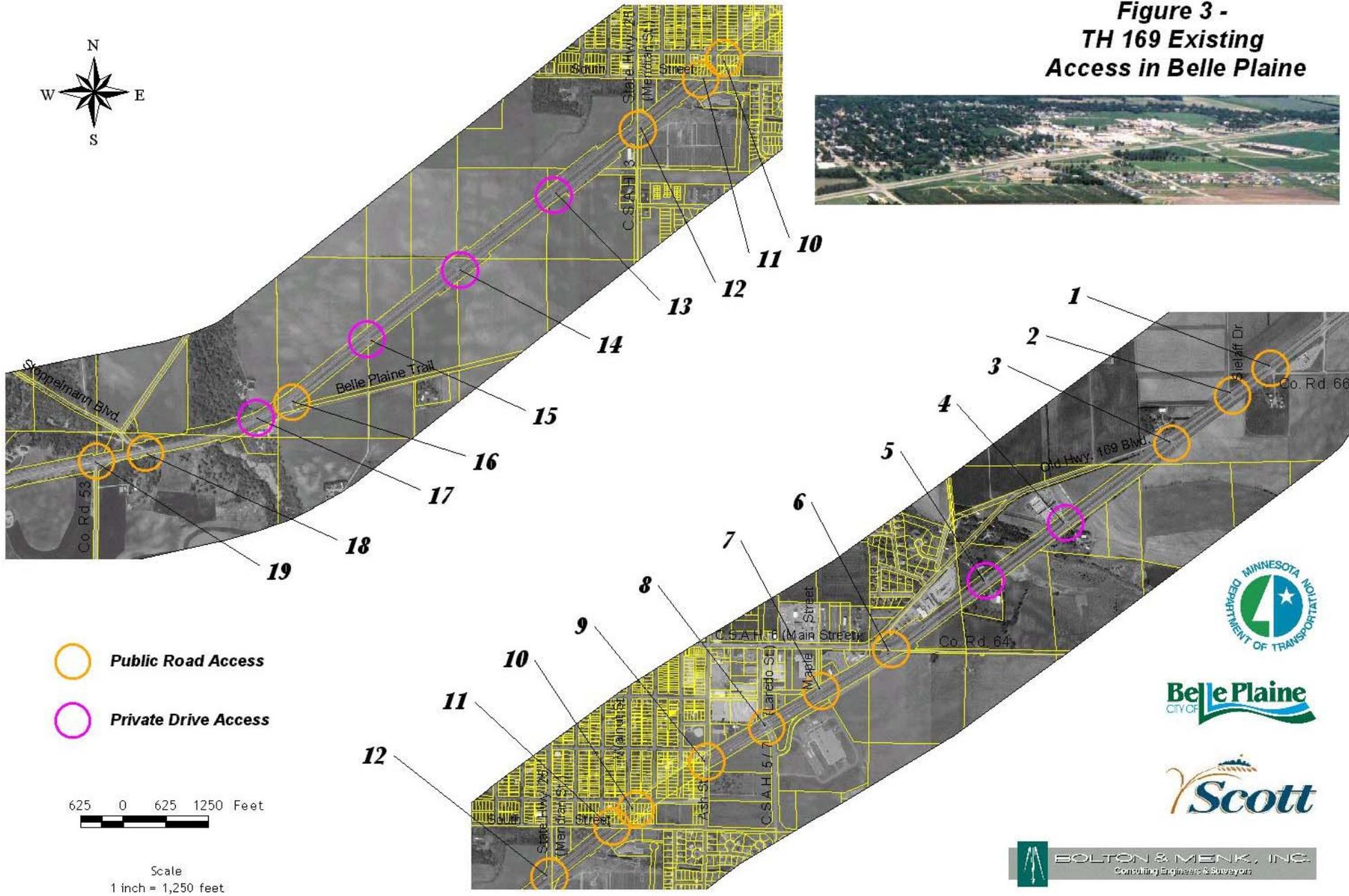


Table 3  
Existing TH 169 Access Locations

		Intersection	Access Type	Function	ADT
1	East	CR 66	Full At-grade, T-intersection	County Collector Road	1100
2	West	Sielaff Drive	Full At-grade, T-intersection	Township Local Access	NA
3	East	Field Access	Full At-grade	Private Field Access	NA
	West	Old Highway 169 Blvd	Full At-grade, T-intersection	City/Township Local Access	350
4	East	22071 Johnson Memorial Dr	Full At-grade	Private Residence Access	NA
	West	22066 Johnson Memorial Dr	Full At-grade	Private Business Access – Brewery Creek Nursery	110
5	East	22381 Johnson Memorial Dr	Full At-grade	Private Business Access – J&W Asphalt	NA
	West	Johnson Memorial Dr	Full At-grade	Private Residence Access	NA
6	East	CR 64	Full At-grade	County Collector Road	400
	West	CSAH 6 (Main Street)	Full At-grade	County Minor Arterial	4750
7	West	Maple Street	SB Right In/Right out	City Local Access	1100
8	East	CSAH 5/7 (Laredo Street)	Full At-grade, Signalized	County Minor Arterial	3050
	West	CSAH 5/7 (Laredo Street)	Full At-grade, Signalized	County Minor Arterial	3500
9	East	Ash Street	NB Right In/Right out	City Local Access	300
	West	Ash Street	SB Right In/Right out	City Local Access	700
10	East	521 East South Street	Full At-grade	Private Business Access – Amoco	1200
	West	Walnut Street	Full At-grade	City Collector Street	2900
11	East	South Street	Full At-grade	City Collector Street	2000
	West	South Street	Full At-grade	City Collector Street	1400
12	East	CSAH 3 (Meridian Street)	Full At-grade	County Minor Arterial	3400
	West	TH 25 (Meridian Street)	Full At-grade	State Minor Arterial	3200
13	E/W	Field Access	Full At-grade	Private Field Access	NA
14	E/W	Field Access	Full At-grade	Private Field Access	NA
15	E/W	Field Access	Full At-grade	Private Field Access	NA
16	East	Belle Plaine Trail	Full At-grade	Township Local Access	60
	West	Field Access	Full At-grade	Private Field Access	NA
17	West		Full At-grade	Private Residence Access	NA
18	West	Stoppelmann Blvd	Full At-grade	Township Local Access	NA
19	East	CR 53	Full At-grade	County Collector Road	170

NB – North bound  
SB – South bound

CR 64 is currently an east-west non-continuous collector roadway that primarily provides local system connectivity within rural Belle Plaine Township, Helena Township, and Cedar Lake Township. CR 64 intersects TH 169 at CSAH 6 and has been identified as a roadway whose function may grow in importance within the County and Metropolitan roadway system. Scott County has identified the need for an east-west corridor study to evaluate potential system connectivity improvements between TH 169 and I-35 via CSAH 8. A portion of CR 64 in Belle Plaine Township may be used to link CSAH 8 between TH 169 and TH 21. The east-west corridor study has not yet begun.

CR 53 and CR 66 are collector roadways on the County Highway system. CR 53 is a north-south roadway that primarily provides local system connectivity within rural Blakely Township, connecting TH 169 with TH 19. CR 66 runs northeast from TH 169 and primarily provides local system connectivity within rural St. Lawrence Township, connecting TH 169 with CSAH 59 and ultimately TH 21 in the City of Jordan. South Street and Walnut Street are city collector roadways.

The remaining 12 intersections primarily serve local and private property access needs. Six of the remaining 12 intersections include City and/or Township roadways that provide access to private properties. The other six intersections provide only direct access to adjacent properties.

The crash history at each of the existing intersections was reviewed for the years 1998, 1999, and 2000. Within this 3-year time frame, a total of 65 crashes occurred at the five main crossings on TH 169 within the Belle Plaine area, including 2 fatal crashes. In December 2001, a collision on southbound TH 169 near CSAH 6/CR 64 resulted in four fatalities. The accident rates at the five main intersections are summarized in the Table 4.

Table 4  
TH 169 Corridor – Belle Plaine Crash History 1998 – 2000

Location	Number of Accidents	Accident Rate per Million Vehicles Entering (MVE)
Meridian Street	11	0.494
South Street	24	1.452
Walnut Street	8	0.484
Laredo Street	9	0.451
Main Street	13	0.565

The crash rate information indicates a similar crash rate at each of the intersections excluding the South Street intersection where the crash rate is nearly three times the rates at any other TH 169 intersection in Belle Plaine. The average metro-wide accident rate for a unsignalized, skewed intersection on a 4-6 lane divided expressway is 0.4 per MVE and for signalized intersection on a 4-6 lane divided expressway is 0.8 per MVE.

It should be noted that the most severe crashes occurred at the Main Street intersection including one fatal crash and one incapacitating injury crash. All other crashes resulted in non-incapacitating injuries or property damage only.

## **2.4 Summary of Issues**

In order to achieve the goal of transitioning to a freeway, the City of Belle Plaine faces the challenge of planning for alternative access opportunities to TH 169 as part of community development activities. The City, County and Mn/DOT officials and staff identified a number of issues early in the process to develop the work program for this study. Generally, the issues center upon the needs of anticipated growth, and potential impacts to existing and future development caused by the short and long-range access improvements to TH 169.

Other concerns pertaining to the TH 169 corridor were raised by City, township and the public during the public involvement process for this study. Further, the City expressed a specific need to re-examine the function of other roadways in the Belle Plaine area as a result of the planned improvements to TH 169. The City is conducting an update of their Transportation Plan to redefine the function of area roadways based upon the conclusions of this plan.

### **2.4.1 City and Public Concerns**

The following is a list of issues identified by the public, public officials and staff that were raised as part of the planning study:

- A. TH 169 Roadway Safety and Capacity
  1. Inability of the existing and planned roadway system to accommodate accelerated growth in a safe and efficient manner.
  2. Skewed intersections with TH 169 create safety problems that become exacerbated as volumes increase on TH 169 and local roadways.
  3. Potential need and location of an interchange required by local development near the TH 25 and CSAH 3 intersections with TH 169.
  4. Location, funding availability and construction commitment for TH 169 and CSAH 6/CR 64 interchange.
- B. Community Cohesiveness and Land Use
  1. Lack of community “unification” between the north and south sides of the City.
  2. Need to create development “nodes” near regional access areas.
  3. The need to provide safe access and connections from new residential neighborhoods on the south side of TH 169 to shopping, schools, parks, and other facilities and services within the historic downtown area of Belle Plaine.
  4. Lack of pedestrian/bicycle crossing opportunities between north and south sides of TH 169.
  5. Need for land use flexibility near CR 66/TH 169 intersection depending upon long term decision on timing for interchange.
- C. Local Transportation System
  1. The need to provide a system of collector roadways to serve new development that complements the existing and planned arterial roadway system.
  2. Ability of other public infrastructure improvements and capacities to accommodate development pressure.

3. Need to retain flexibility for developers and City in determining proper placement of local roadways and local access.

#### **2.4.2 Business/Property Owner Concerns**

Several concerns pertaining to the TH 169 improvements within the area were raised by TH 169 corridor business and property owners during outreach interviews. Business and property owners were asked for specific reactions regarding:

- the potential closure of the direct access onto TH 169 between CSAH 6/CR 64 and TH 25/3,
- a preliminary concept for the TH 169 and CSAH 6/CR 64 interchange,
- concepts for continuous north and south frontage roads along TH 169, and
- other roadway improvements that may be needed in the Belle Plaine area.

The business and property owner's observations and concerns are summarized below. Specific comments are found in Appendix F:

1. Proposed improvements will hurt highway-oriented businesses.
2. One or more access points should remain open on the north side of TH 169 for the highway-oriented businesses.
3. A right in/right out access should be provided on the north side of TH 169 on a temporary basis until all improvements are made.
4. The removal of the Laredo Street/TH 169 signalized intersection will impact truck routes.
5. Ability to pay future potential assessments for frontage/backage road improvements.
6. Strong need for an interchange at the intersection of TH 169 with CSAH 6/CR 64.
7. Concern about business visibility vs. access: travelers will be unable to see the frontage roads because they may not align with TH 169 and highway business signage on TH 169 is needed.
8. Existing businesses that are significantly impacted by TH 169 improvements want to relocate in Belle Plaine area.
9. Strong need to connect north and south sides of Belle Plaine.
10. The TH 169 improvements will change the type of existing commercial land uses along the corridor.
11. The County access spacing requirements on CSAH 6 and CR 64 are too stringent.
12. The planned medians along CSAH 6 and CR 64 should allow for left turns to businesses.

## 3. Recommended Corridor Vision

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### 3.1 Transportation Vision

Based upon the functional roadway system, specific design options were developed for the major access facilities along the TH 169 corridor within the area. The transportation vision was chosen based upon conformance with policies and consideration of public input by the PAC and the City of Belle Plaine.

The recommended vision includes the following roadway features:

- An interchange at TH 169 and CSAH 6/CR 64 (Main Street).

This location was selected based on its ability to meet the existing and future local and regional travel demand by providing a connection between the principal arterial (TH 169) and the minor arterial (CSAH 6). This interchange will conveniently connect TH 169 with downtown Belle Plaine, with the TH 25 Minnesota River Crossing, with a potential east-west, countywide minor arterial connection to I-35. In addition, an interchange at this location replaces the existing signalized intersection at Laredo Street and addresses other existing safety needs along the corridor.
- An interchange at TH 169 and TH 25/CSAH 3 (Meridian Street).

This location was also selected based on its ability to meet the existing and future local and regional travel demand by providing a connection between the principal arterial (TH 169) and the minor arterial (TH 25/CSAH 3). This interchange will conveniently connect TH 169 with developing residential and commercial areas of Belle Plaine as well as connections to downtown Belle Plaine and the TH 25 Minnesota River Crossing. An interchange at this location primarily addresses future access and mobility needs of the developing areas of the community. It also addresses existing safety needs along the southern portion of the study area.
- A north frontage road between CSAH 6 (Main Street) and TH 25 (Meridian Street).

This frontage road is an essential link between the two TH 169 interchange locations. It maintains accessibility for existing highway-oriented businesses along TH 169. It also promotes local circulation and mobility within the community.
- A Hanlon Drive Extension to County Road 64.

This local street connection is needed to provide connectivity in the local roadway network without relying on TH 169. The connection will improve accessibility to existing and future commercial and industrial land uses as well as provide a required link between the CSAH 6/CR 64 interchange and developing areas south and east of TH 169.
- A south frontage road between CSAH 3 (Meridian Street) and South Street, an east-west city collector street.

This local street connection is needed to maintain accessibility for existing highway-oriented businesses at South Street and TH 169. It is also needed to provide connectivity in the local roadway network without relying on TH 169 or other residential streets.
- Development of future local roadways parallel to TH 169 that accommodate the

community's anticipated growth while facilitating access to TH 169 at the selected interchange locations.

- Grade-separated pedestrian crossings of TH 169 that promotes community cohesiveness as well as safety.

The existing underpass located with Veteran's Park is maintained and sidewalk/trail facilities will be included in the construction of the TH 169 interchanges.

- A future over or underpass crossing of TH 169 in the vicinity of the western terminus of existing Belle Plaine Trail.

### **3.2 Future Land Use**

The land use designations along the TH 169 corridor (including properties outside the present Belle Plaine municipal limits) are consistent with the 2020 and long term growth areas (2020 – 2040) identified by Scott County and included as "urban reserve" in the Metropolitan Council's *2030 Blueprint*. Specific land use designations of property were provided by City and township officials and staff, and based upon the following:

- A desire to remove the designation of "strip" commercial development along the north and south sides of TH 169 as shown in the *1999 Comprehensive Plan* Future Land Use map.
- Provide opportunities for additional well-planned business growth within development "nodes" where regional access would be available in the future.
- Provide areas for urban levels of well-planned residential in areas separated from TH 169 where natural amenities exist, infrastructure services could be extended in an economical manner, and in areas cited as "desirable" by developers.

### **3.3 Corridor Vision Plan and Policies**

Figure 4 depicts the Corridor Vision Plan that includes the transportation facilities and associated land uses for the TH 169 Belle Plaine area.

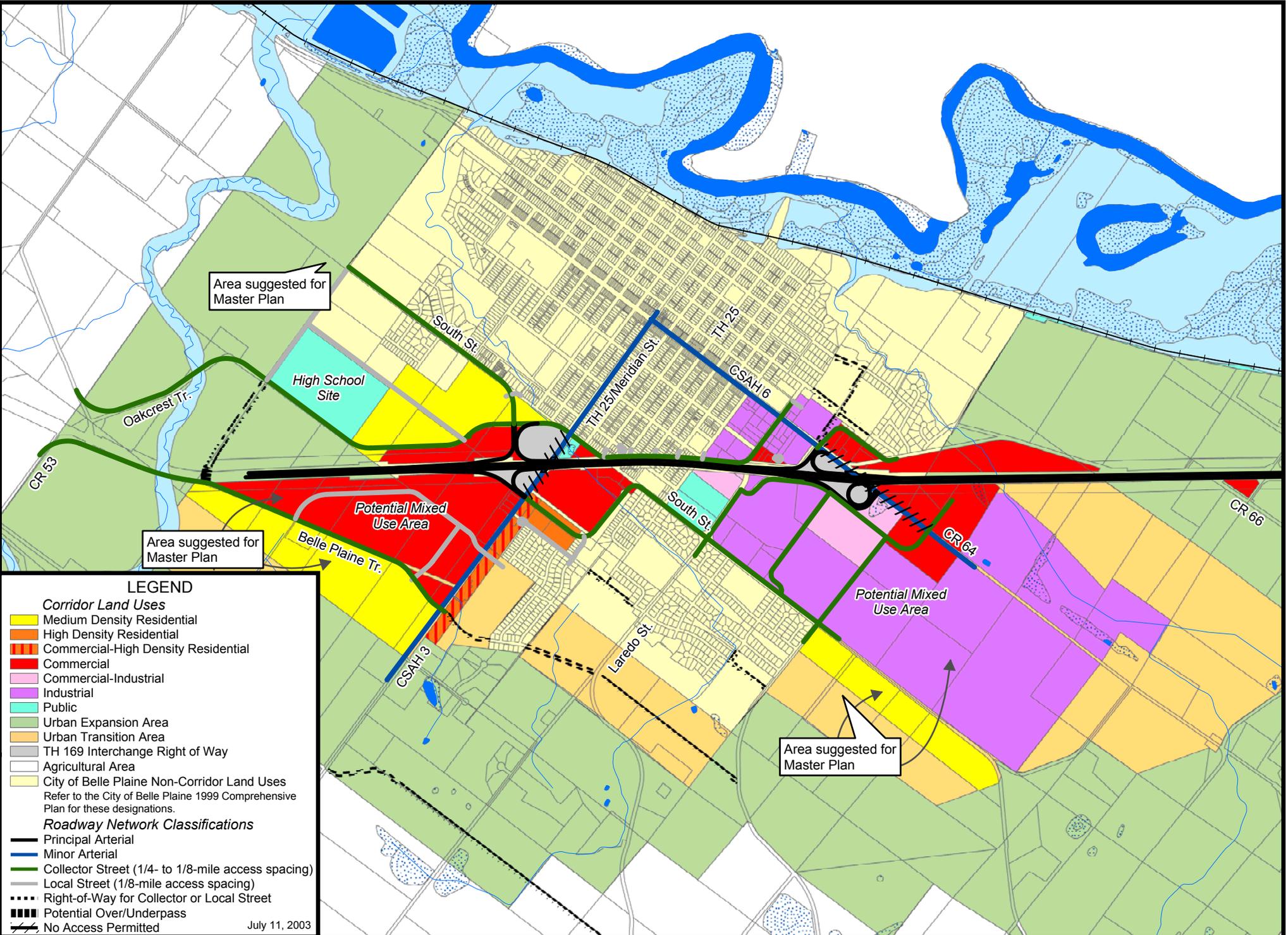
The policy statements listed below have been developed to address items that influence or are influenced by the implementation of the Corridor Vision for TH 169 in the Belle Plaine area. The statements are to be utilized by the appropriate agency to:

- Guide the development of the future transportation/land use plan for the Belle Plaine corridor,
- Guide public decisions regarding new development and infrastructure requirements, and
- Provide direction for amendments to official controls.

#### **A. Transportation System and Facilities**

1. Utilize the functional classification system established on the Corridor Vision Plan to determine right-of-way, design and operational criteria for roadways within the area, and review of potential jurisdictional changes with Scott County and MnDOT, as appropriate. This includes requiring the dedication of adequate right of way for new streets (as part of the subdivision process) and developing criteria for standardizing traffic controls and access based upon the functional classification system.

**FIGURE 4**  
**TH 169 Corridor Vision Belle Plaine Area**



**LEGEND**

**Corridor Land Uses**

- Medium Density Residential
- High Density Residential
- Commercial-High Density Residential
- Commercial
- Commercial-Industrial
- Industrial
- Public
- Urban Expansion Area
- Urban Transition Area
- TH 169 Interchange Right of Way
- Agricultural Area
- City of Belle Plaine Non-Corridor Land Uses  
Refer to the City of Belle Plaine 1999 Comprehensive Plan for these designations.

**Roadway Network Classifications**

- Principal Arterial
- Minor Arterial
- Collector Street (1/4- to 1/8-mile access spacing)
- Local Street (1/8-mile access spacing)
- Right-of-Way for Collector or Local Street
- Potential Over/Underpass
- No Access Permitted

July 11, 2003

2. Provide short and long range transportation planning guidance to developers of large parcels so that the location, right-of-way and access spacing of future internal roadways will support the regional and local transportation systems especially at the planned interchanges with TH 169.
3. Where possible, plan for overall backage road access (rather than a frontage road) for the area south of TH 25/CSAH 3 with connections to Oakcrest Trail and CR 53.
4. Recognize the importance of local streets to neighborhood identity and integrity at the same time facilitating the movement of vehicular, bike, and pedestrian traffic by adopting street design standards that minimize the potential for increased speeds, through traffic, pedestrian hazards and vehicular noise.

#### B. Staging

1. Work with individual property owners to determine the need and timing for private access relocation and/or other site changes based upon the overall frontage road staging plans between CSAH 6/CR 64 and TH 25/CSAH 3.
2. Obtain right-of-way through dedication, as allowed by law or acquisition before or at the time of development and require the construction of roadways for:
  - a. the extension of the frontage road (Hanlon Drive) between Laredo Street and CR 64
  - b. the frontage road section between South Street and CSAH 3, south of TH 169
  - c. the frontage/backage roads along TH 169 southwest of TH 25/CSAH 3.
3. Plan for and preserve the right-of-way needed for the TH 25/CSAH 3 interchange through the use of Right of Way Acquisition Loan Funds (RALF), dedication and other techniques such as density transfers, etc.

#### C. Funding

1. Develop an overall funding strategy and plan for the supporting roadway network, the improvements to the TH 25/CSAH 3 intersection and other related local improvements in cooperation with Mn/DOT, Scott County and the City of Belle Plaine.
  - a. The City will consider participating in the Metropolitan Council's RALF Program for acquisition of right-of-way as depicted on the Official Map.
  - b. The City and Mn/DOT will determine the potential for utilizing Access and/or Management Cooperative Agreement funds to develop the necessary planning and engineering design documents required for the frontage/backage roads between the planned interchanges at CSAH 6/CR 64 and TH 25/CSAH 3 and related roadways.
    - 1.) Roadway retrofits will be given priority for Mn/DOT funding.
    - 2.) The construction of the frontage/backage roads on vacant land will be the responsibility of developers.
  - c. The City and County will cooperate in the review and development of each respective Capital Improvement Program for right-of-way purchase and construction, as required, needed for respective new and/or improved roadways that implement the future transportation system plan.
2. Require new development to pay for public improvements, as allowed by law.

## 4. Recommended Transportation Improvement Areas

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### 4.1 Introduction

The preliminary layouts for the TH 169 interchanges and north frontage road are depicted on Figures 5, 6 and 7. The layouts show the configuration of the planned grade separated interchanges at CSAH 6/CR 64 at the north end of Belle Plaine and the second interchange located south of the existing TH 25/CSAH 3 intersections with TH 169. These interchanges are consistent with the *TH 169 Corridor Management Plan* vision that provides for the transitioning of the portion of the highway in Belle Plaine from a rural expressway to a controlled-access freeway-type facility.

The frontage/backage roads between the planned interchanges generally utilize existing City streets and right-of-way. However, in certain areas, additional right-of-way is needed to complete the segment as depicted on the layouts. Ideally, the construction of the north frontage road will occur before or at the same time as the as the construction of the planned CSAH 6/CR 64 interchange.

The right-of-way and construction of planned local roads parallel to TH 169 that extend north of the planned CSAH 6/CR 64 interchange and south of the planned TH 25/CSAH 3 interchange should be obtained and constructed in conjunction with new development. It is expected that the funding for the portions of the frontage roads to serve new development will be the responsibility of the City with participation from the private sector.

### 4.2 TH 169 and CSAH 6/CR 64 Interchange (Figure 5)

Several design alternatives were considered by the PAC for the CSAH 6/CR 6 interchange. Because of a one-time legislative appropriation of funding for right-of-way acquisition, preliminary design for the TH 169 interchange at CSAH 6/CR 64 needed to occur early in the design process. Two alternatives were prepared by the PAC for the CSAH 6/CR 64 interchange and presented for public review. The first alternative for the interchange was presented at the initial Open House held in June 2001. A revised second alternative was prepared in response to public comments and agency review and presented at an Open House held in October 2001.

A folded diamond interchange design was chosen as the preferred alternative for the CSAH 6/CR 64 interchange. This layout was selected primarily because the design:

- Minimizes right-of-way and construction impacts,
- Responsive to concerns raised by area residents,
- Facilitates future traffic operations,
- Provides land use and access flexibility, and
- Includes bicycle/pedestrian opportunities.

Although the Belle Plaine City Council approved a resolution (see Appendix G portion of minutes from 12/17/01 City Council meeting) supporting the overall interchange, concerns were raised by the Council concerning the inclusion of a median in the design of CSAH 6. The Council voted to approve the preliminary layout of the interchange contingent upon removal of the median within CSAH 6 from the intersection of existing Old Highway 169 Boulevard to

# PROPOSED INTERCHANGE T.H. 169 AT C.S.A.H. 6 / C.R. 64

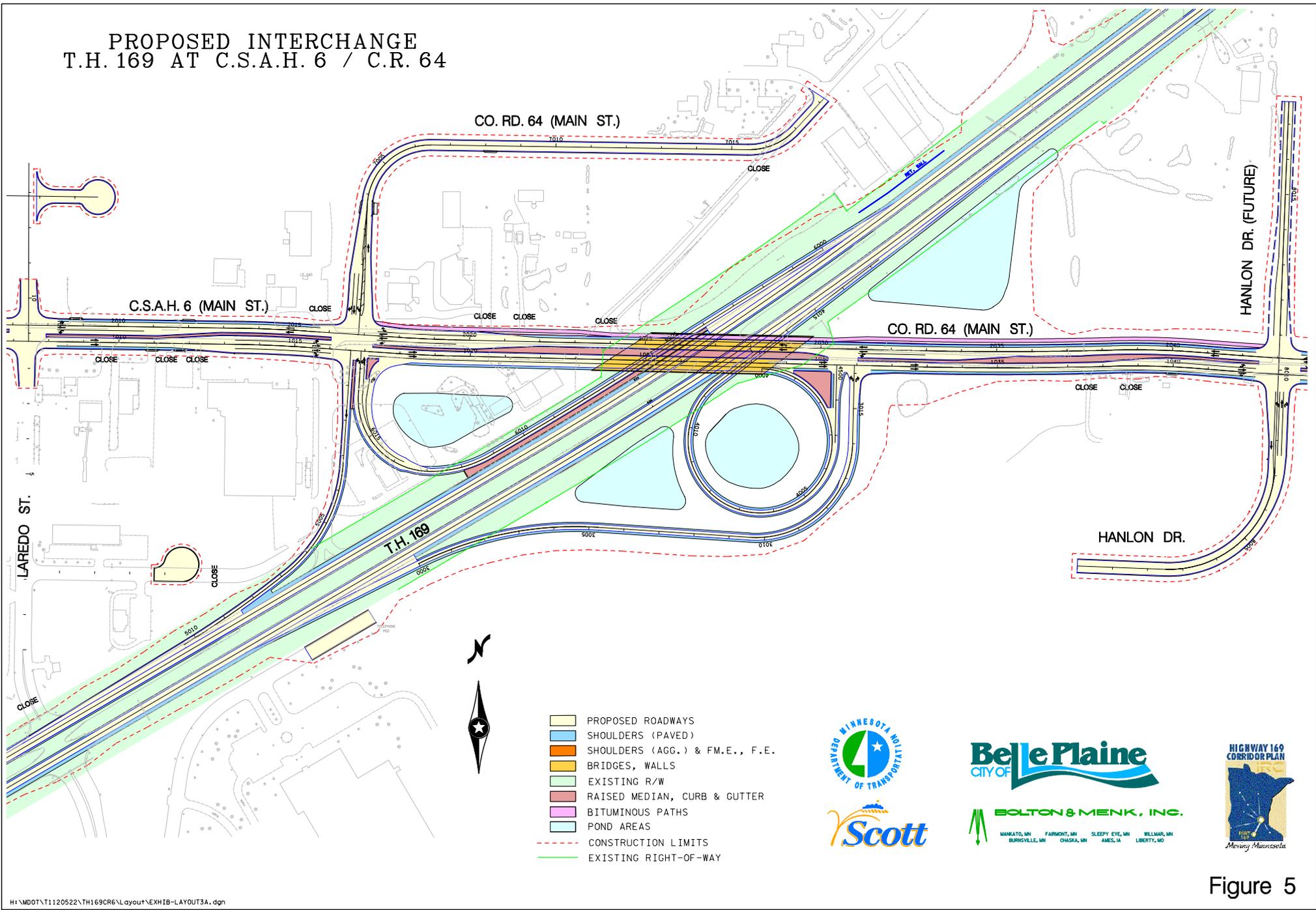


Figure 5

Ash Street and replacement with a center left and right turning lane, and preservation of existing full access to several existing businesses. Mn/DOT appealed the City's contingencies via the Municipal Consent Appeal process. The appeal board supported the Mn/DOT Staff Approved layout presented to the City by Mn/DOT.

Mn/DOT is currently completing the process of purchasing right-of-way for the project as well as completing the final design and preparing construction documents. Construction of the CSAH 6/CR 64 interchange is included in Mn/DOT's 10-year work plan for fiscal year 2010. The project also has potential to be constructed prior to 2010 if new funding becomes available.

In acknowledgement of Mn/DOT's investment in the TH 169 at CSAH 6/CR 64 interchange, a roadway jurisdiction transfer between Scott County (CSAH 6) and Mn/DOT (TH 25) is in process. Under the agreement,

- Existing CSAH 6 (Main Street) between Walnut Street and TH 169 will be designated TH 25.
- Existing TH 25 (Main Street) between Walnut Street and Meridian Street, and TH 25 (Meridian Street) between Main Street and TH 169, will be designated CSAH 6.
- A two-block section of Meridian Street between Main Street and State Street (CSAH 6) will be transferred from the City to the County.
- A two-block section of CSAH 5 (Laredo Street) between Main Street and TH 169 will be transferred from the County to Mn/DOT on a temporary basis until the interchange is constructed.
- Following the construction of the interchange, Laredo Street will become a city street.

These jurisdictional transfers have been agreed to by the City, County and Mn/DOT and are anticipated to become effective in September 2003.

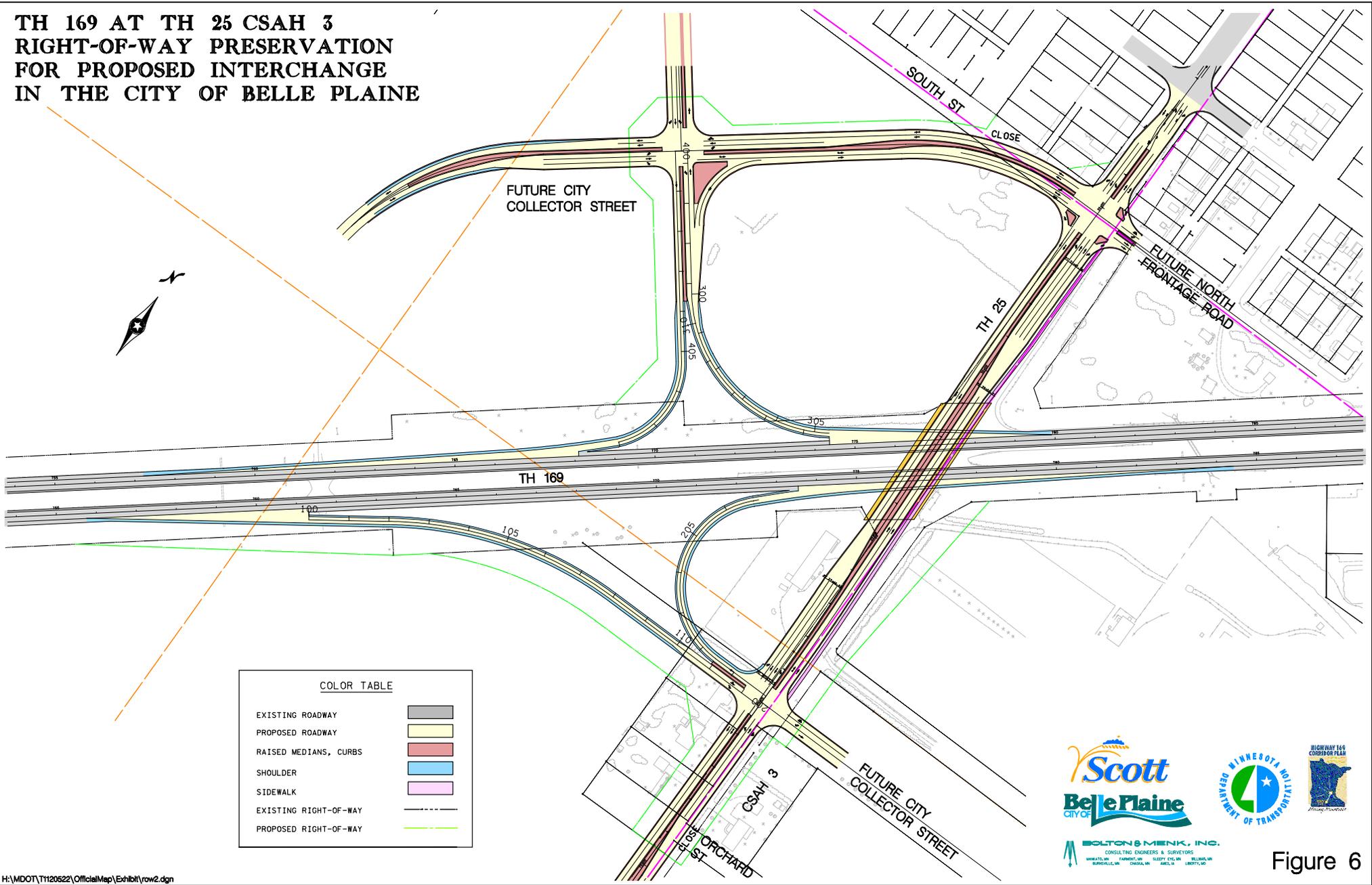
### **4.3 TH 169 and TH 25/CSAH 3 Interchange (Figure 6)**

One of the challenges in reviewing the long-term growth trends in the Belle Plaine area was determining the appropriate type of access facility to replace the public intersection at TH 25/CSAH 3 (Meridian Street). Concepts ranging from a plan for closure of the intersections with access provided via a frontage road to the CR 6/CSAH 64 interchange, to a full diamond interchange were discussed by PAC members to determine the proper facility necessary to accommodate forecasted traffic levels and reasonable access.

Several interchange design alternatives were evaluated for the TH 25/CSAH 3 intersection later in the process. The screening criteria used for each alternative, with the collective comments from the Project Advisory Committee, is included in Appendix H. The PAC selected an overpass design with a northbound folded diamond design and southbound buttonhook for the following reasons:

- Opportunities for land use flexibility,
- Less right-of-way needed for the interchange area compared to other alternatives,
- Supported by most adjacent land owners and developers.

**TH 169 AT TH 25 CSAH 3  
RIGHT-OF-WAY PRESERVATION  
FOR PROPOSED INTERCHANGE  
IN THE CITY OF BELLE PLAINE**



COLOR TABLE	
EXISTING ROADWAY	
PROPOSED ROADWAY	
RAISED MEDIANS, CURBS	
SHOULDER	
SIDEWALK	
EXISTING RIGHT-OF-WAY	
PROPOSED RIGHT-OF-WAY	



**Figure 6**

- Better opportunities for local roadway connections and more convenient local circulation compared to other alternatives,
- Allows convenient access to existing businesses on east side of TH 169,
- Ability to disperse traffic especially on the west side of TH 169, and
- Safe ped/bike crossing compared to other alternatives.

The timing for construction of the TH 169 interchange at TH 25/CSAH 3 (Meridian Street) is unknown at this time. The project has not been identified in Mn/DOT's 10-year work program nor has funding been allocated to purchase right-of-way for the project. Since the primary need for the second interchange is to accommodate future traffic generated by the City's anticipated growth, the City will need to be actively involved in the preservation of right-of-way for the interchange as well as securing alternative sources of funding for construction.

An Official Map has been developed to identify and protect the right-of-way needed for the interchange at TH 25/CSAH 3. Additionally, temporary easements for grading may be necessary on the north side of TH 25 (Meridian Street) on Veterans Park owned by the City. If adopted by the City Council, the Official Map provides the City with a zoning tool to protect the right-of-way from development as well as alerts property owners of the intended public use of the property. A detailed description of the Official Map process, as well as other local implementation tools, is included in Section 5 – Local Implementation Recommendations of this report.

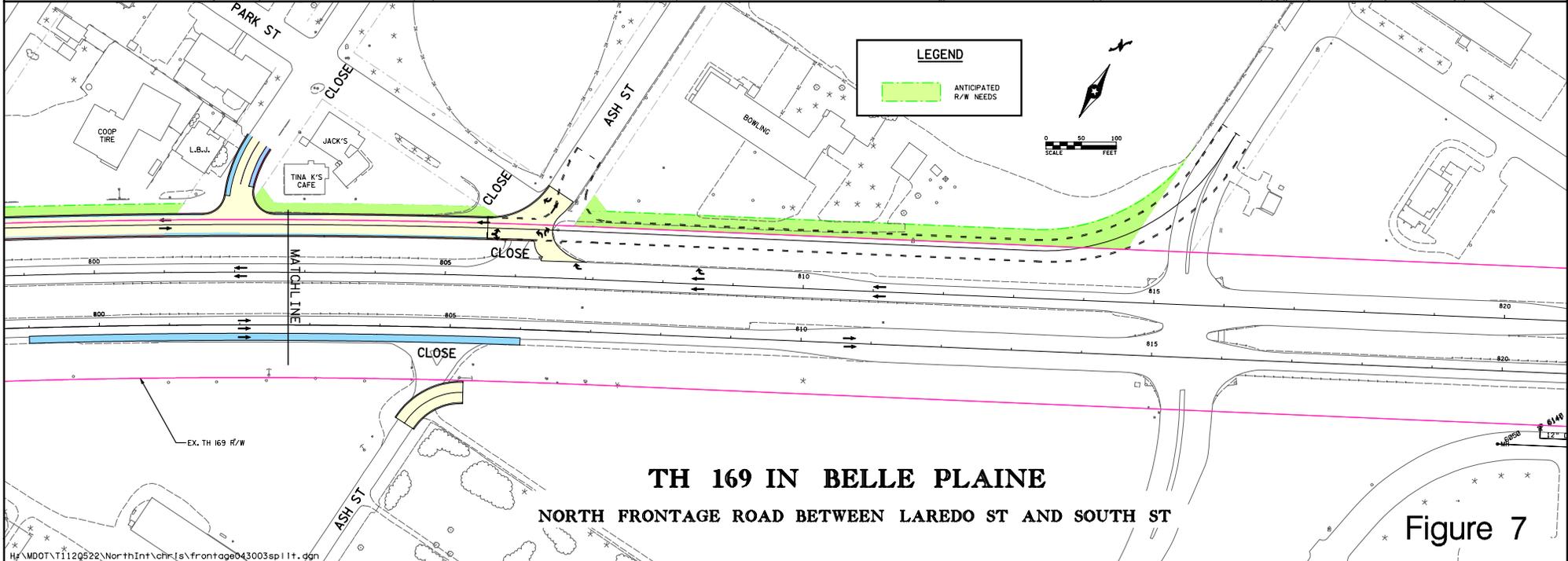
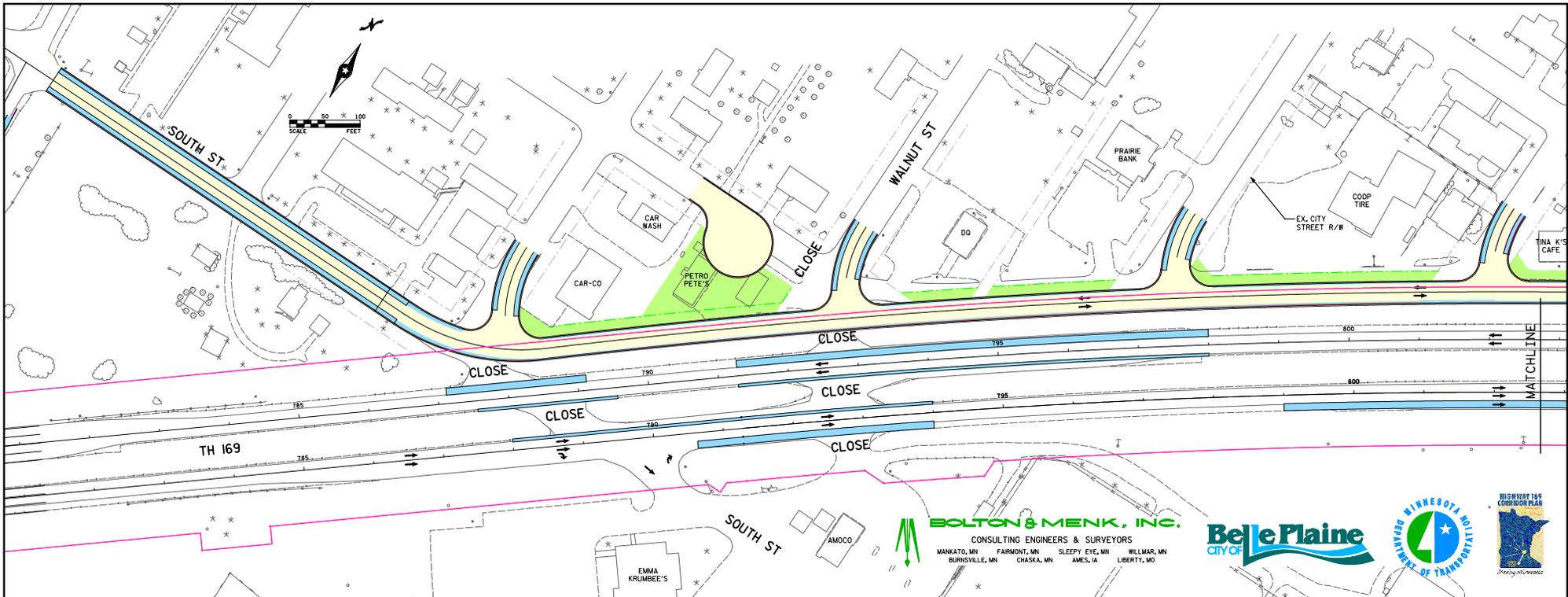
#### **4.4 Local Roadway System Development**

Access alternatives were designed for the TH 169 interchanges and accompanying frontage/backage roads to accommodate planned future land uses and be consistent with the TH 169 performance standards included in the *State Highway 169 Corridor Management Plan*. The proposed local roadway system within the TH 169 corridor provides connectivity between the proposed interchange locations on both sides of TH 169 and is designed to complement the local transportation system. The development of the proposed local roadway system will facilitate the removal of local street and private accesses on TH 169. Local roadway system improvements in developed areas will be achieved through cooperation of Mn/DOT and the City of Belle Plaine, including a proposed frontage road along the north side of TH 169 between TH 25 (Meridian Street) and Laredo Street.

##### **4.4.1 TH 169 North Frontage Road (Figure 7)**

Due to the developed nature of the north side of TH 169 between TH 25 (Meridian Street and CSAH 6 (Main Street), the design of the frontage road utilizes as much of existing public and private roadways as possible between the two planned interchanges to minimize property and access impacts. This frontage road is an essential link between the two TH 169 interchange locations. It maintains accessibility for existing highway-oriented businesses along TH 169. It also promotes local circulation and mobility within the community.

In July 2003, Mn/DOT and the City were successful in securing Mn/DOT Metro District Access Management funds for this project. Right-of-way acquisition for the project is anticipated to begin in 2004 with construction anticipated in 2006.



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**TH 169 IN BELLE PLAINE**

**NORTH FRONTAGE ROAD BETWEEN LAREDO ST AND SOUTH ST**

**Figure 7**

#### **4.4.2 TH 169 South Frontage/Backage Road**

On the south side of TH 169 where existing businesses and vacant properties exist, local roadway connections are planned that will result in local connectivity between CSAH 3 (Meridian Street) and CR 64 (Main Street). Through utilization of the existing portions of South Street, Laredo Street, and Hanlon Drive; a roadway system parallel to TH 169 can be attained with the following local roadway connections:

##### Hanlon Drive Extension to County Road 64

This local street connection is needed to provide connectivity between Laredo Street and County Road 64 without relying on TH 169. This connection becomes essential to the community's accessibility to the future CSAH 6/CR 64 interchange and ability to cross TH 169 once the interchange is constructed and the Laredo Street signalized intersection is closed. Since the Hanlon Drive extension primarily improves accessibility to undeveloped commercial/industrial properties, the roadway will be constructed by development as it occurs. As of July 2003, the City was actively working with developers on the design of a portion of this roadway.

##### A South Frontage Road between CSAH 3 (Meridian Street) and South Street

This local street connection is needed to provide connectivity between CSAH 3 and South Street without relying on TH 169. This connectivity will be needed to maintain accessibility for existing highway-oriented businesses at South Street and TH 169 as well as to improve the community's accessibility to the future TH 25/CSAH 3 interchange. Since this roadway extension primarily promotes the redevelopment of the Emma Krumbree's property, the roadway will be constructed by the development as it occurs. As of July 2003, the City has acquired the right-of-way for this roadway through plat dedication.

#### **4.4.3 Future Local Roadways Parallel to TH 169 and Access Consolidation**

The implementation of the proposed local roadway system in developing areas within the TH 169 corridor will be achieved through the City's development practices as development occurs. The local agencies recognize the local connectivity to the proposed TH 169 interchange locations provides more flexibility and opportunities in land uses within the study corridor. As the local roadway system develops north of CSAH 6/CR 64 and south of TH 25/CSAH 3, existing local street and private property access to TH 169 will be removed and access will be reestablished by the local roadway system. Table 5 summarizes the process of access consolidation throughout the study area.

Table 5  
Access Consolidation

	Existing Intersection	Long-term Plan for TH 169 Intersection	Access Change Occurs Concurrent with:	Future TH 169 Access
1	CR 66	Overpass/interchange	Requires further study	Requires further study
2	Sielaff Drive	close	Development of Local Parallel Route	Future Local Street Access
3	Field Access/Old Highway 169 Blvd	close	Development of Local Parallel Route	Future Local Street Access
4	22071/22066 Johnson Memorial Dr	close	Development of Local Parallel Route	Future Local Street Access
5	22381 Johnson Memorial Dr	close	Development of Local Parallel Route	Future Local Street Access
6	CSAH 6/CR 64	interchange	CSAH 6/CR 64 Interchange	CSAH 6/CR 64 Interchange
7	Maple Street	close	CSAH 6/CR 64 Interchange	CSAH 6/CR 64 Interchange
8	CSAH 5/7 (Laredo Street)	close	CSAH 6/CR 64 Interchange	CSAH 6/CR 64 Interchange
9	Ash Street	close	CSAH 6/CR 64 Interchange	CSAH 6/CR 64 Interchange
10	Walnut Street	close	TH 169 North Frontage Road	TH 25/CSAH 3 Interchange
11	South Street	close	TH 169 North Frontage Road And TH 169 South Frontage Road	TH 25/CSAH 3 Interchange
12	TH 25/CSAH 3 (Meridian Street)	interchange	TH 25/CSAH 3 Interchange	TH 25/CSAH 3 Interchange
13	Field Access	close	Development of Local Parallel Route	TH 25/CSAH 3 Interchange
14	Field Access	close	Development of Local Parallel Route	TH 25/CSAH 3 Interchange
15	Field Access	close	Development of Local Parallel Route	TH 25/CSAH 3 Interchange
16	Belle Plaine Trail	close	Development of Local Parallel Route	TH 25/CSAH 3 Interchange
17	Private Resident	close	Development of Local Parallel Route	TH 25/CSAH 3 Interchange
18	Stoppelmann Blvd	close	Development of Local Parallel Route	TH 25/CSAH 3 Interchange
19	CR 53	close/right in – right out	Requires further study	Requires further study

There may be certain locations where a temporary or interim access solution is required to address a safety or a development-timing situation before the ultimate access improvement

can be made. In these situations, the temporary access solution must be coordinated and approved by Mn/DOT.

#### **4.5 Future Traffic Volume Forecasts and Analysis**

Traffic forecasts for the proposed roadway network were prepared for the year 2020. Traffic projections were based on the land use forecast information presented in Section 2.2 of this report. A *Traffic Forecast Methodology* technical memorandum highlights anticipated changes in existing travel patterns as a result of the TH 169 access changes, land development and trip generation projections by traffic analysis zones, and trip distribution assumptions. A copy of the technical memorandum is provided in Appendix I. The forecasted 2020 traffic volumes on the proposed roadway network in Belle Plaine are illustrated in Figure 8.

The proposed roadway network has sufficient capacity to accommodate future traffic volumes to 2020 and beyond. The primary area of future capacity concern in Belle Plaine is at the proposed interchange locations. At each of these locations, the minor arterial roadways that cross TH 169 are planned for a 4-lane divided roadway, which is typically capable of carrying up to 40,000 vehicles per day. The 2020 traffic forecasts for these roadways are well below 40,000 vpd.



## 5. Local Implementation Recommendations

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### 5.1 Introduction

This section of the plan establishes the short and long term implementation strategy for the corridor transportation system identified in this plan. Specifically, it identifies the tasks that must be accomplished by Belle Plaine, Scott County, Mn/DOT and/or the private sector to implement the area policies of this plan and provides guidance for the eventual construction of the interchange access and roadway improvements associated with TH 169.

The implementation strategy consists of several components as follows:

- Belle Plaine Area Corridor Vision Plan approval by the PAC and the Belle Plaine City Council and review by Scott County and the townships, and the Metropolitan Council.
- Adoption of Official Map and application of other land preservation techniques for the roadway improvements as depicted on the Corridor Vision map.
- Adoption and/or application of standards within City and County official controls to guide the development of area supporting roadway network, the spacing and design of accesses, and the overall external and internal design of development/redevelopment.
- Implementation of a staging plan that includes the identification of the roadway improvement priorities and framework for the timing, cost participation and intergovernmental cooperation.

It is expected that the implementation strategy will occur over the long term and be updated on an annual basis.

### 5.2 Corridor Vision Plan Adoption

The City of Belle Plaine adopted a moratorium in 2002 to control the amount of commercial and residential development within one-half mile of TH 169 from Laredo Street to the southwest of the CSAH 3/TH 25 intersection until the completion of this plan. The purpose of the moratorium was to delay development decisions until the planned TH 25/CSAH 3 interchange concept was selected by the PAC members and to review the need to change planned in certain locations within the corridor.

The adoption of the Corridor Vision Plan serves as the official document to guide future transportation and land use decisions within the corridor. The functional classification system indicates the roadway network needed to support these land uses and the *State Highway 169 Corridor Management Plan* vision. Additionally, this plan will serve as the basis for the preparation of a new Transportation Plan that was recently been initiated by the City of Belle Plaine.

It is recognized that coordinated growth and provision of transportation improvements and other public services will result in long-term benefit to the City, County and the townships. The land use portion of this plan indicates the properties that may be served by municipal services at some point in the future and those planned to remain in agricultural use.

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### 5.2.1 Future Land Use, Transit and Pedestrian/Bicycle Facilities

The Corridor Vision Plan (Figure 4) depicts the location of planned land uses within the corridor and the supporting roadway network needed for a reasonable level of development. The City has suggested several land use changes in the vicinity of the two planned interchanges. The actual implementation of the land use portion of the plan will depend upon market conditions and the level of public facilities that can be provided over time to support development and manage growth.

#### A. Land Use Policies

1. Provide planned mixed use/commercial “nodes” and activity areas at the planned interchanges within the corridor in a manner that supports the staging of improvements for the corridor roadway system.
2. Maintain a mix of land uses near the planned CSAH 6/CR 64 interchange to allow for business development opportunities that need regional access provided by TH 169.
3. Encourage highway-oriented business development to locate in planned mixed use/commercial “nodes” near interchange areas where access may be provided by internal roadway systems rather than adjacent minor arterials.
4. Support the *1999 Comprehensive Plan* goal to retain the retail and service vitality of the historic downtown area by retaining safe regional access to the downtown area and the development of other commercial and industrial lands that do not detract from the central business district.
5. At the TH 25/CSAH 3 intersection, stage new development so that future traffic volumes can be accommodated within interim and ultimate improvements.
6. Discourage urban levels of land uses outside of the Belle Plaine city limits and promote orderly annexation procedures for new development provided that sufficient public facilities can be provided to adequately serve new development.
7. Encourage new business development to locate where logical extensions of the frontage/backage roads can be made.
8. Promote land use, transportation, pedestrian/bicycle trail and park, and public facility connections between the north and south sides of TH 169 in the Belle Plaine area.
9. Provide buffers, such as natural vegetation or new landscaping, between existing and planned residential land uses, and TH 169 related improvements.
10. Utilize the *TH 169 Corridor Belle Plaine Area Access Plan* as the official planning document within area boundaries.

#### B. Transit and Commuter Travel

TH 169 is planned to continue to serve as a major route for commuters between the Twin Cities and the Belle Plaine area. Metro-area transit is not presently available to the Belle Plaine, although as the region continues to grow, there may be some demand for transit in the future. However, it is expected that the commuter traffic will continue to grow due to the planned household and employment growth in Belle Plaine and its growing ties to the metropolitan area. As such, providing a park and pool lots in proximity to the planned interchanges would serve future commuter needs.

The undeveloped properties that are designated for industrial/mixed land uses along the south side of the planned CSAH 6/CR 64 interchange provide opportunities for park and pool lots for commuters to the Twin Cities. Additionally, opportunities exist on the north and south sides of the planned TH 25/CR 3 interchange for commuter lots. These lots could be provided individually or integrated into shared parking areas with private development depending upon use characteristics.

The City will need to continue to work with Mn/DOT, Scott County and developers to identify and preserve specific locations within these areas as the timeframe for planned interchange construction becomes more imminent. However, priority should be given to planning for commuter travel facilities in the area of the planned CSAH 6/CR 64 interchange due to the anticipated timing for construction in FY 2010, the planned employment oriented land uses and proximity to residential neighborhoods.

### C. Pedestrian/Bicyclist Facilities

The area plan provides for the inclusion of bicycle and pedestrian facilities. The functional classification standards for each of the major roadways within the corridor includes sufficient right-of-way dimensions to accommodate a sidewalk or path, as appropriate, when constructed to tie into the City's overall pedestrian/bicycle system. The preliminary plans for the CSAH 6/CR 64 interchange includes a pedestrian/bicycle sidewalk along the north side of the bridge and roadways and will connect to the exiting and planned City trail system.

A major concern of the community was to preserve the integrity of the existing trail that is situated near Veterans Park with an underpass under TH 169. This trail connection will be preserved and connected to a planned pedestrian/bicycle sidewalk extending along the planned CSAH 3/TH 25 bridge associated with the south interchange.

## 5.3 Official Map and Land Preservation

Land preservation of future right-of-way for the local supporting roadway system and the planned TH 25/CR 3 interchange is an essential task for plan implementation. Three approaches are recommended to reserve right-of-way for future roadway improvements. The first includes the adoption of an Official map to allow for reservation of certain lands needed for the major roadway facilities. Next, land dedication and/or preservation allows for the transfer of property to the public for designated purposes as part of the local development approval process. Last, the City and/or County may need to purchase property identified for roadway right-of-way and fund needed improvements.

### 5.3.1 Official Map

The adoption of an "official map" allows local governments to preserve areas that are needed for future right-of-way for the transportation network before private investments are made on property. Local governments are required to identify land that is needed for future roadway purposes by depicting the future acquisition area on an official map. The designation of future right-of-way on an official map does not allow the local government to obtain property without compensation, however, it does provide the following benefits to the community and landowners:

- It allows private landowners to plan development around future right-of-way lines;
- If a building is constructed without a building permit or in violation of permit

conditions within the identified right-of-way after adoption of the official map, land within the future right-of-way generally may be purchased without compensating the property owner for such building or improvement;

- It offers the local government purchasing rights to the land, provided there is a willing seller. If a land use or zoning permit has been applied for development within the identified right-of-way and is denied, it may be appealed to the local Board of Adjustment. The local Board may authorize the permit if certain findings are made. If authorized, the City or County has six months to institute proceedings to acquire the property, provided the owner of the property is willing to sell the property; and
- It is required if RALF funds are to be utilized. Administered by the Metropolitan Council, this fund allows for the purchase of right-of-way by a local governmental unit in advance of development for State Trunk Highway projects. An official map must be adopted and an environmental assessment worksheet (EAW) completed for the project before these funds may be utilized.

The City or County must follow the process listed below to adopt an official map:

1. Adopt a major thoroughfare plan and a community facilities plan.
2. Develop an official map by preparing, at a minimum, a centerline survey and future acquisition lines.
3. Hold a public hearing to adopt the map by ordinance.
4. File the map at the County Recorder's office.

The official mapping TH 169 Belle Plaine corridor is depicted in Appendix J and includes the planned TH 25/CSAH 3 interchange and associated ramps.

### **5.3.2 Land Dedication and Preservation**

Another preservation tool is the acquisition of right-of-way to be utilized for public purposes during development approval process. The City and County currently employ land dedication requirements for new roadways based upon guidelines established in their respective transportation chapters of the Comprehensive Plans. It is anticipated that the City and County will obtain the majority of right-of-way for new roadways as part of the development review process. However, there are certain existing roadways where future traffic volumes may require the acquisition of additional right-of-way to allow for increased roadway width, and new or expanded intersections.

Currently, the City and County zoning and subdivision ordinances require the dedication of right-of-way based upon the design and function of certain roadways. It is important that the City and County use foresight in determining the appropriate right-of-way requirements during the development approval process because of limited opportunities to obtain additional right-of-way at little or no cost after development occurs. Consideration should be given to:

- the ultimate roadway width,
- number of lanes,
- potential for turning lanes, and
- and design of pedestrian/bicycle sidewalks or trails along the roadways.

If located within the Orderly Annexation Area, right-of-way needs are likely to be greater due to the intensity of land development, higher traffic volumes, and potential need for additional levels of improvements such as left and right turning lanes at intersections. Revised minimum right-of-way guidelines have been prepared for the City of Belle Plaine based upon the future function and traffic volumes of the planned corridor transportation system and are shown in Appendix K.

There are other land preservation techniques that may be utilized to preserve future right-of-way as part of the land development process. First, some cities have negotiated a “transfer of development rights” with property owners for land needed for future right-of-way. The density or intensity of land use is transferred to adjacent or nearby property, assuming a reasonable level of future traffic levels. Next, some cities have allowed an interim use on future right of way with conditions that the use be removed when the right-of-way is purchased or needed.

### **5.3.3 Land Purchase**

Not all of the land needed for the future roadway system right-of-way can be dedicated as part of the development approval process. Therefore, local or regional funding may be required for right-of-way purchase for the interchanges and the supporting roadway system. Consideration of the timing of the roadway improvement is needed because the programming of funding for right-of-way acquisition may be lengthy depending upon the funding source.

It is expected that the planning for funding for the right-of-way acquisition and construction for the interchanges and the portion of the supporting roadway system that is not dedicated by the private sector will be a cooperative effort of the City, County and Mn/DOT. However, the level of participation by each governmental entity for planning and funding will vary depending upon the roadway function that the right of way is needed for and the timing of the improvement. It is important to recognize that Mn/DOT has not programmed funds for any of the identified interchange improvements except for the planned CSAH 6/CR 64 interchange right-of-way.

The City, County and Mn/DOT will need to develop an understanding of responsibilities for right of way purchase and construction planning that may need adjustment over time as conditions change within the area and to leverage potential funding sources. The following describes the available current funding sources for right-of-way acquisition:

- RALF Program: Described earlier.
- Capital Improvement Programming (CIP): The City and the County have a process to identify and fund public facility improvements within their respective Capital Improvement Plans. Appendix F of the *Scott County Transportation Plan 2000 - 2020* documents the cost participation policy of the County for roadway projects and the procedure to identify and rank priorities for County roadway improvements. The improvements required to CSAH 6 to be completed by the County in conjunction with the CSAH 6/CR 64 interchange are identified in the County Capital Improvement Plan.

The City and County will need to identify the source of funding as part of the CIP planning process. The City or County may want to utilize traditional or specialized special assessment districts, such as that utilized in the City of Woodbury. Additionally, specialized private participation funding should be explored for appropriate roadway improvement projects as part of the CIP process.

- Metro District Access Management Funds: The Mn/DOT Metro District has set aside

funding to be used on various access management projects through each fiscal year. The purpose of the funding is for access consolidation and removal projects on the State Trunk Highway system. The money can be used for right-of-way acquisition and construction of local roadway improvements provided they remove and/or consolidate access on the trunk highway.

### **5.3.4 Other Techniques**

The City, in cooperation with the County and Mn/DOT, as required, will need to review and adopt specific funding strategies for right-of-way and/or construction of respective roadway improvements shown in this plan that cannot be obtained from conventional sources. There are several examples of public/private partnerships and initiatives for private sector funding of public transportation improvements that local municipalities have utilized for roadway projects needed to support development. These techniques include:

- Developer contributions as part of the land use/zoning amendment process,
- Special assessments for improvements, and
- Specialized zoning and/or funding districts (such as utilized in the Cities of Rochester and Minnetonka).

It is recommended that the City explore the techniques that will allow for flexible, yet equitable assignment of roadway funding responsibility as part of the local land development procedures. If funding sources cannot be identified, the City and/or County may have to withhold review of land use amendments to the Comprehensive Plan, detachment/annexation requests and zoning map changes until adequate funding assurances can be made by the responsible party (ies).

## **5.4 Access Management**

### **5.4.1 Access Allowance and Spacing**

#### *State*

Mn/DOT's adopted access management provides recommendations for the spacing and allowance of public street intersections and private accesses along state highways. The recommendations are based on the goal of maintaining an appropriate balance between providing safe access within a community context and the mobility function of state highways in achieving statewide economic goals.

The two roadways within the area that are subject to the state access management guidelines are TH 169 and TH 25. TH 169 is designated a High Priority Interregional Corridor – Freeway from I-494 to TH 25 in Belle Plaine. South of TH 25, the highway is designated as a High Priority Interregional Corridor – Rural to the south study area limits. TH 25 is designated as a Minor Arterial – Urban Core from TH 169 to the Minnesota River crossing.

Appendix L contains a summary of the Mn/DOT's system to define the different types of intersecting access with the highway system. Table 6 lists the Mn/DOT spacing guidelines for public and private access for TH 169 and TH 25 in the Belle Plaine area.

Table 6  
Belle Plaine Area State Highway Access Spacing Guidelines

Highway Category			Access Guidelines			
Highway	Category	Area or Facility Type	Intersection Spacing		Minimum Signal Spacing	Private Access
			Primary full movement	Conditional secondary		
TH 169 – north of TH 25	1A-F	Full grade separation	Interchange access only		Not allowed	Not allowed
TH 169 – south of TH 25	1A	Rural	1 mile	½ mile	Interim* By deviation only	By deviation only
TH 25	5C	Urban core	300 – 660’ dependent on block length		¼ mile	Permitted, subject to conditions

\*If permitted on existing roadway segments, must have plan for eventual replacement by an interchange, closure and connection to the supporting road network.

North of TH 25, no new public or private accesses to TH 169 will be allowed according to the State access spacing guidelines. Within this area, there are numerous existing accesses along TH 169 that do not meet the spacing guidelines and are considered non-conformities. Over time, direct access to TH 169 from public roadways and private drives will be removed through the provision of alternative access that meet the spacing guidelines established for TH 169.

Due to the potential for high volumes, crash rates and crash severity’s at the CSAH 3/TH 25 intersection, the City may need to implement, in close cooperation with Mn/DOT and Scott County, interim safety measures to control access onto TH 169 until the new interchange is constructed. Examples of interim measures include reconstruction to correct “skewed” approaches, the conversion of a full-movement at-grade intersection to a right-in/right-out access, or installation of a temporary signal light. If an interim measure were instituted along TH 169, it would be considered temporary until construction of the long term improvements are completed to alleviate operational and safety concerns. Installation of a temporary signal system on TH 169 will only be considered if right-of-way is secured for a future interchange and may require that funding be identified for the interchange construction, to ensure a plan is in place for the removal of the temporary signal system.

South of TH 25, new private and public access to TH 169 will be discouraged with access provided via existing or new supporting roadways. In certain circumstances, private accesses may be allowed to TH 169, south of TH 25 where alternative access to the highway is unattainable. In this circumstance, only one access per parcel is desirable and it should be located where adequate sight distance is available.

*Scott County*

The County adopted spacing guidelines based upon the forecasted traffic volumes and functional classification of the roadways. The County access spacing guidelines are included in the *Scott County Transportation Plan 2000-2020 – May 2001*.

*City of Belle Plaine*

The City adopted spacing standards in 1999 within the transportation chapter of the Comprehensive Plan and are included within the land use controls. Certain City spacing requirements need adjustment because of the change in vision for TH 169 in the subarea resulting in the new corridor functional roadway classification system.

Table 7 provides reasonable spacing standards for streets and driveways associated with new developments within the urbanizing area and the rural areas surrounding the City.

Table 7  
Recommended Access Spacing for City Roadways

Public Intersections	Standards
Along Minor Collector:	300' to 660' (1/8 mile)
Along Major Collector:	1/8 mile (660') to 1/4 mile (1,320')

**5.4.2 Access Management Policies**

A. Access Management

1. The following access policies shall apply to properties that contain frontage on TH 169:
  - a. Properties planned for urban development within the Orderly Annexation Area boundary:
 

Direct access to/from TH 169 from new and re-development will be prohibited. Access will be obtained via the frontage/ backage road system as depicted on the Corridor Vision map and in accordance with access spacing requirements.
  - b. Properties planned for rural uses outside the Orderly Annexation Area boundary:
 

Direct access to/from TH 169 for new or expanded uses will be discouraged. All local access will be provided from the frontage/backage road system as depicted on the Corridor Vision map and in accordance with access spacing requirements. In the event that alternative and reasonable access is not available and attainable before TH 169 transitions to a freeway, temporary access may be provided in accordance with Mn/DOT requirements.
2. Utilize the access spacing standards to guide the location and allowance of access for public roadways and private access within the corridor area.
3. Require urban levels of development to access the lowest functional class roadway available and discourage access to the collector/minor arterial roadway system unless no other available and attainable alternative exists.
4. Plan and require reasonable alternative access to the lowest functional class roadway for existing businesses when redevelopment occurs, land use/zoning changes are requested or as frontage road reconstruction occurs.
5. Develop and adopt an access management plan as part of the preliminary engineering design of the planned TH 25/CSAH 3 interchange that defines the location of access points and staging of interchange improvements based upon the concept included in this plan, as amended as necessary.

6. Require the construction of turnarounds to prevent “backing” onto the roadway for driveways that must access collector or minor arterial roadways in urban and rural areas of the area.
7. Encourage and facilitate the coordination of development and redevelopment plans between adjacent property owners and businesses to accommodate shared access points and parking, as appropriate.

### **5.4.3 Other Planning and Design Techniques**

The City and the County may want to utilize certain planning and design techniques that provide additional opportunities to manage access location and design associated with future development. The following planning and design techniques are recommended for larger developments located within the Orderly Annexation Area boundary where access and land use coordination is imperative:

#### *Local Road/Private Drive Design Standards*

There are numerous access management principles that can be employed during the subdivision and development review process that will benefit the existing and planned roadway system within the area. Recommended land use control policies and changes to the City zoning and subdivision ordinances are noted in Appendix M.

#### *Encourage Mixed Use Developments*

There are several locations along the corridor where the Corridor Vision Plan map indicates mixed residential or mixed use development. As development becomes more imminent within these areas, the City should continue to encourage the private sector to design mixed use because of the potential to:

- plan for shared driveways and access,
- reduce demand on transportation facilities, and
- allow for park and pool commuter lots.

#### *Encourage or Require Master Planning*

It is anticipated that development will be phased on the larger parcels within the City and Orderly Annexation Area boundary over a number of years. Although the development of a Master Plan for the entire property provides many benefits for the City, it is particularly useful for managing transportation-related facilities. These benefits include the ability to:

- review specific development layout (including subdivision ghost platting) and intensity for large land areas,
- plan for local streets that complements supporting roadway system,
- plan public and private access points to local and supporting roadway system,
- plan for shared access and parking, and cross-access and parking easements, and
- determine overall transportation and other infrastructure needs.

#### *Traffic Impact Analyses*

The City and County may require a traffic analysis be prepared for larger and/or more intense developments to assess potential transportation-related issues on local, County and State roads. The results of the analysis will assist the City in determining the level and timing of future roadway or intersection needs, dependent upon the desired phasing of development. Further, a traffic analysis can be used to determine the responsibilities for funding necessary

improvements to road systems to accommodate the desired intensity of development.

## **5.5 Intergovernmental Cooperation and Management Plan**

### **5.5.1 Intergovernmental Cooperation**

A key provision of the *State Highway 169 Corridor Management Plan* is to continue to participate with the study partners to seek opportunities and shared strategies to implement plan recommendations. Over time, it is likely that adjustments to this plan will be necessary to reflect new information, a change in priorities, amendments to the *State Highway 169 Corridor Management Plan*, and changed conditions in the Belle Plaine area.

It is important that a process be established to review the plan on a regular basis to determine if changes need to be incorporated into the document. Mn/DOT has made a commitment to maintain the TH 169 Joint Policy and Technical Advisory Committee on an ongoing basis. It is recommended that the Belle Plaine PAC meet as needed to review this plan to determine if there is a need for future amendments or changes to the document.

### **5.5.2 Orderly Annexation and Premature Subdivisions**

The land uses and policies of this plan encourage residential and business growth to occur within an Orderly Annexation Area close to the Belle Plaine municipal boundaries where public sewer and water services can be extended. Additionally, roadway improvements are anticipated within this area and the developed portion of Belle Plaine to allow for the eventual implementation of this plan and the *State Highway 169 Corridor Management Plan*.

It is recommended that the City and County designate the area within the Orderly Annexation Area in their respective Comprehensive Plans as an area where detachment/annexation agreements will be considered with provisions that require the dedication of necessary right-of-way for planned roadways and other public improvements. These actions require thoughtful coordination between the City, affected townships and the County to facilitate ongoing commitment and equal treatment among the parties.

The orderly annexation provisions can be coordinated with the portion of the City of Belle Plaine Subdivision Ordinance that establishes the conditions for premature subdivisions. A provision should be added to this section of the Ordinance recognizing this plan and the need for the dedication/construction of roadways and improvements to comply with the plan.

### **5.5.3 Management Program**

A management program noted in Table 8 outlines specific sequential actions will allow for the most efficient implementation of the Belle Plaine Area Plan. The management program allows governmental agencies to incorporate actions and improvements into their respective processes to identify the timing, funding sources, and jurisdictional responsibilities for the actions and/or improvements. It is important that the City, County and Mn/DOT coordinate the programming of the actions and improvements, especially as each becomes more imminent.

Table 8  
Management Tools and Actions

Tool/Action	Timing	Entity Primarily Responsible	Comments
Adoption of Area Plan as Comprehensive Plan Amendment	Short term	City with acceptance by County/ MnDOT and review by Metropolitan Council	<ul style="list-style-type: none"> <li>• Needed for Official Map</li> <li>• Needed before roadway improvements can be included in funding programs or plans</li> </ul>
Adoption of Official Map	Short term	City	<ul style="list-style-type: none"> <li>• Required to identify ROW reservations</li> <li>• Survey needed</li> <li>• Needed to obtain RALF funds</li> </ul>
City Ordinance Amendments <ul style="list-style-type: none"> <li>• Compliance with area plan</li> <li>• Access spacing requirements</li> <li>• Right-of-way dedication</li> <li>• Adequacy of facilities provision for premature subdivision</li> </ul>	Short term	City and County	<ul style="list-style-type: none"> <li>• Expanded access management provisions</li> <li>• Staged development requirements for municipal services and roadways</li> <li>• ROW dedication</li> <li>• Allows for staging of development with dedication/construction of roadways in developing area</li> </ul>
Development of Funding Strategy for Roadway System for ROW and Improvements <ul style="list-style-type: none"> <li>• Frontage Roads</li> <li>• TH 25/CSAH 3 interchange</li> <li>• Local roadway system</li> </ul>	Dependent upon section	Area Plan partners	<ul style="list-style-type: none"> <li>• Cooperation by City, County and Mn/DOT</li> <li>• Revisions to City and County CIP's</li> <li>• Private/public partnership strategy</li> </ul>
City Transportation Plan	Short term	City with review by County, MnDOT and Metropolitan Council	<ul style="list-style-type: none"> <li>• Adopt functional classification system and roadway standards</li> <li>• Reflect area transportation plan</li> </ul>