Southwest Chaska

GROWTH & DEVELOPMENT PLAN

DEVELOPMENT PLAN

JANUARY 2013

Hoisington Koegler Group Inc. Design Workshop Bolton & Menk Inc.

1. PROJECT BACKGROUND 1

2. CONTEXT ANALYSIS 9

7. Implementation 65

8. Appendix

THIS PAGE LEFT INTENTIONALLY BLANK

Chapter 1
Project Background

Plan Background

Located immediately west of historic downtown Chaska, the SW Chaska Growth Area encompasses approximately 1,800 acres (2.8 square miles) of land within the City of Chaska's boundaries that is predominately used for agricultural purposes today. This former Chaska Township land was annexed into the City in 2005. Additionally, the growth area includes approximately 200 acres of land, currently part of Dahlgren Township, that is wedged between the City's current western boundary and new Jonathan Carver Parkway/CSAH 11. The general boundaries of the project area are Creek Road and Chaska Blvd/CSAH 61 (east), Engler Blvd/CSAH 10 (north), Jonathan Carver Pkwy/CSAH 11 (west), and Chaska Blvd/CSAH 61 (south).

Beginning with the City's 2000 Comprehensive Plan Update, the City has adopted land use policies supporting annexation of the SW growth area for future urban development. Some of the major reasons identified for annexing this significant growth area were:

» *controlling development along future U.S. Hwy 212 and its interchanges,*

» *strengthening downtown Chaska as a vibrant trade center by increasing the potential customer base near downtown,*

» *creating and maintaining a greenbelt around the City,*

» *encouraging residential development in close proximity to the City's commercial and public facilities, and*

» *increasing the supply of potential residential land in order to lower prices of undeveloped land needed to build more affordable housing in the community.*

As a prime example of the City's tradition of well-planned, orderly growth, these reasons still hold true today in 2013.

New U.S. Hwy 212, just completed in 2008, bisects the growth study area's 2,000 acres and significantly changes the area's access to the regional freeway network and locational attributes within the Twin Cities metro. In addition to the existing freeway interchange at Engler Blvd (CSAH 10), the City is in the process of working with Mn DOT on a future CR 140 interchange. In 2011, the City was successful in gaining conditional approval of a proposed CR140 interchange which will significantly impact the area's growth and development patterns. In order to gain MnDOT approval of a formal Highway Interchange Request, the City is required to amend its Comprehensive Plan to reflect transportation and land use implications of this new interchange. The new Hwy 212 corridor benefits Chaska by reducing travel times between Chaska and the 494/694 freeway belt, providing significant developable land opportunities at current and future highway interchanges, and creating new entrances to the community and historic downtown Chaska.

Ths SW Chaska Growth & Development Plan follows on the heels of the City's of the Downtown Chaska Master Plan, which was adopted by the City in February 2012. Although the City has a long tradition of planning and revitalization efforts focused on its historic downtown, the City had never undertaken a master plan for the entire downtown area. Since one of the major benefits of annexation and future development in the SW growth area was to strengthen the historic downtown, the City strategically created the downtown master plan prior to progressing with the SW growth area plan.

Southwest Chaska Growth Area

Recent History - Timeline of Major Changes Impacting Southwest Chaska Growth Area

1970s: Chaska's suburbanization begins when metro growth reaches the City
1980s: Plans for future highway relocations -
U.S. Hwy 212 shift to north and MN Hwy 41 new river crossing
1990s: Planned annexation of Chaska Township
2001: West Chaska Creek Stormwater/Natural Resources Mgmt. Plan
2003: Smart Growth Twin Cities – Heights of Chaska Plan
2005: Chaska Township land annexed into City of Chaska
2006: U.S. Hwy 212 final design has just one access in SW Chaska
2006: Greenbelt "conservation development" option adopted
2007: Chaska Biotech Center concept plan created
2007: Heights of Chaska AUAR, CR 140 interchange need identified
2008: Developers' charrette for Heights of Chaska area
2008: New U.S. Hwy 212 opens, bisecting SW growth area
2009: Hwy 41 River Crossing EIS identifies preferred route thru SW
2010: 2030 Comprehensive Plan Update
2011: CR 140/Hwy 212 interchange, Mn DOT conditional approval
2012: Downtown Master Plan adopted

Need for the Plan

Over the past ten years or so, the City has developed a number of plans and development concepts for various aspects and areas within the SW growth area. Up to now, the SW growth area has essentially been planned as three primary areas:

- *east of Hwy 212 for residential neighborhoods,*
- *Engler Boulevard (CSAH 10) freeway interchange area for the Chaska Biotech Center, and*
- *west of Hwy 212 for rural residential as part of the Chaska Greenbelt.*

However, some of these plans have become outdated and there has never been a holistic plan that encompasses the entire growth area – east and west of new Highway 212 - and a broader mix of land uses. The City initially identified the need for a SW Chaska growth and development plan when the 2030 Comprehensive Plan was updated in 2010. The 2030 Comprehensive Plan contains a specific policy stating that the City should prepare an area-wide plan for the SW growth area that updates the 2003 Heights of Chaska plan and encompasses the entire growth area lying on both sides of the new Hwy 212 corridor. In early 2012, City Staff and the City Council developed a SW Growth Management Approach to identify growth management issues, desired outcomes, and guiding principles for future SW growth area planning. Following a comprehensive inventory and review of current plans, studies and concepts relating to the SW growth area, the following growth management issues, desired outcomes and guiding principles were approved by the City Council in February 2012.

SW Growth Management Issues:

- *Comprehensive Plan Amendment necessary for MnDOT's future formal approval of an additional Hwy 212 interchange at CR 140,*
- *2003 Heights of Chaska Concept Plan doesn't address new realities, such as Hwy 212 interchanges, changed real estate market, etc.*
- *Lack of an area-wide master plan addressing both sides of Hwy 212*
- *Need to find funding for CR 140/Hwy 212 interchange*
- *Location of Chaska Greenbelt adjacent to Hwy 212 limits development potential*
- *Chaska Greenbelt concept doesn't connect between community's western edge and river valley*
- *Need for a phasing strategy for development and public infrastructure improvements*

SW Growth Management Desired Outcomes:

- *Preserve and revitalize downtown Chaska as the community's central destination & gathering place*
- *Create memorable walkable neighborhoods near downtown*
- *Develop the Chaska Biotech Center to significantly grow community's jobs and tax base*
- *Connect Chaska Greenbelt around the community*
- *Preserve natural resource and open space corridors*
- *Optimize Hwy 212 corridor for community development and identity potential*
- *Strong connections to the rest of the community*
- *Accommodate community's projected 2030 population, households and jobs growth*
- *Sustainable development environmentally, fiscally and socially*

SW Growth Management Guiding Principles:

- *Establish Greenbelt and connected Green Corridors through the SW growth area*
- *Create walkable scale neighborhoods that have an identifiable mixed-use center, public spaces, edges, and a complete street network.*
- *Develop business center(s) along Hwy 212 that grow jobs and tax base while complementing downtown rather than competing with it.*
- *Design growth area to contribute to revitalizing downtown as the hub of community destinations and gathering places.*
- *Provide strong connections to the rest of the community, including streets, trails, open spaces and public facilities.*

Purpose of the Plan

This growth and development plan is intended to address the new realities of the SW growth area since 2003, which include:

- *State Bioscience Zone designation/Chaska Biotech Center concept,*
- *significant changes in the development market,*
- *regional roadway network enhancements, and*
- *evolving Chaska Greenbelt strategies.*

Ultimately, this plan is intended to provide an implementable and flexible roadmap for the entire SW growth area. Due to the inextricable link between the City's downtown revitalization plans and future growth in the adjacent SW growth area, it is critical that the SW Chaska growth & development plan complement and strengthen downtown Chaska as the heart of the community.

The purpose of this plan is to provide the City with a guide for future land use decision-making, public infrastructure investments, and review of proposed development projects in the southwest growth area. With the completion and opening of new Hwy 212 through this area in 2008, the SW Chaska Growth Area is primed to attract significant growth when the development market recovers from the recent economic recession. Due to the existence of many property owners in the growth area and the anticipated 30-year time horizon for full build-out of the area, this plan is intended to accommodate long-term incremental growth rather than a master planned development. To ensure a flexible, sustainable and implementable plan, it is also intended to be less detailed in its development concepts in favor of providing more usable guidance in the form of general development patterns, key concept elements, and design guidelines.

Existing Plans, Studies & Concepts

Since 2000, the City's proactive planning efforts have produced a number of plans, studies and concept relevant to the SW growth area, including a stormwater/natural resources management plan for the West Chaska Creek watershed, Heights of Chaska Development Concept Plan and AUAR (east of Hwy 212), MN Bioscience Zone designation and $1M Bioscience Infrastructure Grant, Chaska Biotech Center Concept Plan (west of Hwy 212), and Proposed CR 140/Hwy 212 Interchange Warrant Analysis. Since these plans and development concepts all provide a foundation for the SW Chaska Growth & Development Plan, brief overviews of each plan, study and concept follow are provided on the following pages.

Heights of Chaska Concept Plan (2003)

Smart Growth Twin Cities Opportunity Site

- *Regional project funded by Metropolitan Council in 2001, linked to future Highway 212 corridor*
- *1,000 acres east side of future Hwy 212 and west of historic downtown Chaska*
- *Three community design workshops with 60-70 people attending each workshop*
- *Concept Plan was completed in 2003*
- *CR 140 interchange was not anticipated*
- *Heights of Chaska plan was incorporated by reference into the City's Comprehensive Plan in 2006*

Heights of Chaska Illustrative Concept Plan

Heights of Chaska Concept Plan (2003)

Concept Plan Highlights

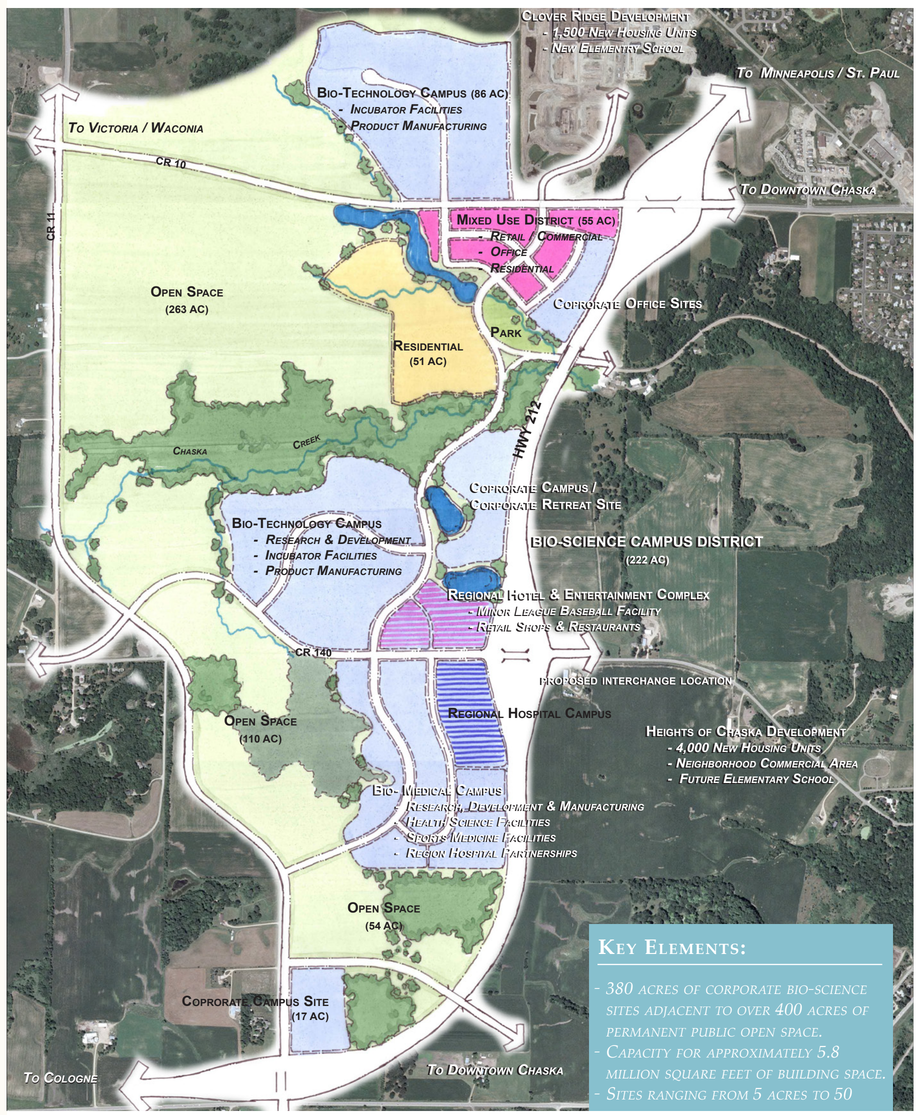
- *Two neighborhoods with small neighborhood retail centers - up to 3,600 households and 70,000 square feet of retail*
- *Mix of housing types*
- *Community facilities could include elementary school, playfields, daycare centers, churches, etc.*
- *Extensive open space network composed of "Chain of Lakes", green corridors, preserved remnant "Big Woods" and wooded bluffs*

Aerial View of Heights of Chaska Concept

Chaska Biotech Center Concept (2007)

City's Biotech Objectives

- Use "conservation design"
- Create 8,000 - 10,000 jobs
- Provide good physical connections to community
- Grow industrial/commercial tax base
- Take advantage of freeway access to create "world class" bioscience park
- Strengthen bioscience industry in SW Metro Area
- Partner with State
- Partner with research institution
- Attract major medical complex

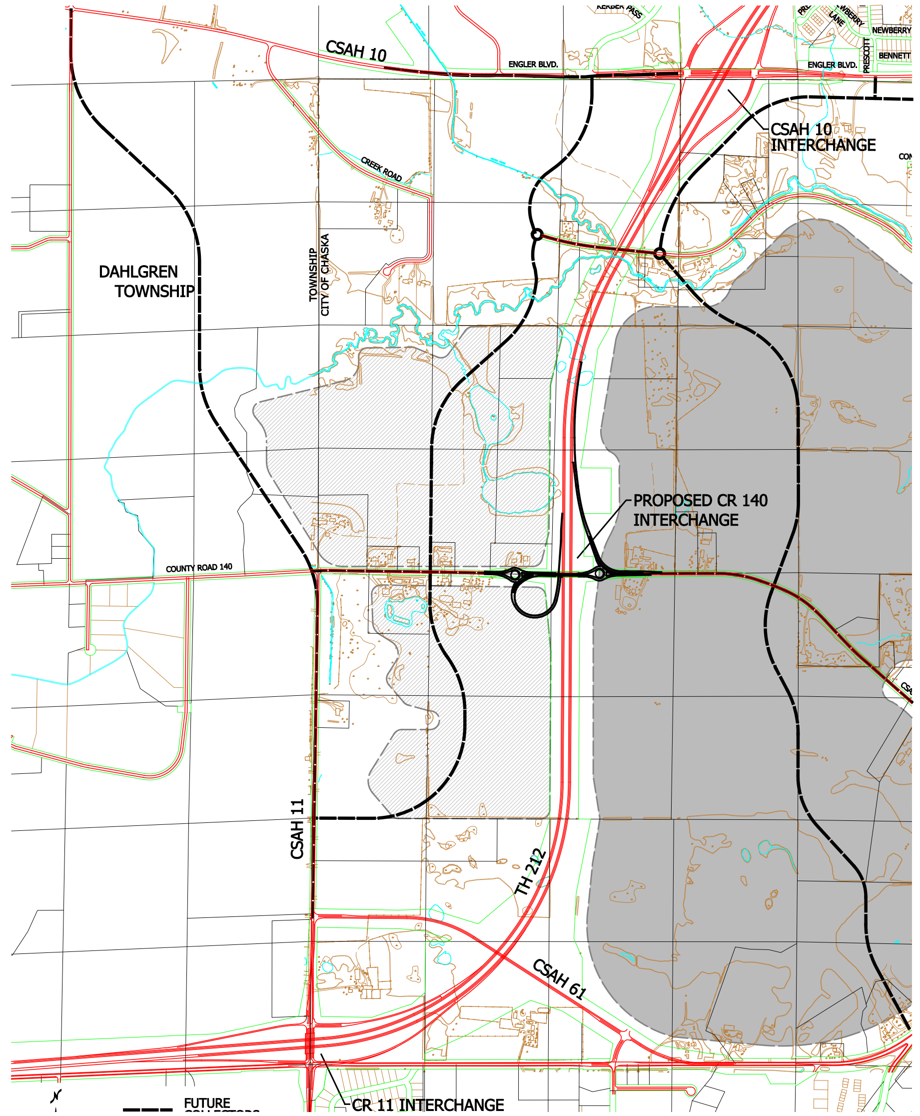


Chaska Biotech Center Concept

CR 140/Hwy 212 Interchange (2011)

Interchange Warrant Analysis

- Mn DOT gave conditional approval to the proposed partial interchange at CR 140/Hwy 212
- Mn DOT approval of a Formal Access Request for the CR 140 interchange will still be required
- CR 140 was recently reclassified from a Major Collector to an "A" Minor Arterial to support a future interchange with Hwy 212
- Partial interchange design provides Hwy 212 access to and from the east
- Estimated construction costs (2010) for partial interchange are $7-8M
- Expansion of CR 140 to a three-land bridge will require adding a separate pedestrian bridge over Hwy 212
- New Jonathan Carver Parkway (CR 11) constructed to provide a north-south roadway connection west of new Hwy 212 corridor, connecting from Hwy 5 to the north down to Hwy 212 to the south

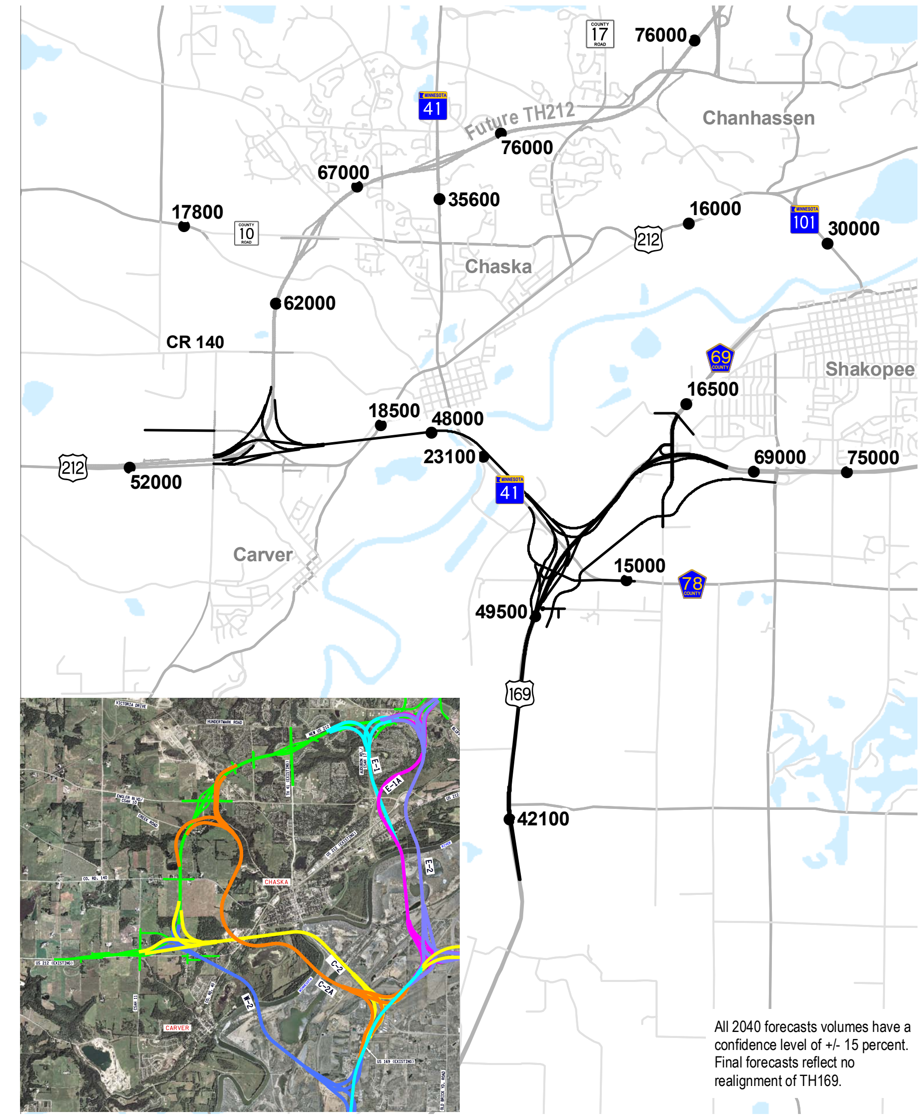


Proposed Future Roadway System

Future MN Hwy 41 River Crossing (2012)

Draft Environmental Impact Statement (EIS)

- A new river crossing is currently being studied by Mn DOT to connect Hwy 169 in Scott County to new Hwy 212 in Chaska in the vicinity of Hwy 41
- Three of the route alternatives would impact the southwest growth area: C-2, C-2A and W-2
- Mn DOT's preferred route is C-2, which would connect south of CR 140 interchange
- A final alignment has not been identified or programmed in Mn DOT's 2008-2030 Transportation System Plan



TH 41 Alternative C2 Daily Traffic Volumes (2040)

2030 MUSA Staging

Within Current MUSA

» *Chaska Biotech Center*

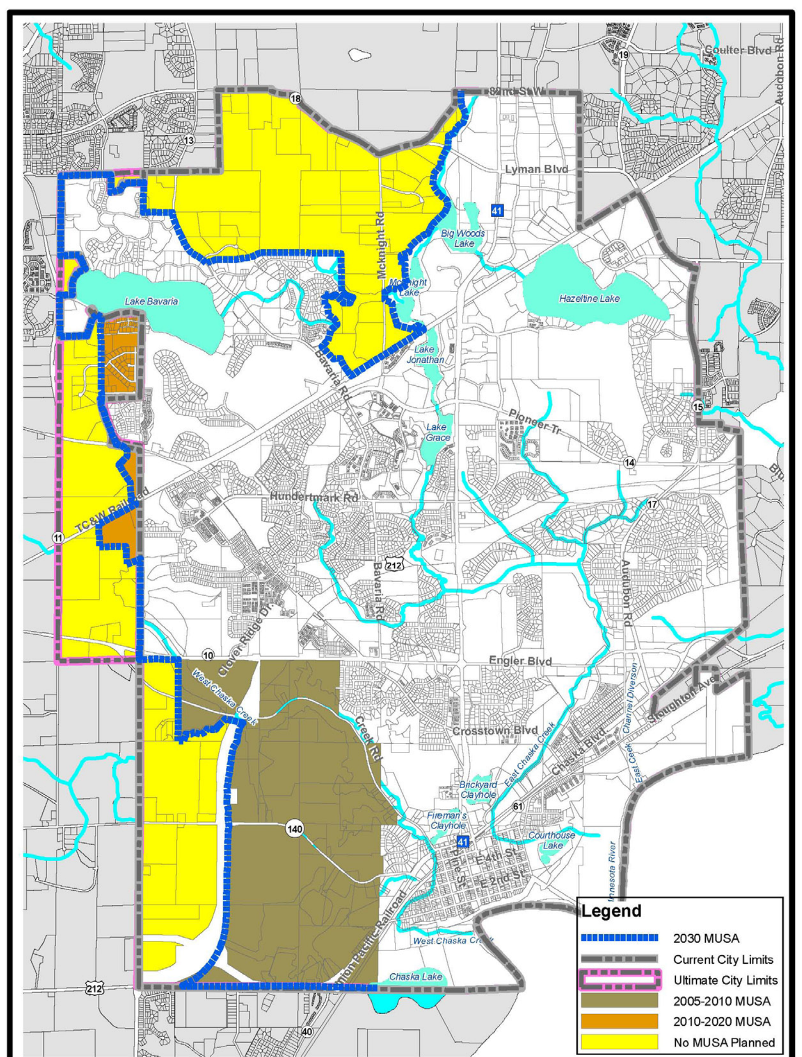
» *Heights of Chaska*

Not Planned for MUSA

» *West Chaska Greenbelt*

» *Dahlgren Township, Potential Annexation Area*

In the current 2030 Comprehensive Plan, most of the land west of new Hwy 212 is planned to remain outside the 2030 MUSA to serve as part of the Chaska Greenbelt along the western edge of the City. This land is currently guided for Rural Residential land uses that allow a maximum density of four (4) dwelling units per 40 acres.



2030 MUSA Staging

2030 Comprehensive Plan (2009 Update)

2030 Land Use Plan

Southwest Chaska Land Use Guidance

» *Neighborhood Mixed Use*

» *Business Park*

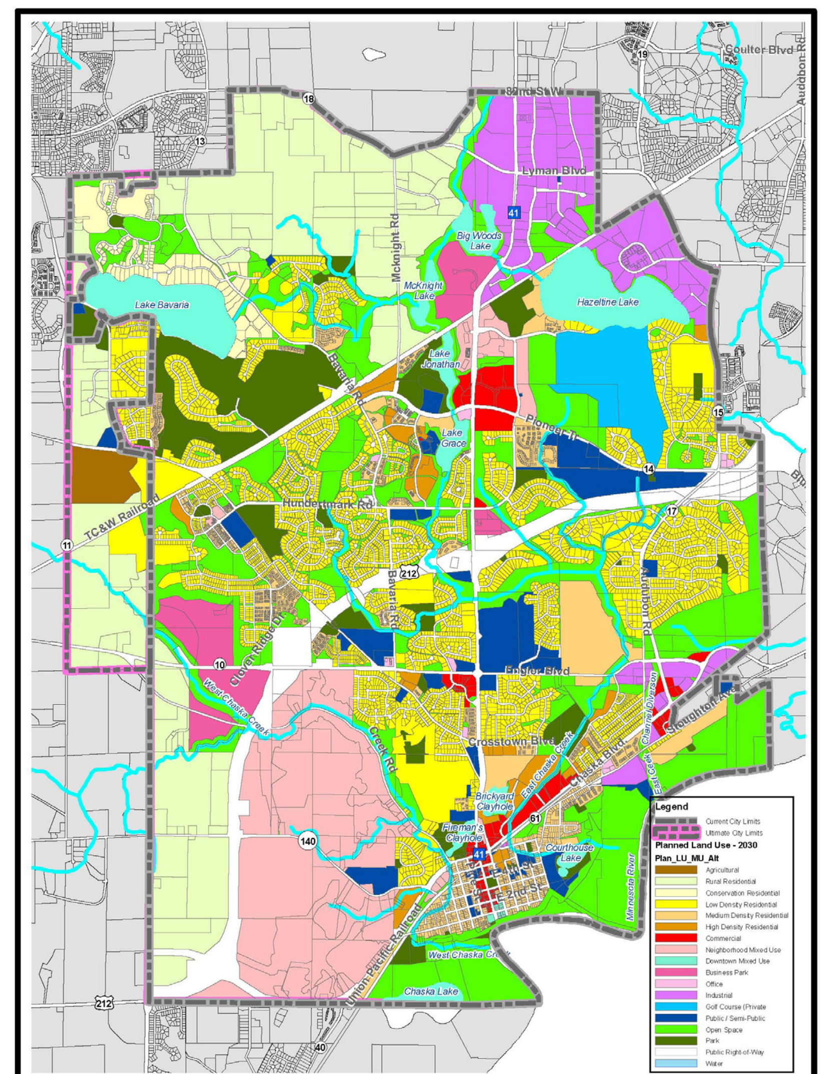
» *Rural Residential*

» *Open Space*

New Land Use Categories in 2009

» *Neighborhood Mixed Use*

» *Business Park*



2030 Land Use Plan

2030 Comprehensive Plan (2009 Update)

Chaska Greenbelt Concept

Concept's History

» *Began as a Freestanding Growth Center concept in early 1990s*

» *Continuation of U of MN Landscape Arboretum's open space*

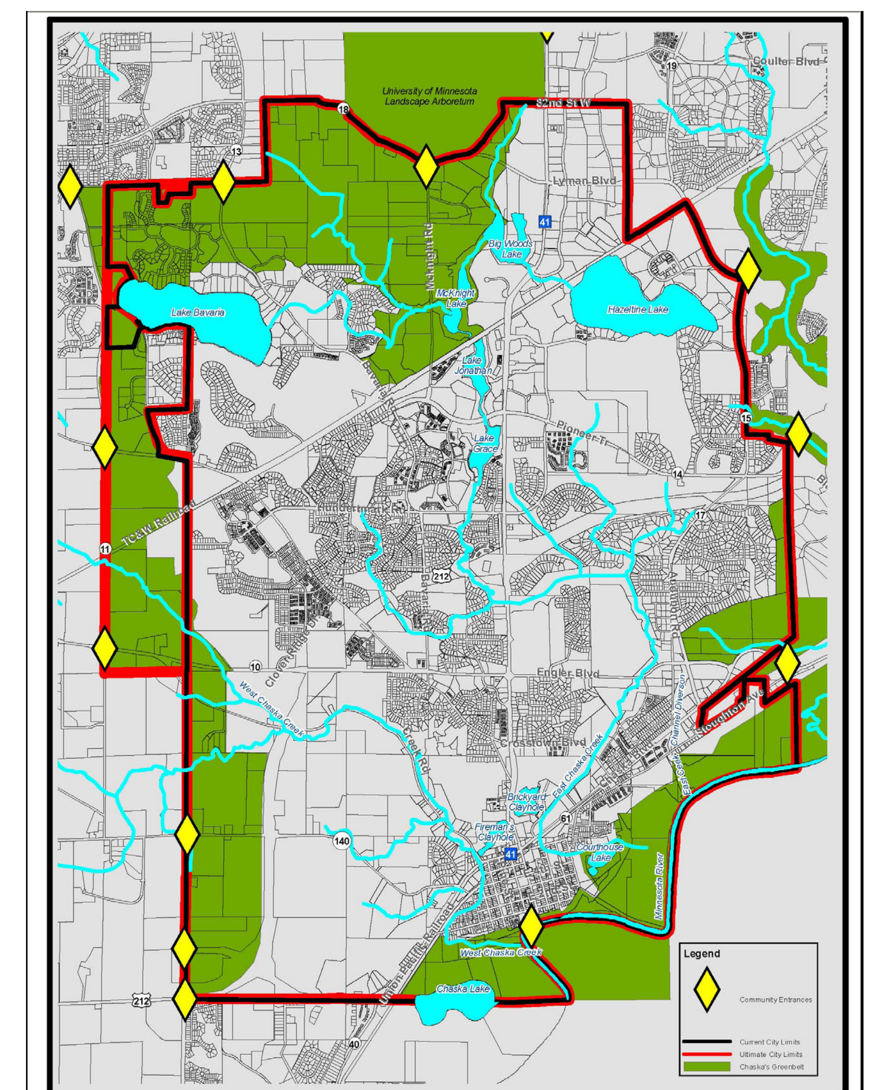
» *Originally envisioned as rural residential land, protection of Chaska's "rural character"*

Updated Concept (2006 Comp Plan Amendment)

» *Residential conservation or cluster development - 1/3 development with 2/3 open space*

» *Urban water/sewer services provided*

» *Envisioned as community green spaces and natural resource areas*



Chaska Greenbelt Concept

2030 Comprehensive Sewer Plan (2009)

- *Three major sewersheds or districts: Heights, Southwest and South*
- *Only existing sewer service is the Heights trunk line along the eastern portion of CR 140, serves Highlands neighborhood*
- *Future planned trunk sewer extensions and estimated costs (2008):*

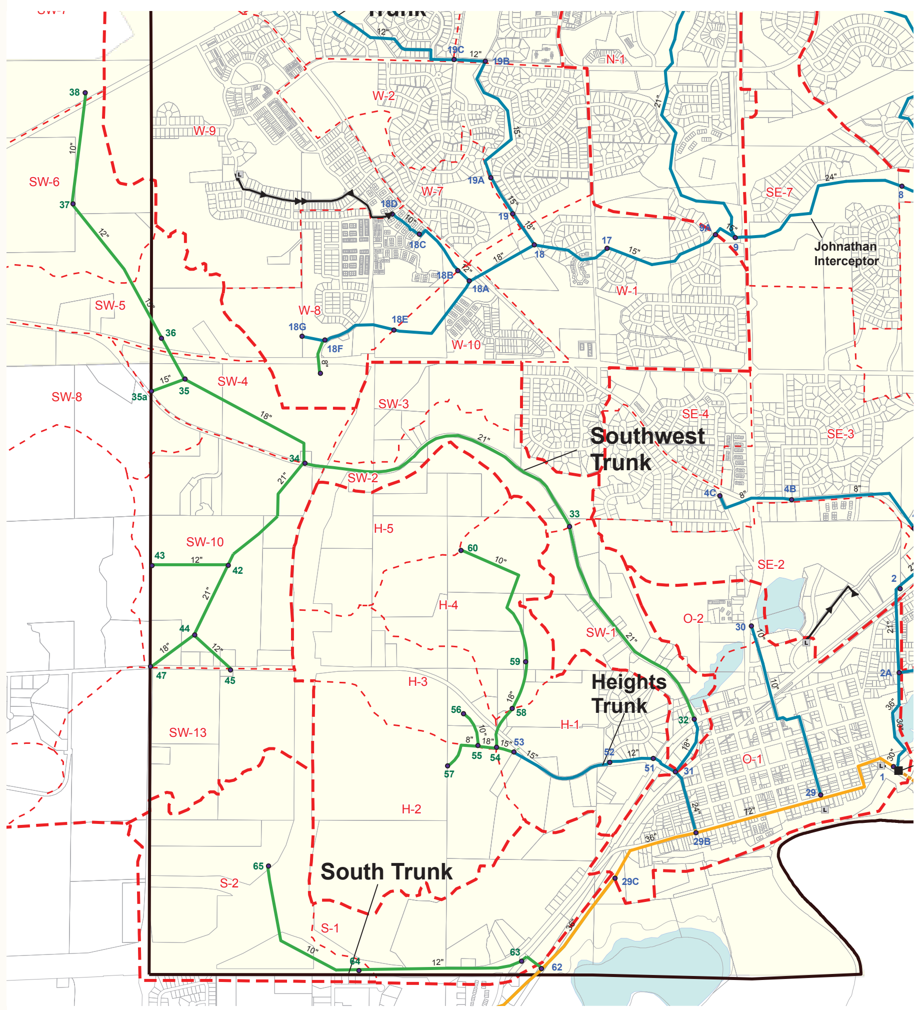
  - Heights District: Further extension of trunk sewer line up CR 140 to serve four minor sewer district above the bluff and east of Hwy 212 - approx. $485K to install
  - Southwest District: Extend trunk sewer line up Creek Road to provide services to area west of Hwy 212 - approx. $3M to install
  - South District: Extend trunk sewer line along CR 61 to serve southern areas below the bluff and west of Hwy 212 - approx. $590K to install

2030 Water Supply Plan (2009)

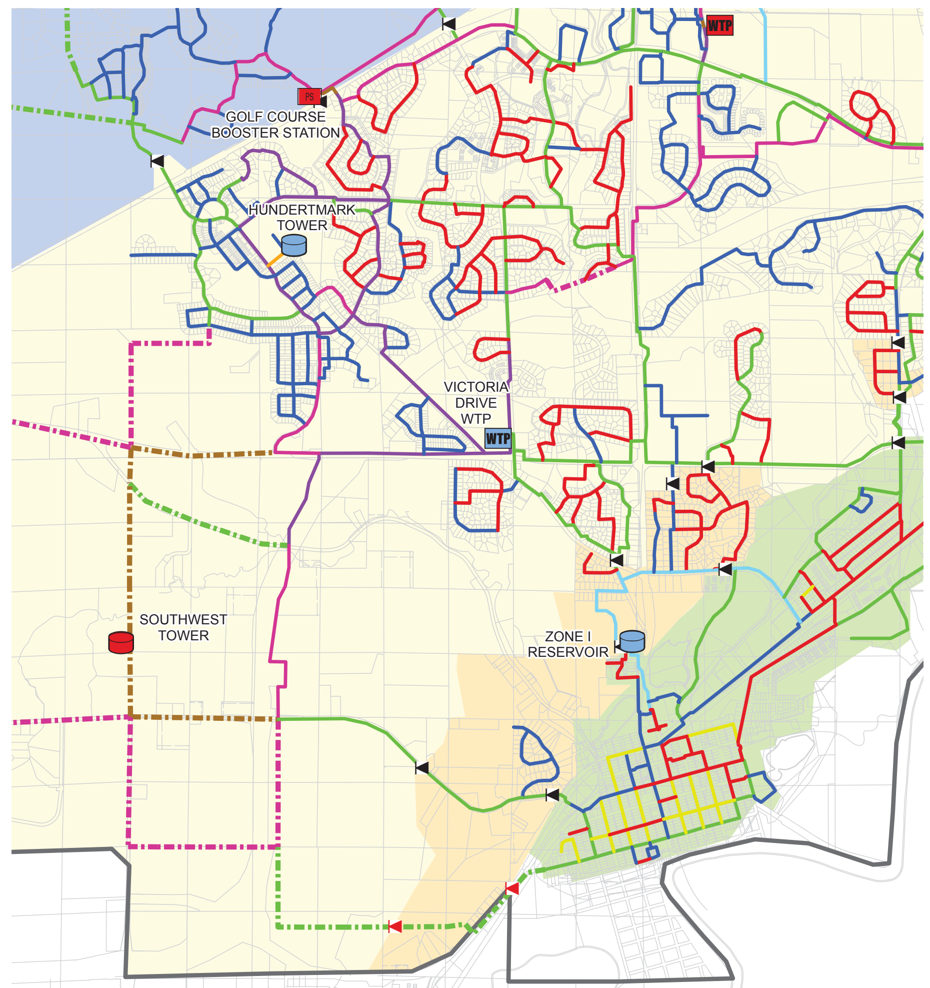
- *Existing water main lines located in CR 140 corridor and along the east side of the Hwy 212 corridor, completing a loop system up to Engler Blvd (CR 10)*
- *Planned extension of water mains to occur west along CR 140, Engler Blvd (CR 10), and Chaska Blvd (CR 61), as well as north south along Jonathan Carver Parkway (CR 11)*
- *An additional water tower will be needed in the southwest growth area, tentative siting is in the area northwest of the planned CR 140/ Hwy 212 interchange*

2016 Local Storm Water Mgmt Plan (2007)

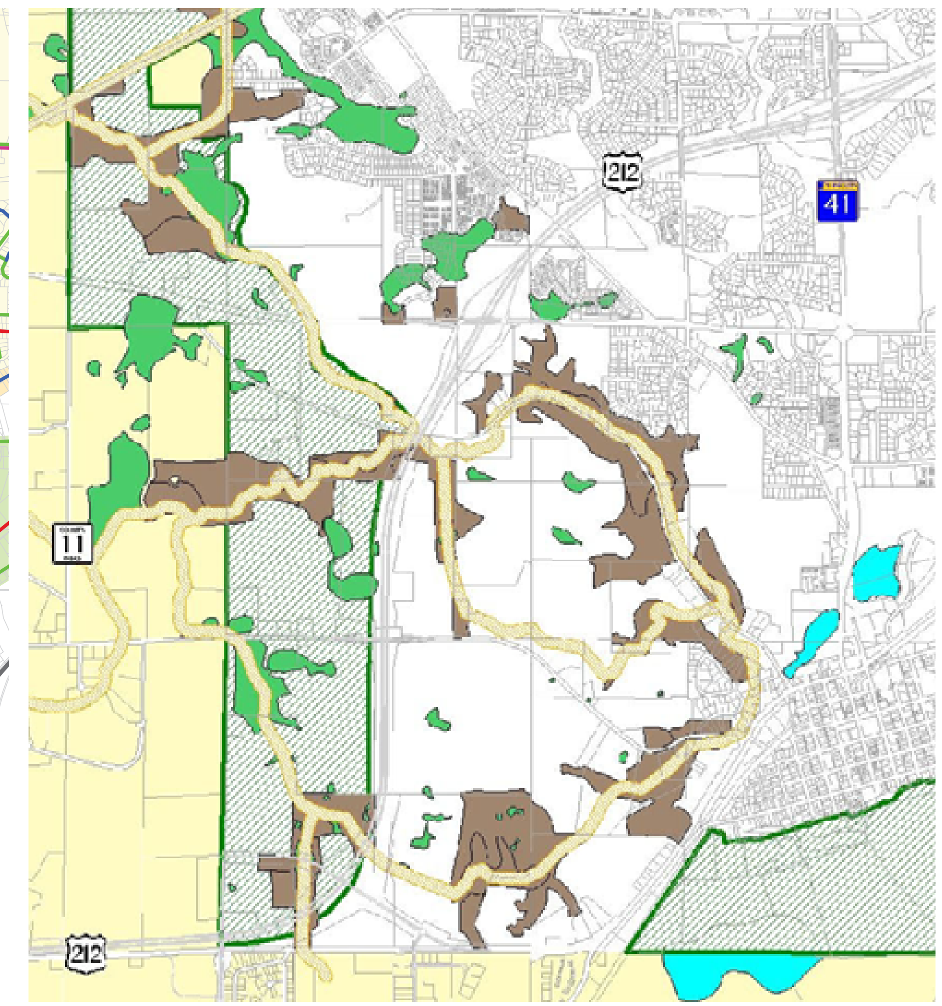
- *Two main stormwater drainage districts located in southwest growth area: Lower Chaska Creek District and South Chaska Creek District*
- *The southwest growth area watersheds are under the jurisdiction of the Carver County Watershed Management Organization (CCWMO)*
- *The Local Storm Water Managemetn Plan (LSWMP) recommends a regional stormwater basin approach by consolidating individual basins that would normally be constructed in each subdivision or development, into central facilities when feasible.*
- *The LWSMP identifies sensitive waterways, wetlands, steep slopes and woodlands*
- *The LSWMP also recommends wildlife corridors that should be preserved as future development occurs*



2030 Trunk Sanitary Sewer System



Ultimate Water Supply System



Natural Resource Inventory Map

Downtown Chaska Master Plan (2012)

Downtown Vision

"Revitalize Downtown Chaska as the hub of community destinations and gathering places that reflect and celebrate our historic character, traditional small town atmosphere and values."

Market Positioning

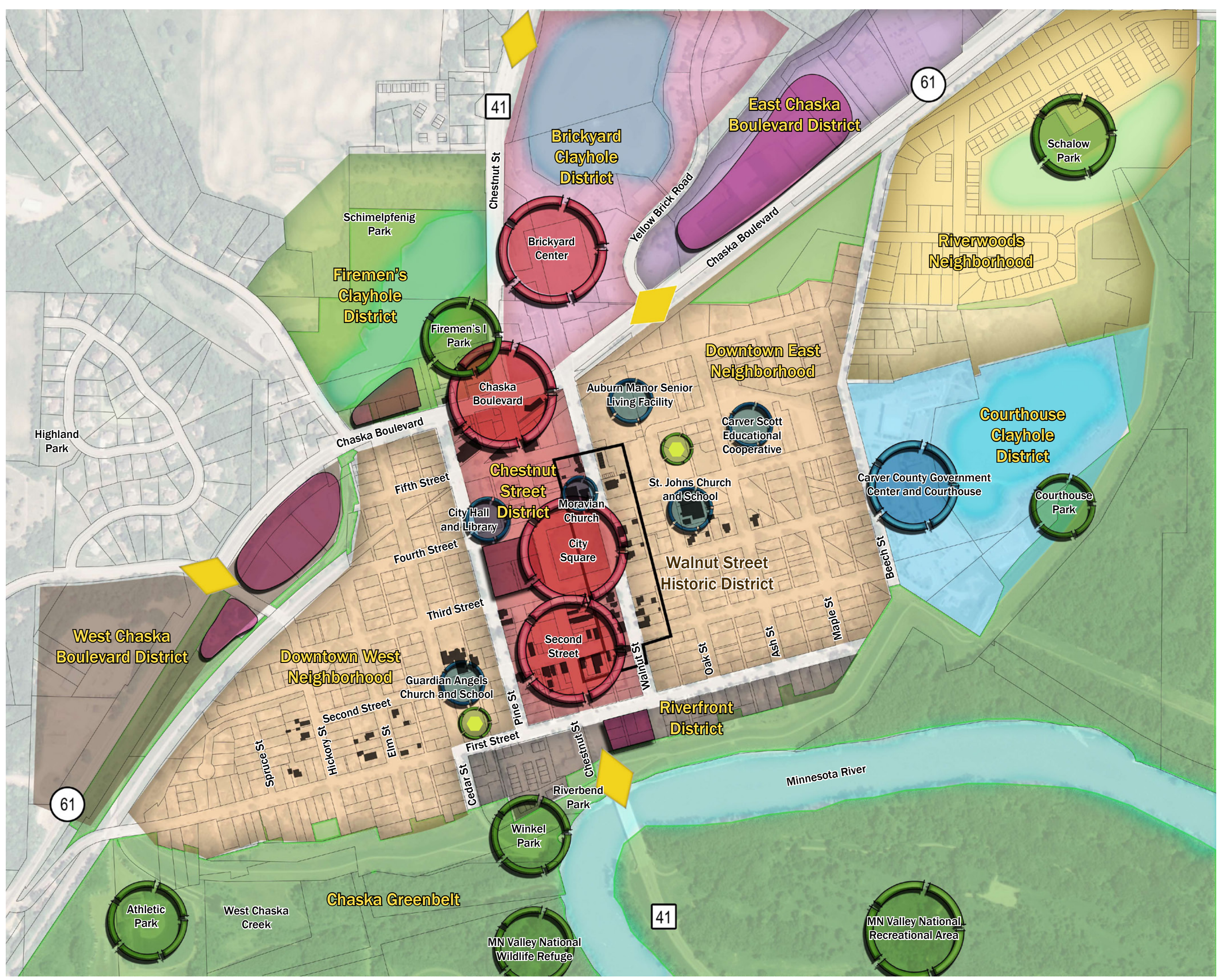
1. *Growth of households and employees in SW Chaska could benefit Downtown businesses*
2. *Manage competition between SW Area retail and Downtown*
3. *Revitalize Downtown as a highly desirable destination for residents and employees SW Chaska*

Connectivity between Downtown & SW Growth Area

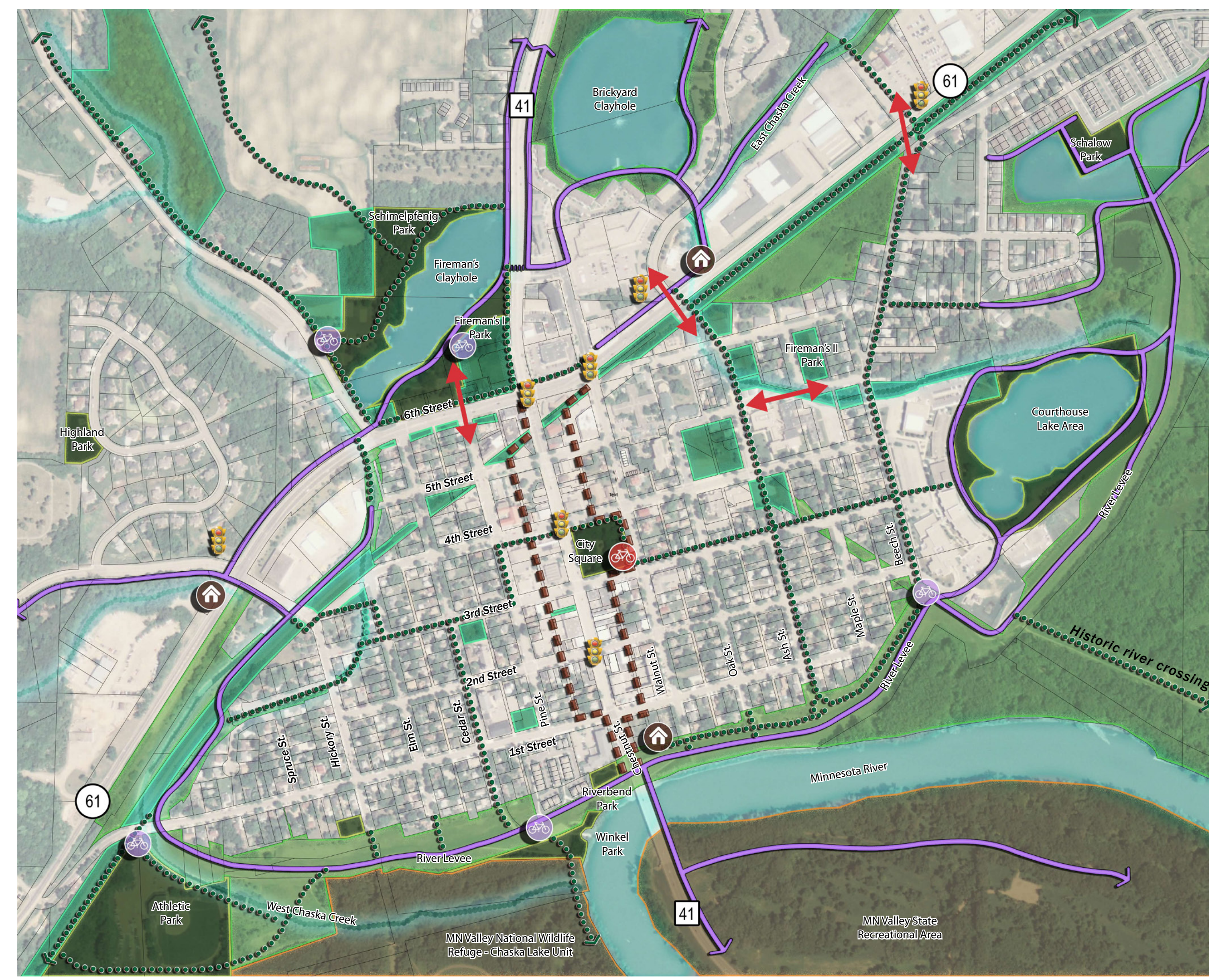
CR 140 interchange will provide the shortest route from Hwy 212 to downtown Chaska, thereby increasing downtown patronage and enhancing the perceived link between the SW Chaska area and downtown.

Key DT Connections

1. *CR 140 from Hwy 212 to Hickory St/4th St*
2. *Chaska Blvd (CR 61) connections to Hwy 212 and potentially rerouted Hwy 41 river crossing*
3. *Potential connection from future residential neighborhoods north of CR 140 to Creek Road and downtown*
4. *Trail network connections*



Vision: Downtown Destinations



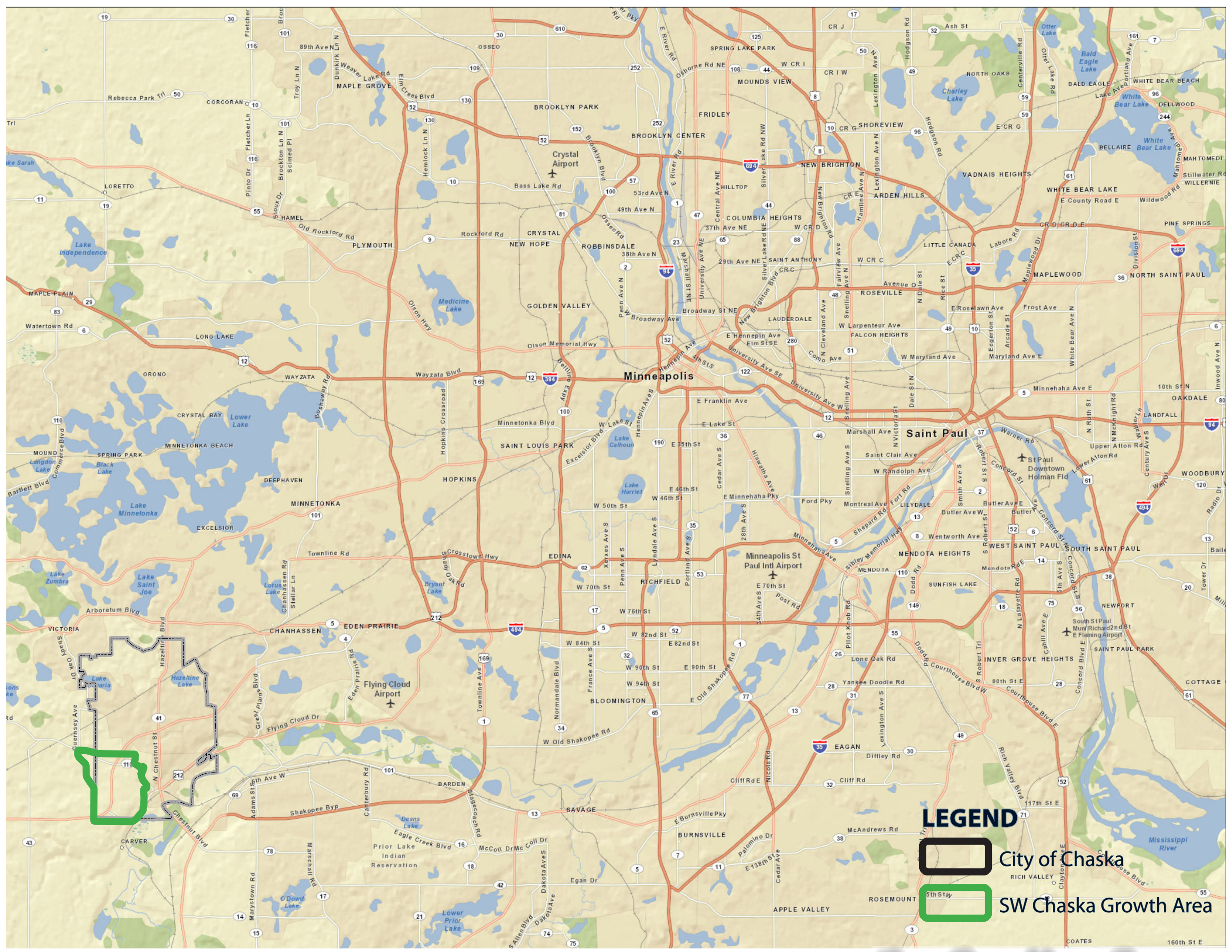
Vision: Downtown Connections

Chapter 2
Context Analysis

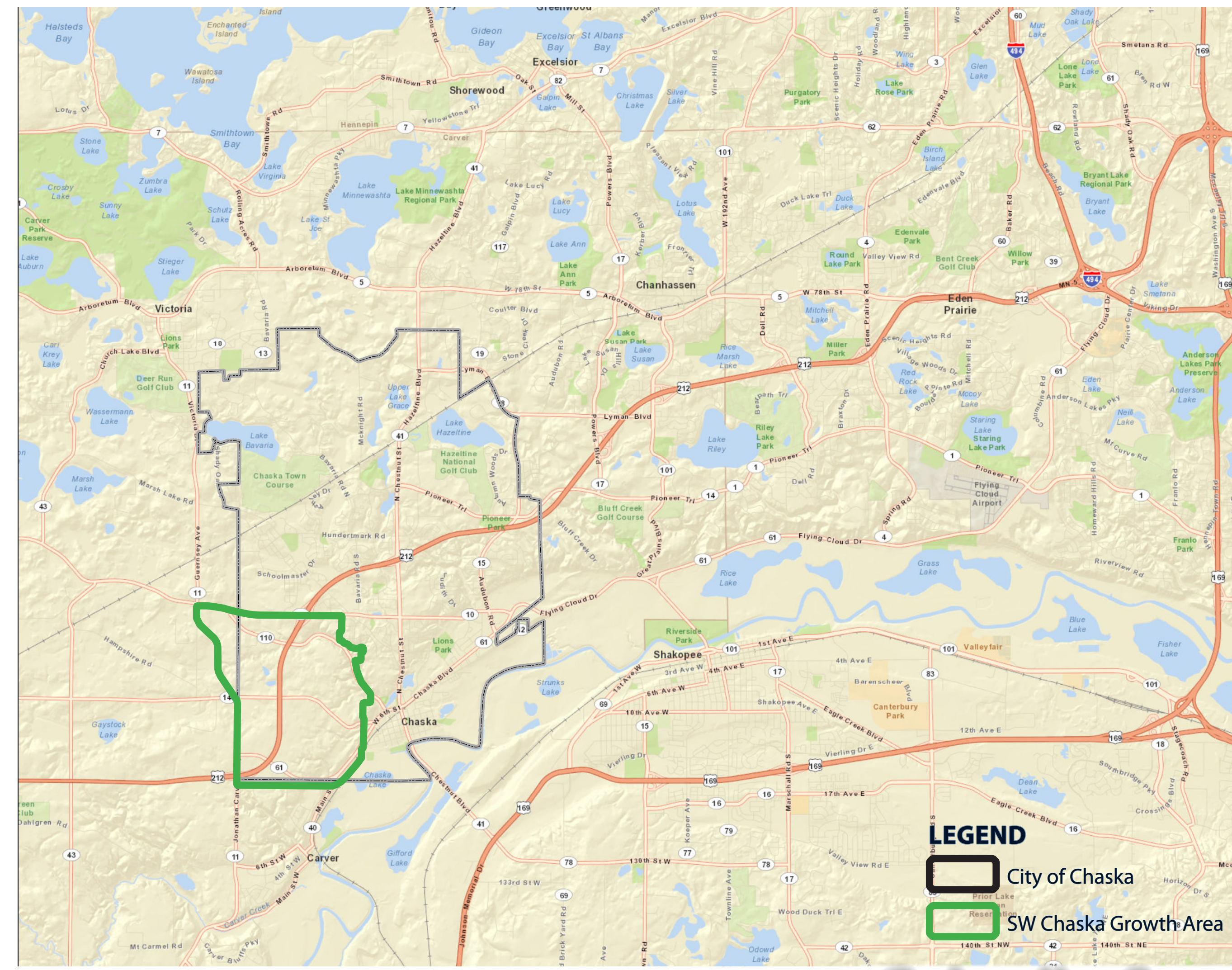
Regional Context

The southwest Chaska growth area is located approximately 25 miles southwest of downtown Minneapolis, along the Minnesota River Valley. Chaska and the southwest Twin Cities metropolitan area has been experiencing significant growth in recent years. New Trunk Highway 212, which was completed in 2008, significantly improved automobile access between the City of Chaska and the core metro area. Chaska now has convenient and quick access (10 minutes) to the I-494/694 freeway loop. Chaska's location on the north side of the Minnesota River is a locational asset since it means travel between the metro core and Chaska does not involve crossing the river.

The southwest Twin Cities metro area continues to be a very desirable sector for living and working. The southwest Chaska growth area has the potential to capture its portion of this growth and to become a model for smart growth at the edge of the Twin Cities metropolitan region with compact development patterns, mixed uses, housing choices, employment, parks, trails and open spaces, natural areas and enhanced connectivity.



Twin Cities Metro Context



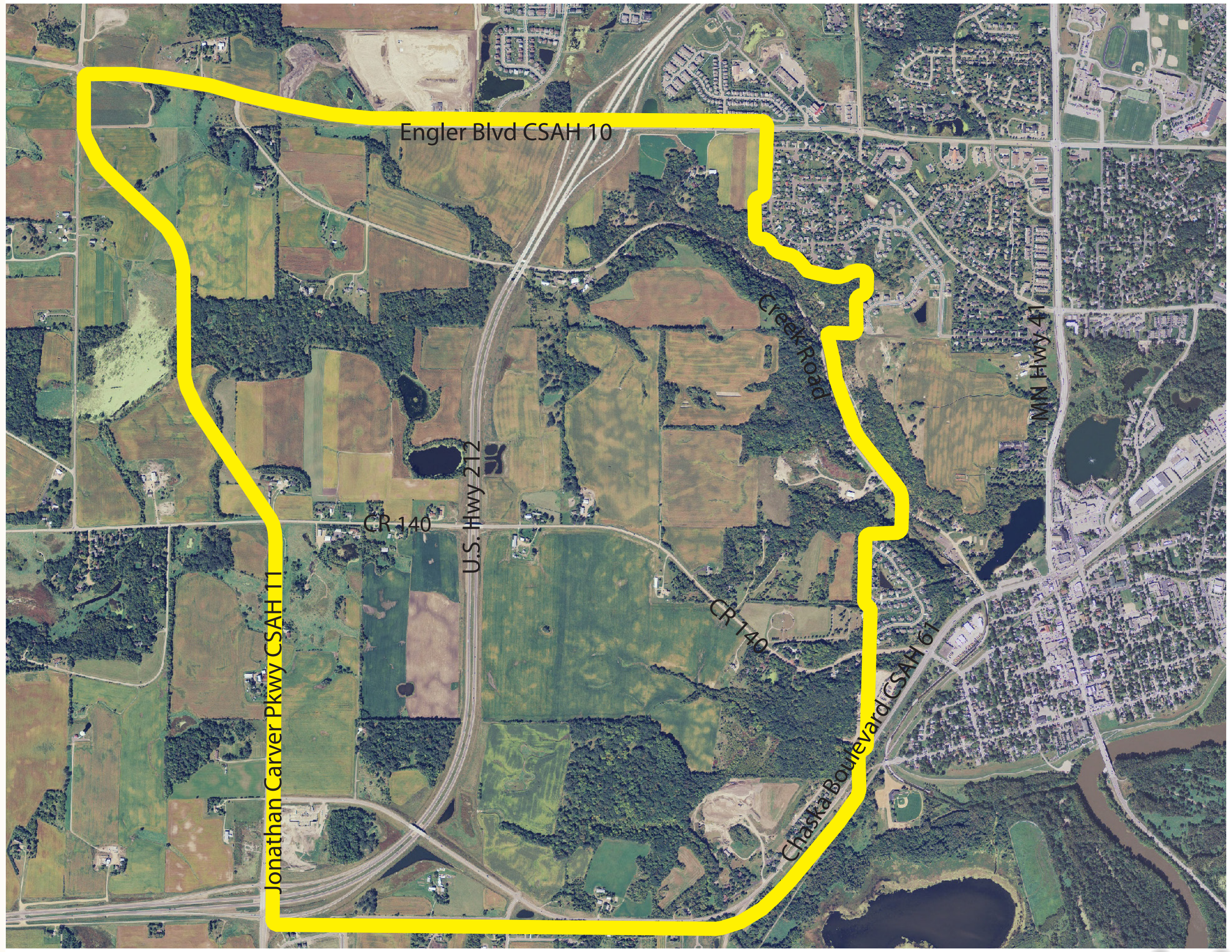
Southwest Metro Context

Surrounding Context

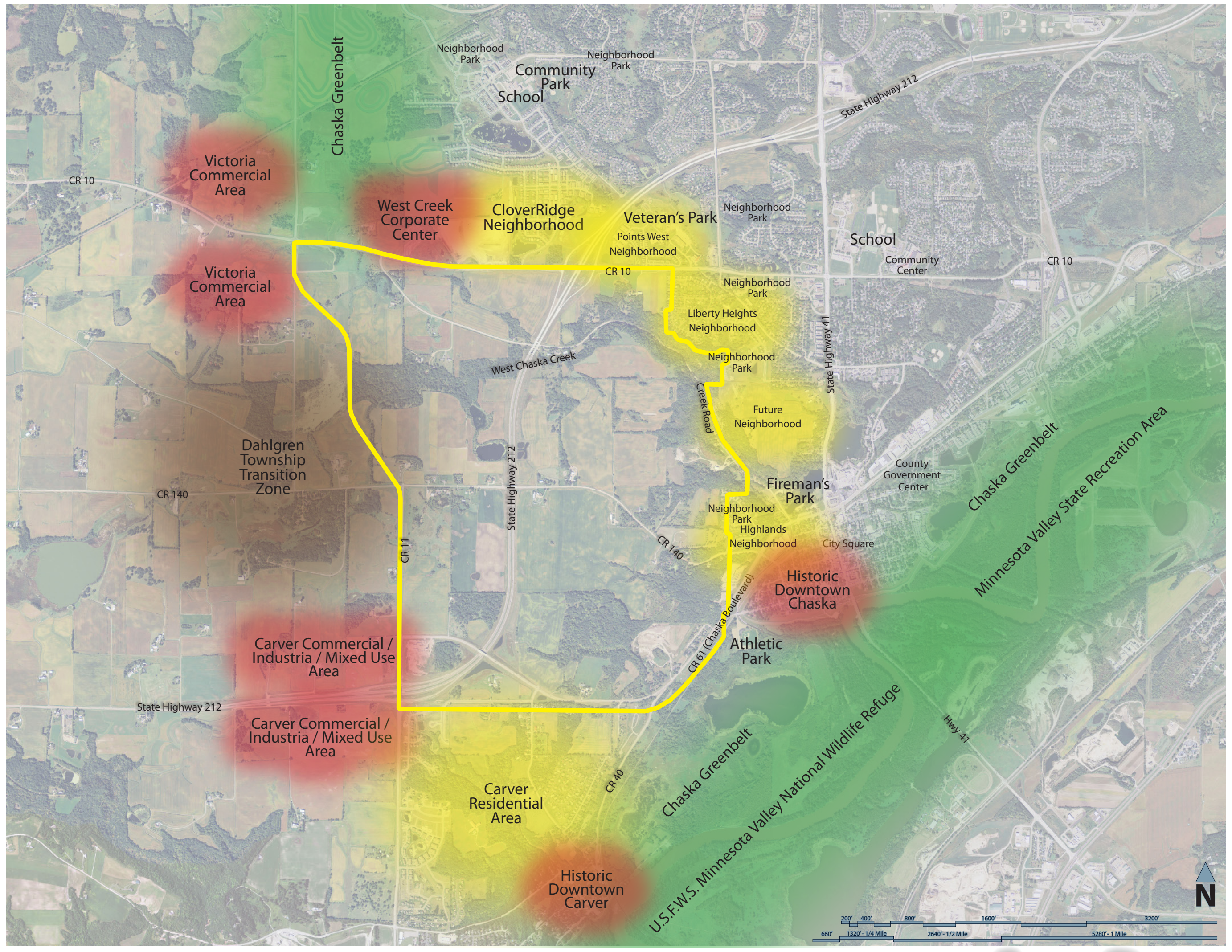
The roughly 2,000 acre growth area is located west of downtown Chaska on the bluff land overlooking the Minnesota River Valley. The bulk of the area is located in the City of Chaska, however, the far northwestern portion of the site is part of Dahlgren Township. It is currently an agricultural area with a few scattered residential homes and farmsteads. The area is bounded by Chaska Boulevard(CSAH 61) to the south and east, Creek Road to the East and Engler Boulevard (CSAH 10) to the north, and Jonathan Carver Parkway(CSAH 11) to the west. The area is bisected by U.S. Highway 212.

The area is characterized by rolling farmland, wetlands, steep ravines, wooded areas, and the river bluffs. River valley views to the south and east are spectacular from the site. The "Big Woods" located along a drainage ravine in the south portion of the study area is the remnant of an upland oak savanna, characterized by large groves of mature red, white and burr oak trees. West Chaska Creek runs through the site toward downtown Chaska. The creek ravine is marked by steep slopes and wooded hillsides, too steep to develop.

The area is well served by existing arterial roadways and is located within a mile west of downtown Chaska with direct access to downtown along County Road 140. Adjacent development to the north of Engler Boulevard(CSAH 10) includes the Clover Ridge community and a new data center along CSAH 10. Recent commercial development in Carver is located at TH 212 and CSAH 11, on the western edge of the growth area.



Aerial



Context Diagram

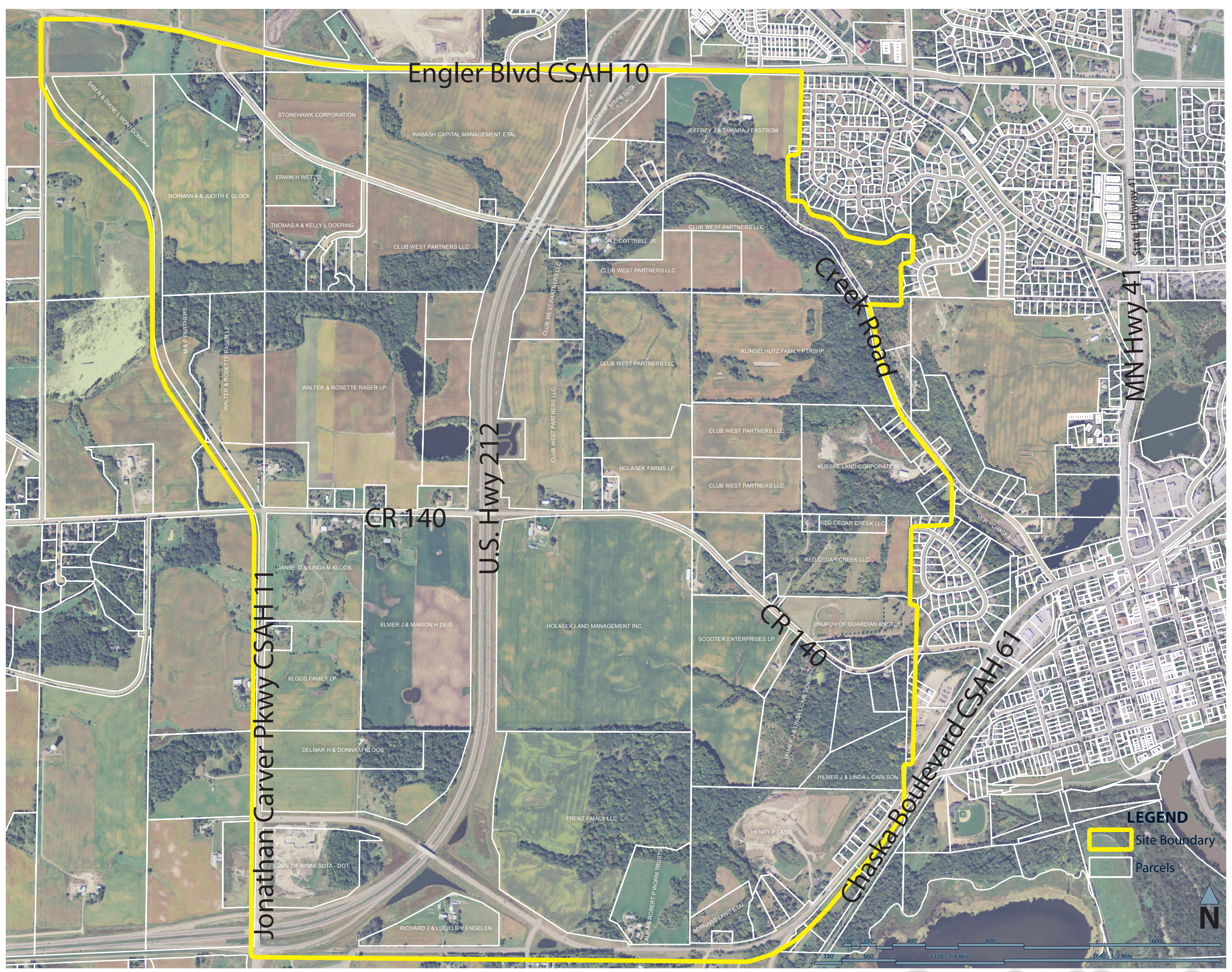
Current Land Ownership & Use

Current Land Ownership

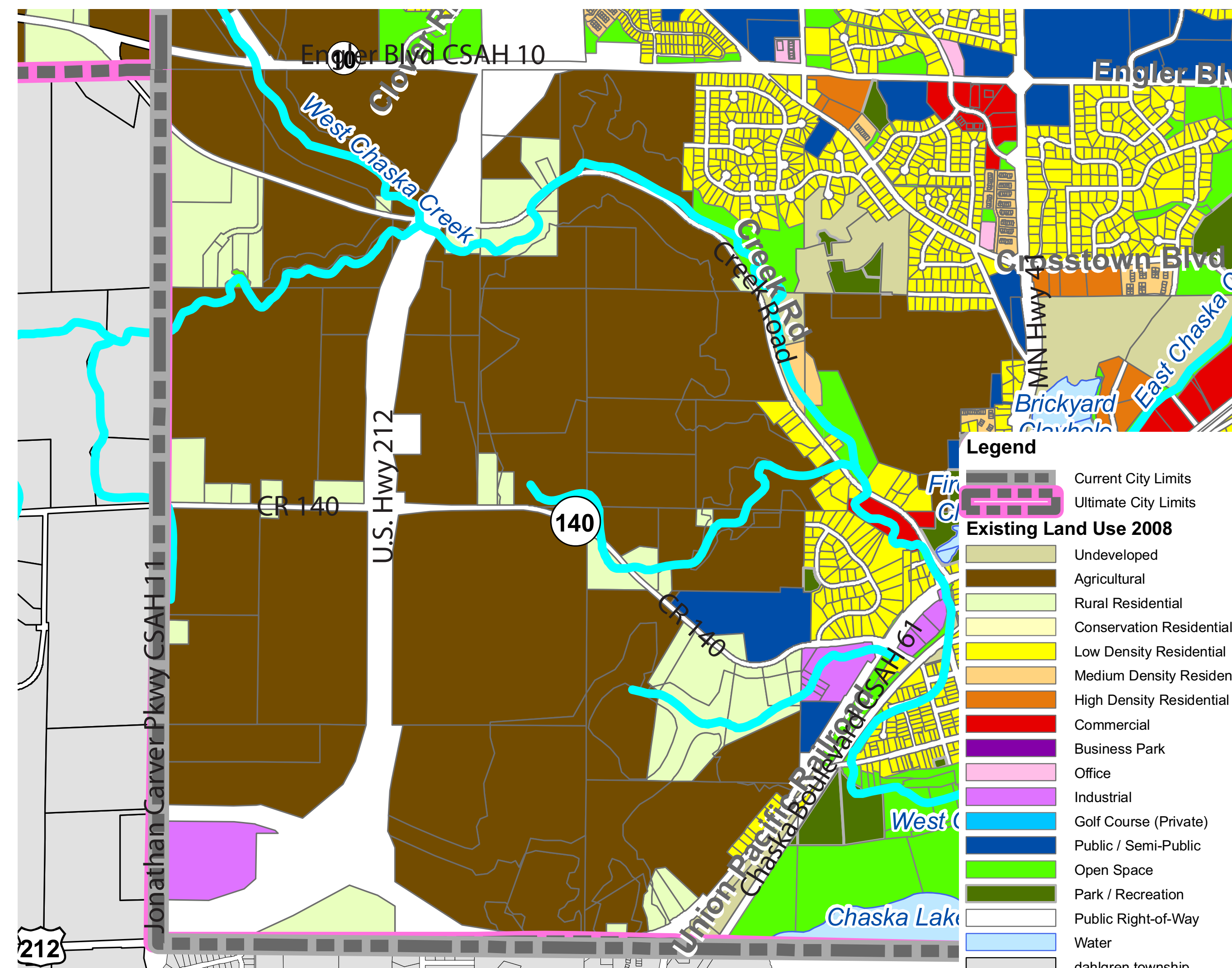
Current land ownership in the southwest growth area includes numerous individuals/entities and a broad range of parcel sizes. Fragmented land ownership will undoubtedly present challenges to coordinating future development within the growth area. It will be very important to include land owners in the planning, funding and implementation aspects of future development within the area.

Current Land Use

As the southwest Chaska growth area is the former Chaska Township and was just annexed into the City of Chaska in 2005, existing land uses continue to be predominately agricultural. Much of the agricultural land is actively farmed by the property owners, who typically live on or adjacent to the farm property. Rural residential land uses are clustered along the few existing roadways in the area, which are primarily CR 140, Creek Road and Chaska Blvd (CSAH 61). The Guardian Angels Church's cemetery is located along CR 140, just up the bluff from downtown Chaska. A Mn DOT facility was recently completed in the southwest corner at the intersection of Chaska Blvd (CSAH 61), Jonathan Carver Pkwy (CSAH 11) and Hwy 212. New business park development is currently occurring directly north of the southwest growth area, just west of the Engler Blvd (CSAH 10)/Hwy 212 interchange, as part of the Chaska Biotech Center initiative.



Current Land Ownership



Current Land Use

Natural Features

Natural Resources

Significant natural resources in the study area include upland forest communities, streams and wetland areas.

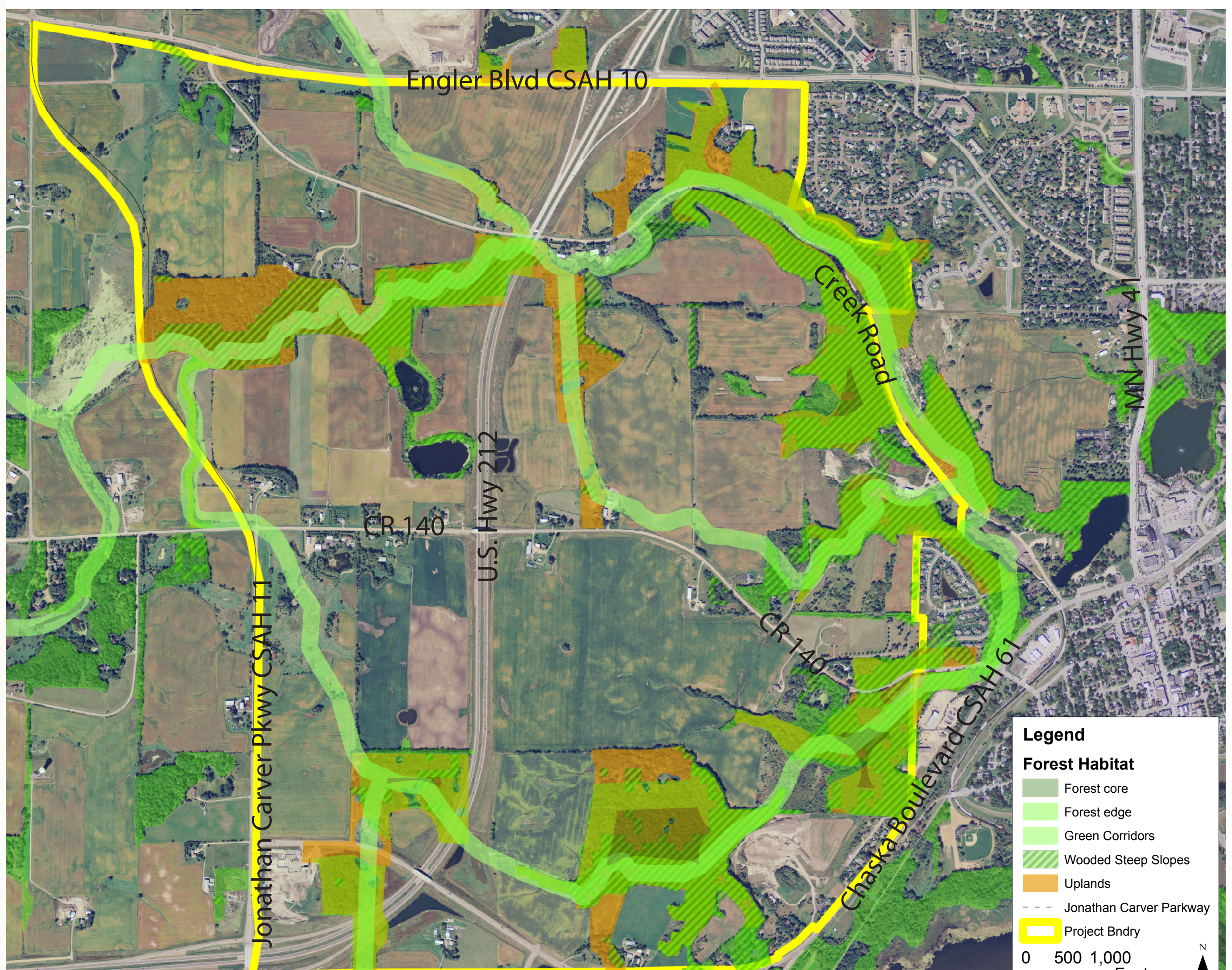
Wetland areas and streams are protected landscapes and should be preserved and enhanced. They provide important ecological functions to the landscape such as improving water quality, flood water attenuation, and providing fish and wildlife habitat. Wetlands are often neighborhood amenities because they can provide screening from adjacent neighbors and wildlife viewing opportunities. Wetland buffers can help mitigate potential development impacts to wetlands by reducing erosion by stormwater. Wetland boundaries should be delineated early in the platting process to avoid development within wetlands and buffer zones.

The forest communities in the study area provide valuable green open space for human and wildlife needs. The forest communities are primarily associated with Chaska Creek and the "Big Woods", a remarkable remnant oak savanna located in the south portion of the study area. The forest communities are generally associated with drainage ravines, steep slopes and sharply rolling glacial topography. They are therefore sensitive to the impacts of erosion and sedimentation. The forest communities in the study area should be given special consideration for future protection and management due to their quality and sensitivity.

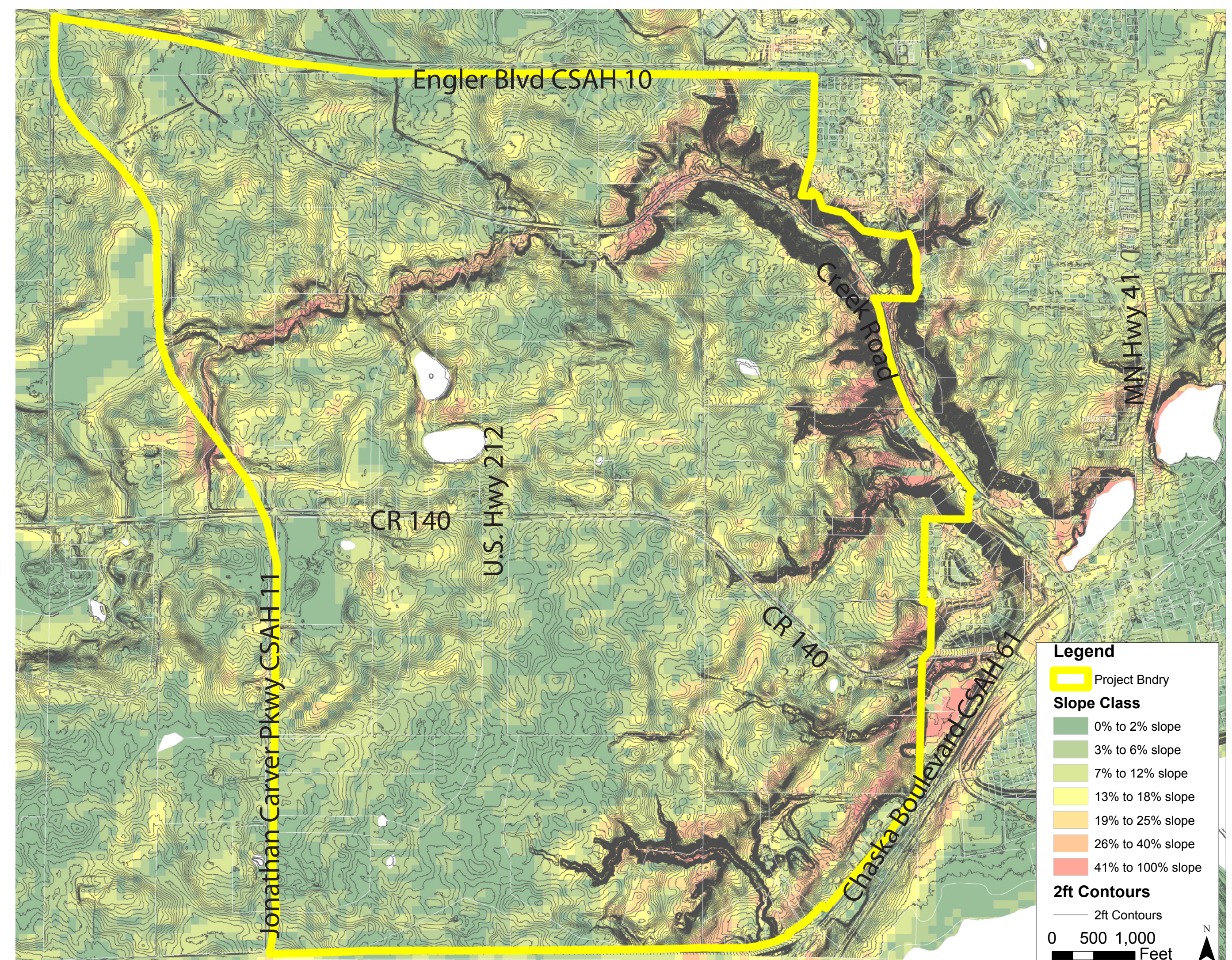
Topography

The study area is generally characterized by rolling hills, marked by areas of drainage ravines, steep slopes and bluffs associated with the Minnesota River Valley. Drainage ravines generally run west to east, toward downtown Chaska, where they drain into the Minnesota River.

Chaska Creek and the Big Woods areas are characterized by steep slopes and sharply rolling glacial topography. They are therefore sensitive to the impacts of erosion and sedimentation and should be protected and left undeveloped.



Natural Resource Inventory



Topography

Natural Features

Hydrology

The study area includes several sub-watershed areas, streams and wetlands. Chaska Creek picks carries stormwater runoff from several sub-watersheds in the study area. It runs through the site from west to east toward downtown Chaska where it eventually discharges into the Minnesota River.

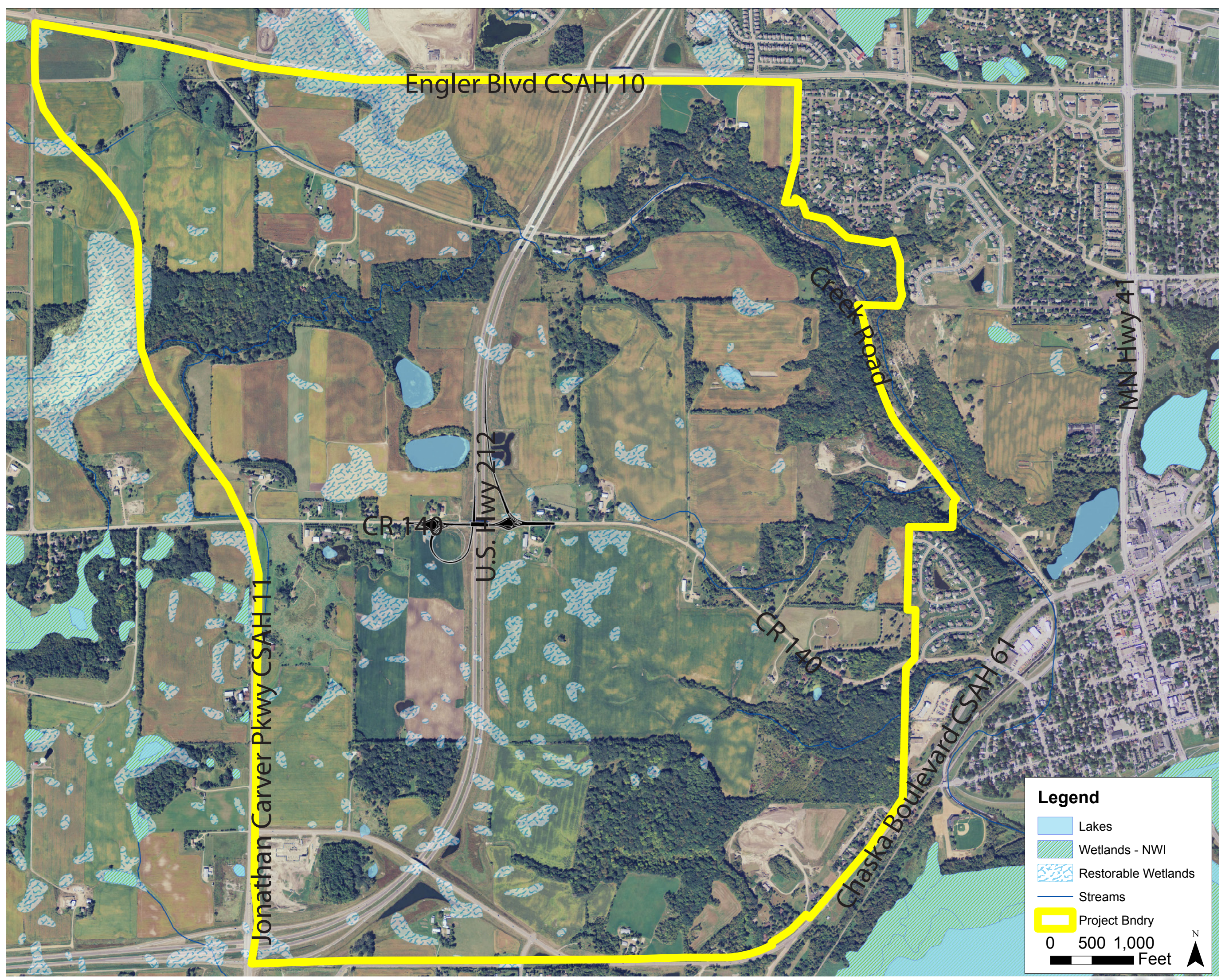
The study area is marked by several wetland areas, some of which are of medium to high quality. Many of the mapped wetlands exist in farmed fields and are considered low quality. A few of the wetlands are ephemeral ponds. Two are ponds with standing water that support fish and wildlife.

Soils

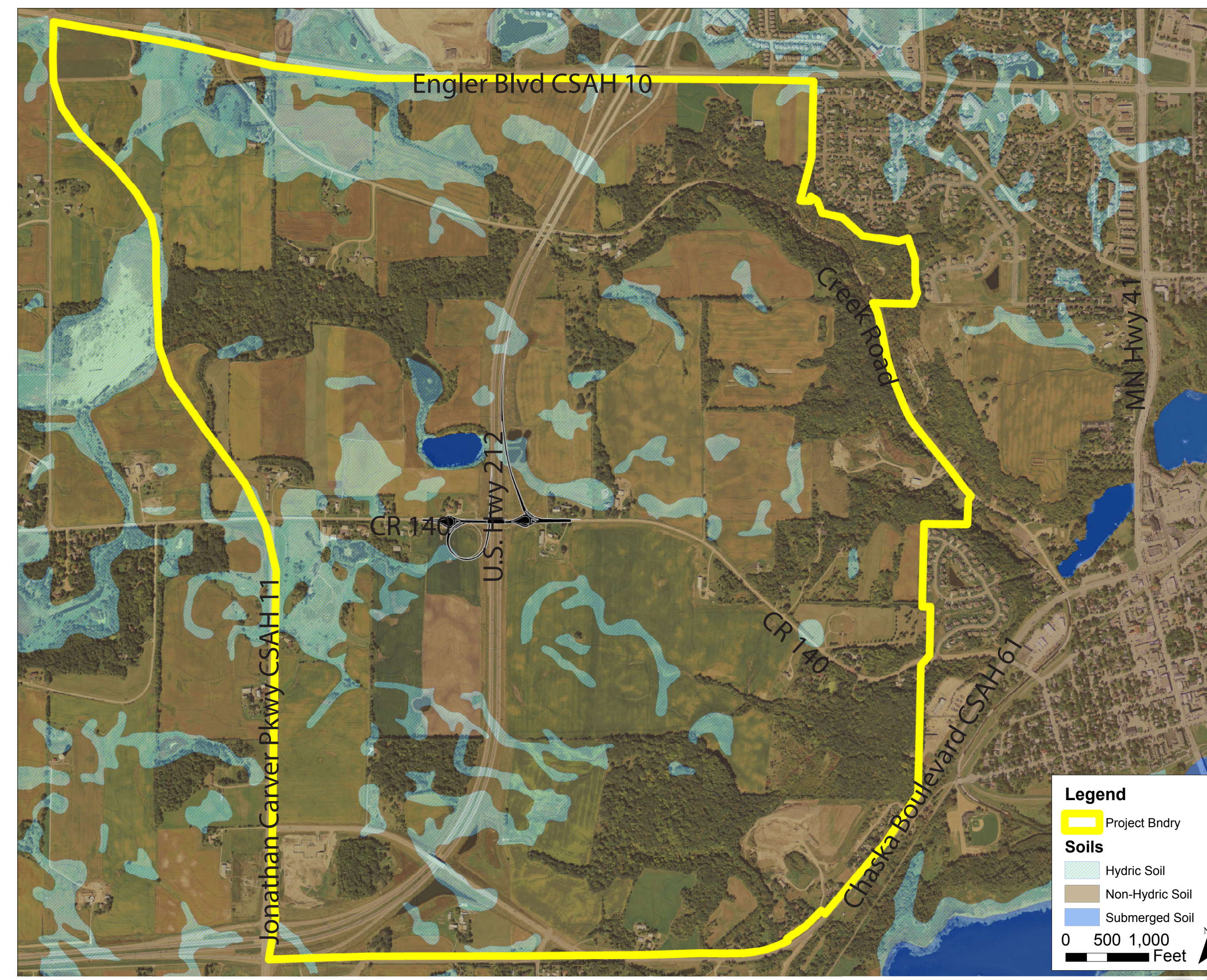
The 2007 Chaska Local Surface Water Management Plan contains the following information related to soils in the southwest Chaska growth area. Chaska is covered by soils formed from glacial materials deposited over most of the City. The several soil types that are present in Chaska can generally be found in two distinct areas within the City; within, or adjacent to, the Minnesota River floodplain, and dispersed throughout the remaining upland area to the north and west of the river. The Natural Resource Conservation Service (NRCS) prepared a soil survey for Carver County in 1966 that contains detailed information on the general soil associations and classification types, as well as erosion potential, infiltration characteristics, and suitability for a variety of land uses.

The majority of the soils found in the upland area of Chaska are generally very deep, moderately well to well drained soils formed in glacial till on moraines. They have moderate to slow permeability and are classified as Fine to Fine-Loamy soils. The majority of the remaining soils are generally very deep, very poorly to moderately drained soils formed in glacial till on moraines. They have moderate to moderately slow permeability and are classified as Loamy and Fine-Loamy soils.

A soil's drainage characteristics are important for determining the amount of surface water runoff from any given area. In general, Chaska has soils with a moderate potential to generate surface water runoff. In many cases, though, grading associated with development projects reduces the drainage capacity of the soil, increasing its runoff generating potential.



Hydrology



Soils

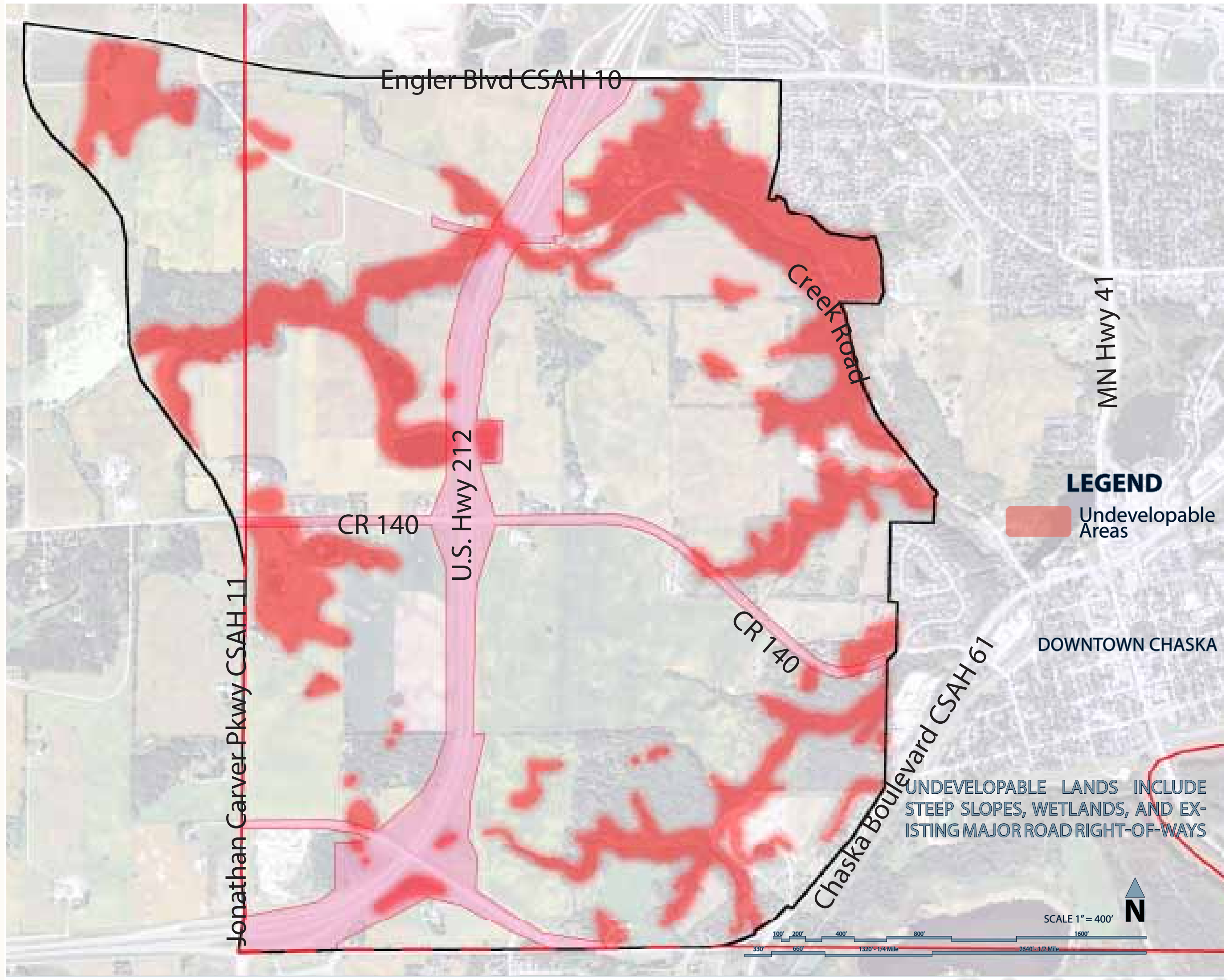
Developable Land Summary

Undevelopable Land

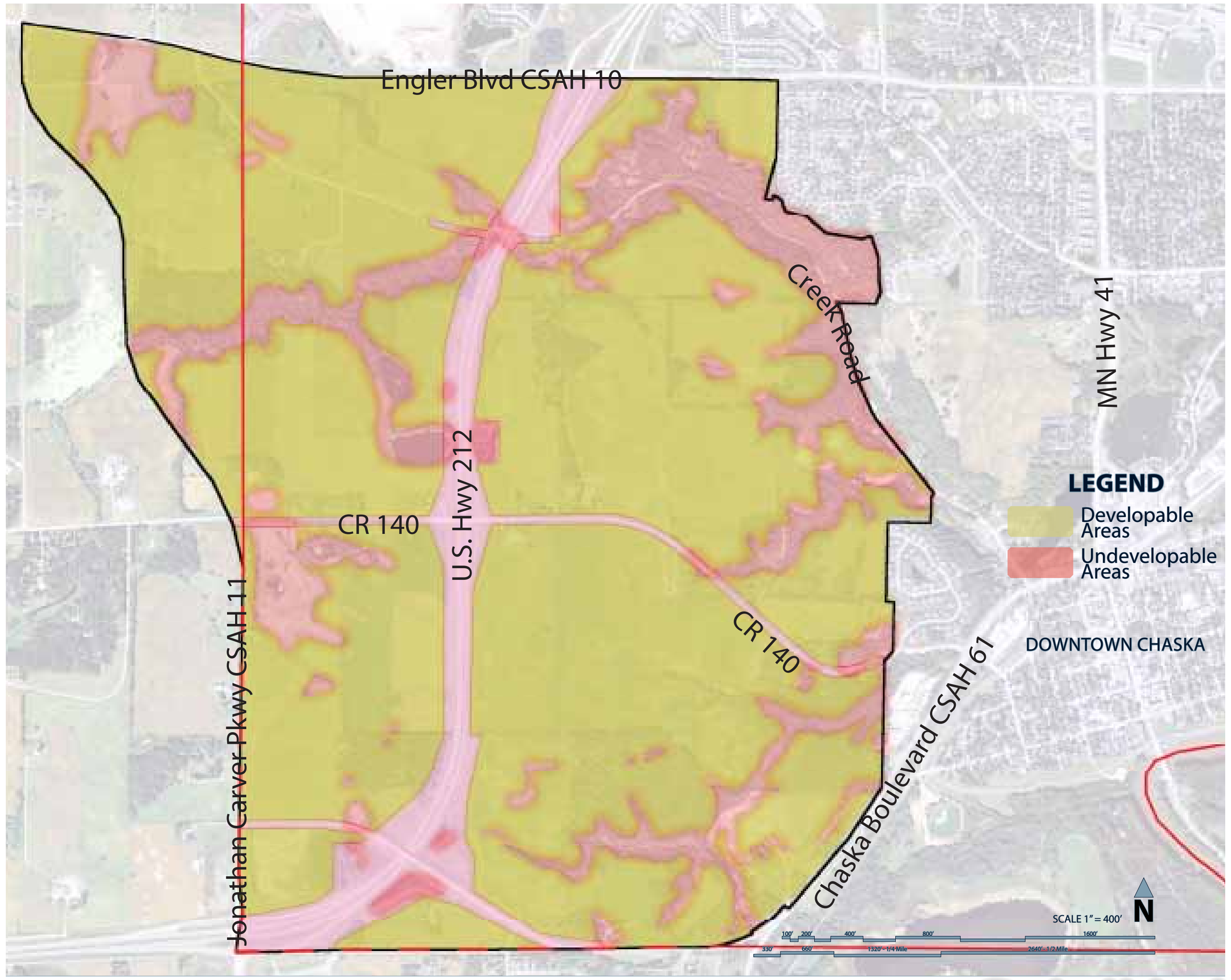
Based upon an inventory and analysis of the site's sensitive natural resource features, undevelopable lands were identified within the southwest growth area. Undevelopable lands highlighted in pink in the diagram below include water bodies, water courses (e.g. creeks and rivers), floodplains, wetlands, and wooded steep slopes. These natural features are currently protected by existing City ordinances. Existing road rights-of-way are also shown on the diagram below.

Developable Land

The diagram below visually illustrates land areas, highlighted in yellow, that are generally suitable for future development. These developable areas result from identifying undevelopable lands upfront. As can be seen in the diagram, the protected natural areas and existing rights-of-way really define a variety of future developable areas, including varying sizes and development edge types.



Undevelopable Land



Developable Land

Transportation

Regional Context

The southwest Chaska growth area is served by a principal arterial and several existing minor arterial roadways. U.S. Highway 212 runs north/south and bisects the area into east and west sub-areas. County Road 140 runs east/west and bisects the area into north and south sub-areas. Engler Boulevard (CSAH 10) runs along the northern edge of the area and Chaska Boulevard CSAH 61 runs along the southern edge of the area. Creek Road traverses through the northern portion of the area, generally running east/west and connecting CSAH 10 to downtown Chaska. Newly constructed Jonathan Carver Parkway (CSAH 11) runs north/south along the western edge of the area.

U.S. Hwy 212 is classified as a Principal Arterial roadway and was recently completed (2008) as a four-lane freeway in the southwestern suburbs of the Twin Cities metropolitan area. To the west, Hwy 212 is a rural highway connecting portions of south-central and western Minnesota to the Twin Cities. To the east, Hwy 212 provides connectivity to the developed areas of the core metropolitan area. As such, Hwy 212 is designated as one of Minnesota's Interregional Corridors, a designation given to significant transportation corridors that provide economic benefits to the state by providing connectivity and mobility between key trade centers throughout the state. Hwy 212 currently carries 16,500 average daily trips, but is project to carry over 100,000 average daily trips by 2030, when development in the southwest Chaska growth area is closer to buildout.

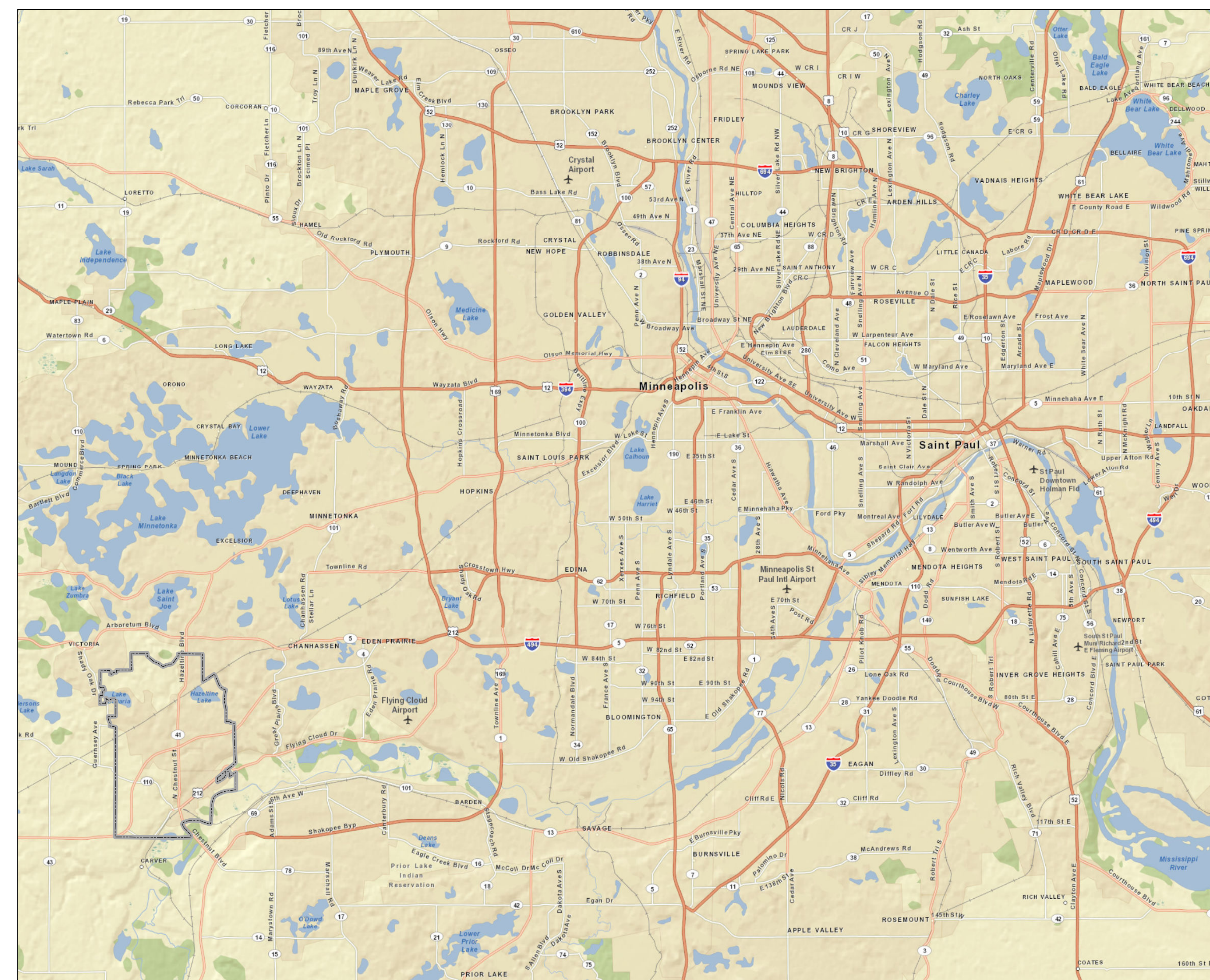
CR 140 was recently (May 2011) reclassified as an "A" Minor Arterial Expander roadway, providing east/west movement within the area and connecting to north/south movements outside the growth area. Currently CR 140 passes over Hwy 212 (bridge), however, an interchange between the two roadways is proposed for future development as a part of this study. A new interchange at CR 140 and Hwy 212 is seen as a necessary reliever of traffic volumes by 2030. At that point, CR 140 will provide quick access to downtown from Hwy 212.

Engler Boulevard (CR10) provides east/west movement and carries a significant amount of commuter traffic coming from the western suburbs of Waconia and Victoria. There is an existing interchange at CR 10 and Hwy 212 which provides commuters from the west access to the freeway system (Hwy 212).

Chaska Boulevard (CR 61) provides east/west movement between CSAH 11 and downtown Chaska. CSAH 61 currently passes over Hwy 212 (bridge). CSAH 11 provides north/south movement along the west edge of the growth area. CSAH 11 is a newly constructed roadway with an interchange at Hwy 212 at the southwest corner of the area. This new interchange provides access to the southwest growth area as well as planned commercial uses in Carver.

Creek Road follows the bottom of a ravine along West Chaska Creek as it moves from downtown Chaska northwest into the area. It is lined with steep slopes and woodlands. Creek Road provides east/west movement between CSAH 10 and downtown Chaska.

Southwest Chaska Growth Area



Regional Transportation Network

Transportation

Future Trunk Hwy 212 & County Rd 140 Interchange

Traffic forecasts indicate that existing interchanges at Hwy 212 and Engler Blvd (CSAH 10), and Hwy 212 and CSAH 11 will not be adequate to handle traffic demands by 2030 due to anticipated growth in the southwest Chaska growth area. Projections indicate potential for approximately 3,500 future households and 5,000 – 10,000 future jobs in the growth area alone. In 2030, planned development in the growth area is expected to generate up to 109,000 average daily trips along Hwy 212 through the growth area. In response to this, the City of Chaska completed a warrant analysis and submitted a request to the Metropolitan Council and MnDOT to construct an interchange at Hwy 212 and CR 140 (June, 2011). MnDOT granted conditional approval of the future interchange in 2011, which will require a land use amendment prior to final approval. A MnDOT Formal Access Request is still required to move this project forward. The proposed interchange would provide access for regional trips to and from the southwest growth area. This planning effort considers a future full interchange at Hwy 212 and CR 140.

Collector Roadway Design Considerations

The southwest Chaska growth area lacks sufficient north/south movement roadways to accommodate future growth in the area. Additional local roadways, including a collector system of roads and local frontage roads are planned for this area to serve future development at the time when growth occurs in southwest Chaska. These roadways are anticipated to provide adequate capacity to serve local trips within the growth area. The City of Chaska has prepared conceptual collector roadway alignments east and west of Hwy 212. Each of these collector roadways would provide north/south movement across the growth area.

Creek Road Design Considerations

Creek Road was recently turned back from Carver County to the City of Chaska (2004). The City's Comprehensive Plan calls for a portion of Creek Road to be eliminated and converted to a regional trail. For the purposes of this study, three options were looked at for the future of Creek Road, including the possibility of maintaining Creek Road for vehicular traffic. In one option, the roadway would be reconstructed and includes a regional trail alongside of it. Given the narrow valley the roadway exists in, this option proves difficult and expensive to construct. In a second option, the roadway would be reconstructed as a narrow road, but the regional trail is moved alongside CR 140. In the third option, portions of Creek Road would be eliminated and converted into a regional trail. Enough of Creek Road would be preserved in this scenario to provide access to adjacent properties in the area.

The addition of a full interchange at Hwy 212 and CR 140 will have a dramatic effect on land use decisions in the growth area and will provide a more direct link to downtown Chaska than existing connections from Hwy 212 today. This future interchange will also alleviate traffic demands on the interchanges at Hwy 212 and CSAH 10, and Hwy 212 and CSAH 11.

Multi-Modal Design Considerations

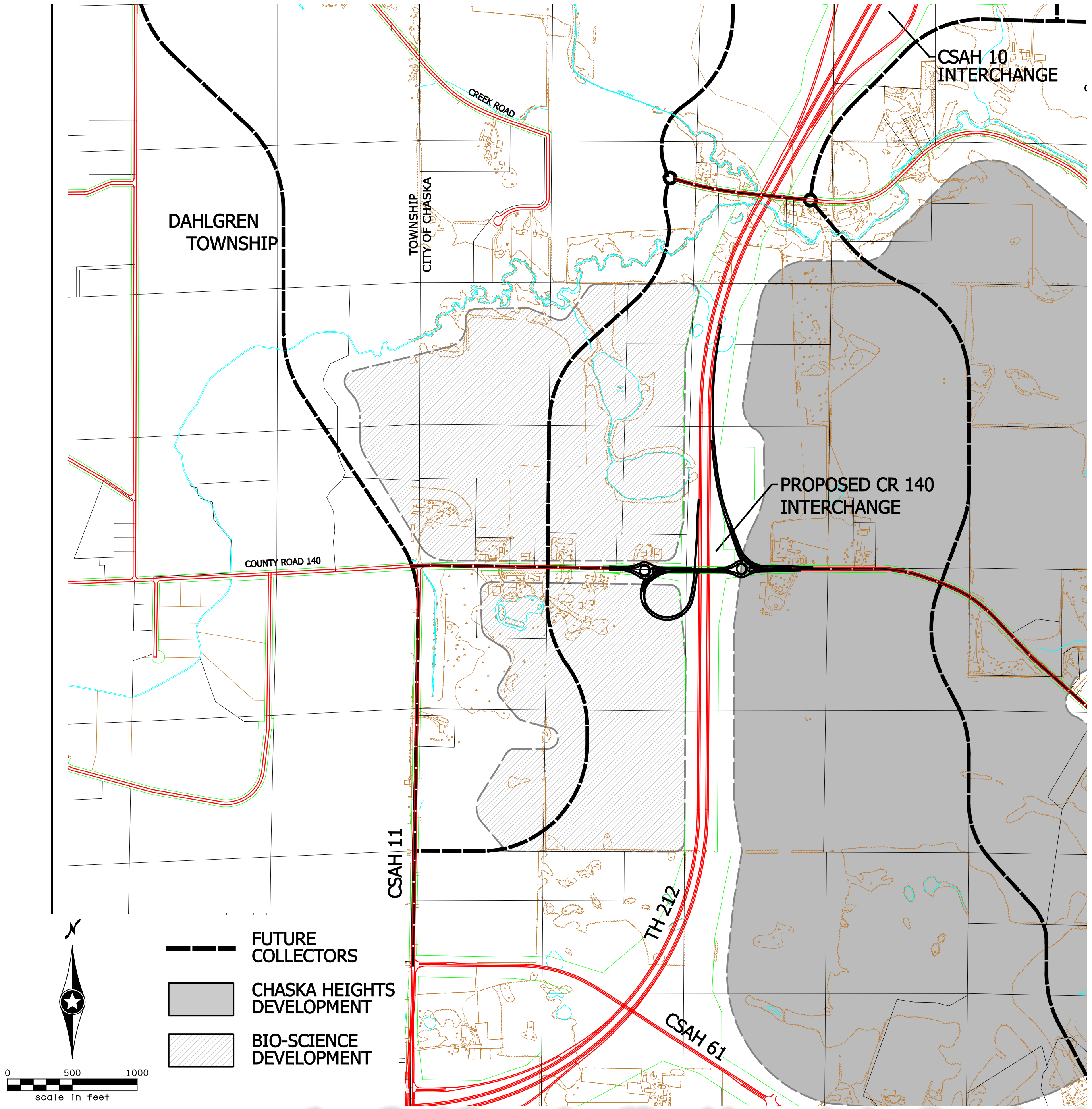
Planning for the Southwest Chaska Growth Area should consider multiple modes of transportation alternatives. A multi-modal transportation system can reduce auto use, reduce greenhouse gas emissions and promote healthier lifestyle choices.

Southwest Metro Transit and Carver Area Rural Transit (CART) serve the City of Chaska and surrounding areas in Carver County. Southwest Metro will provide transit service and facilities to the Southwest Growth Area as it develops and creates a demand for future service. Accommodations for transit service and facilities should be considered as part of the future planning for the Growth Area.

Pedestrian and bicycle routes do not currently exist within the Growth Area, however, the City's Comprehensive Plan indicates several regional trails through and connecting to the Growth Area from the surrounding region. The plan should consider a complete and comprehensive system of pedestrian trails and sidewalks, as well as bicycle trails, routes, lanes and facilities to encourage healthy lifestyles and alternative modes of transportation.

Connectivity between Downtown Chaska and the Southwest Growth Area

A future interchange at CR 140 and Hwy 212 would provide the shortest route from Hwy 212 to Downtown Chaska, thereby increasing Downtown patronage and enhancing the perceived link between Southwest Chaska and Downtown Chaska. Other connections to Downtown Chaska from the Southwest Chaska Growth Area include CSAH 61 and Creek Road. The 2030 Comprehensive Plan identifies future City and Regional trails in the Southwest Growth area along Creek Road and CR 140 that would provide additional connectivity between Southwest Chaska and Downtown. The growth plan should evaluate additional roadway and trail opportunities to enhance connectivity between Downtown and Southwest Chaska.



Future Road System from CR 140 Warrant Analysis Report (2011)

Public Facilities

Sanitary Sewer System

For study purposes, the City's Comprehensive Sewer Plan divides the City into major sewersheds or districts. There are ten such major sewer districts within the entire city, each defining the limits of service for a major trunk sewer. The major sewer districts were further subdivided into minor sewer districts for the purpose of developing design flows within the small branch trunks and to determine the accumulative design flows in the main trunks. The sewer districts were named according to general location within the City and were identified by an abbreviation prefix followed by an identifying number.

While most of the existing developed areas of Chaska lie with the East Chaska Creek drainage area, the southwest growth area lies within the West Chaska Creek drainage area. The sewer districts for the West Creek Watershed are planned to be served through Downtown Chaska through the Chaska West Interceptor. Three major sewer districts are defined within the southwest growth area: Heights, Southwest and South.

Heights Sewer District

The Heights Sewer District contains approximately 800 acres of land, which encompasses the area above the river bluff and east of Hwy 212. The remainder of the Heights District is primarily agricultural today. The topography consists of rolling plateaus occupying the central and western areas and bluffs and steep, heavily wooded ravines adjacent to Creek Road and CSAH 61. Elevations range from a high of 950 ft. at the west end near new Highway 212 to a low of 740 ft. near CSAH 61. This sewer district's trunk line will follow CR 140 and branch out to serve four (4) minor sewer districts. The trunk line currently exists from downtown to a point above the bluff in the vicinity of Guardian Angels cemetery and serves the Highlands neighborhood.

Southwest Sewer District

The Southwest District is the largest in the study area and contains approximately 2,300 acres in total. Only the eastern one-third of the district lies within the current municipal boundaries of Chaska. The remainder is in Laketown and Dahlgren Townships. Within the southwest growth area, the Southwest District includes most of the land west of Hwy 212 and is almost entirely rural and agricultural today. The topography generally consists of large plateau areas traversed by deep ravines formed by West Chaska Creek. Elevations range from a high of 1,040 ft. to a low of 730 ft. The planned trunk sewer line will be follow Creek Road from downtown northwest to Hwy 212 and then branch out to serve the minor sewer districts west of the Hwy 212 corridor.

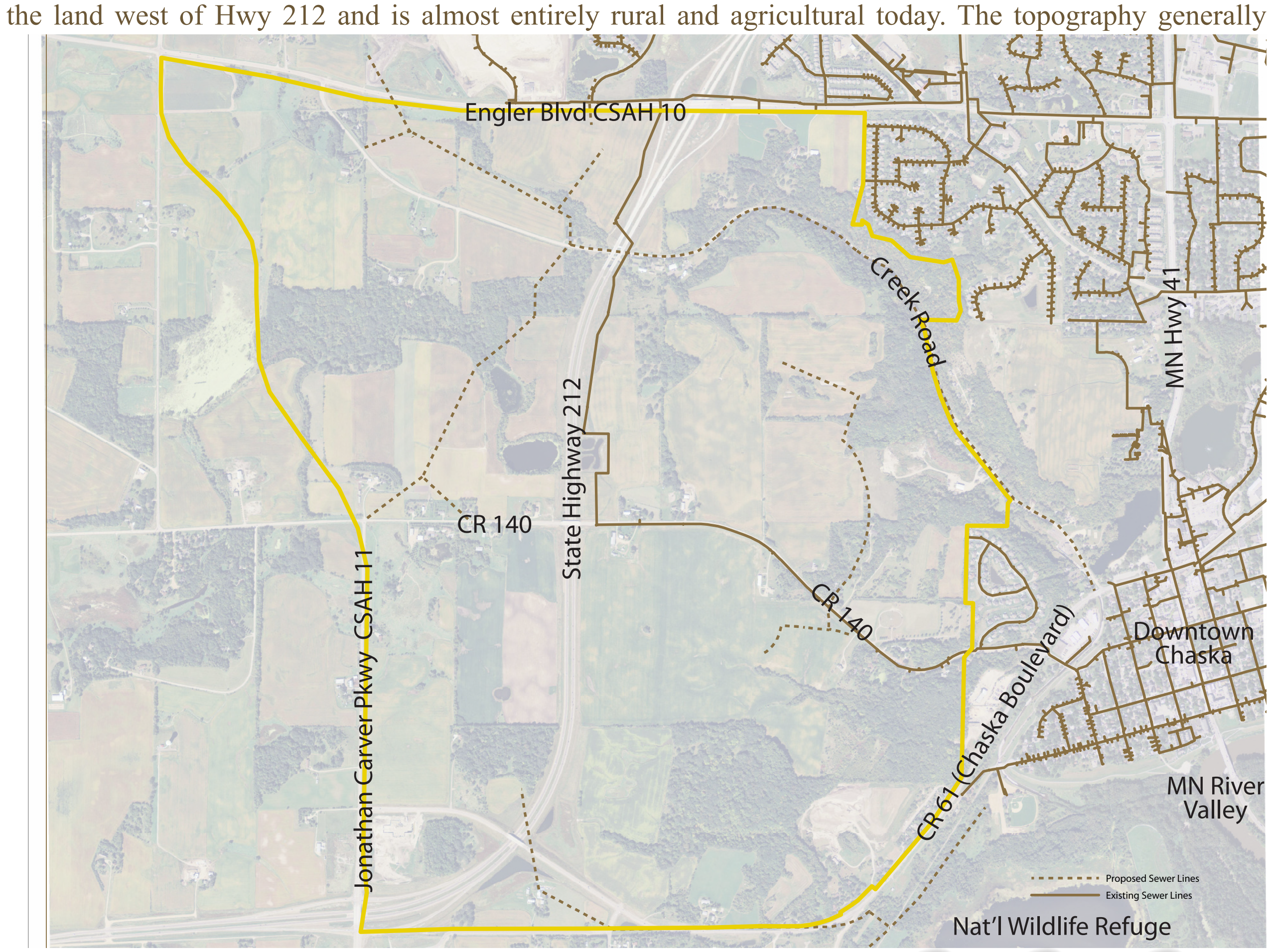
South Sewer District

The South Sewer District contains approximately 420 acres of land and lies almost entirely within Chaska's municipal boundaries. Within the southwest growth area, the South District includes the areas below the river bluff and along CSAH 61. This sewer district is very similar to the Southwest District in both existing land use and topography with drainage falling rapidly in elevation through ravines to CSAH 61. Elevations range from a high of 970 ft. at the west end to a low of 740 ft. near CSAH 61. The planned trunk sewer line will follow CSAH 61 to serve the minor sewer districts below the river bluff, including one minor sewer district west of the Hwy 212 corridor.

Water Service System

The City of Chaska's water system includes water supply, treatment, and storage to meet the water demands of the City's residents and businesses. The City of Chaska operates six (6) groundwater wells and one (1) water treatment plant to supply water to the distribution system. Chaska maintains five (5) water storage tanks to sustain water system pressures and provide water during emergencies. To serve the varying ground elevations within the City, four (4) pressure zones operate to maintain ideal water system pressure for all customers.

Up to eight (8) additional wells will be required to meet ultimate water demands and should be constructed as water demands increase. The City of Chaska's current capital improvement plan includes the construction of four (4) additional wells by 2020; an additional four (4) wells will be needed post-2020 to meet the City's ultimate water demands. An additional 2.5 MG is recommended to be constructed as a single water tower located in the southwest growth area. As development occurs, water demands and development densities should be reviewed to ensure the Southwest Tower is constructed to meet anticipated growth.



Sewer Service System

Water Service System

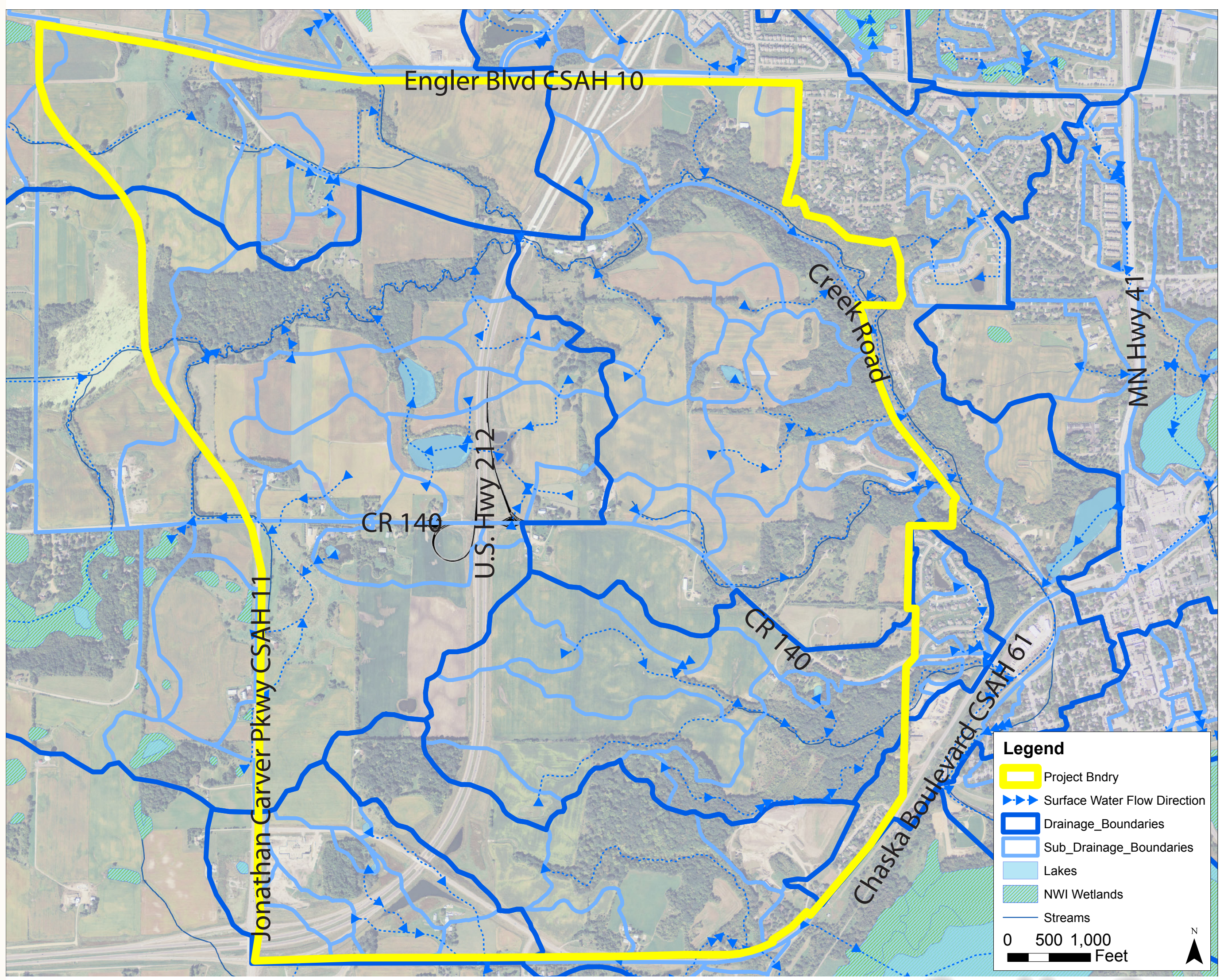
Public Facilities

Storm Water System

The surface water management system for the City of Chaska is organized into ten (10) major drainage districts city-wide. Each major drainage district is divided into smaller sub-districts. The sub-districts are generally drawn to encompass all drainage to a particular pond, wetland, lake, or storm sewer. The southwest growth area is located within the two (2) following districts, which are under the jurisdiction of the Carver County Watershed Management Organization (CCWMO):

Lower Chaska Creek District

The Lower Chaska Creek District is approximately 1,049 acres located in the south-central portion of the City. The district is comprised of mostly undeveloped area that consists of largely agricultural use with undevelopable ravines and some natural wooded and wetland areas. The upper reaches of the district have begun to develop. Engler Boulevard (CSAH 10) separates some of the older development in the south (Liberty Heights and North Meadow neighborhoods) and new development to the north (Points West and Clover Ridge neighborhoods). A majority of the southwest growth are, all land above the river bluff, lies within the Lower Chaska Creek District. The entire area drains to West Chaska Creek which bisects the district draining east then southeast towards the Minnesota River. Prior to reaching the river, the creek is intercepted by the Corps of Engineers diversion channel and routed around the downtown area.



Storm Water System

South Chaska Creek District

The South Chaska Creek District is approximately 5,449 acres located in the southwest portion of the City. The vast majority of the district is currently located outside Chaska's municipal boundary, but has been included in the City's LSWMP study area for water quantity and quality modeling accuracy. This district is currently undeveloped and consists of largely agricultural use with some natural wooded and wetland areas. The southernmost portion of the southwest growth area, land lying below the river bluff, lies within the South Chaska Creek District. Along with the Chaska Creek District, this district is the headwaters of Chaska Creek, and generally drains east to the confluence with Chaska Creek. From there, Chaska Creek continues to drain east and south through the Lower Chaska Creek District and ultimately to the Minnesota River. Prior to reaching the river, the creek is intercepted by the Corps of Engineers diversion channel and routed around the downtown area.

The City's LSWMP recommends a regional stormwater basin approach by consolidating individual basins that would normally be constructed in each subdivision or development, into central facilities when feasible. Regional basins provide a cost-conscious approach to stormwater management by providing the following benefits:

» *Combining engineering, design, and construction cost for individual developments;*

» *Utilizing naturally occurring depressions and existing topography to minimize excavation costs;*

» *Reducing total land required for stormwater management by providing efficiently designed central facilities in place of several individual facilities;*

» *Minimizing the cost to manage the system by creating fewer stormwater basins;*

» *Lowering the cost of maintenance;*

» *Providing flexibility in design of larger central facilities to incorporate recreational opportunities, create wildlife habitat areas and improve aesthetic benefits for area residents; and*

» *integrating low areas with upland areas to improve wildlife habitat.*

Storm Water Management is Key to Future Development Patterns

Public Facilities

Other Public Facilities

Open Space System

The southwest growth area is surrounded by a wealth of beautiful natural open spaces, which include:

- » *Minnesota Valley National Wildlife Refuge, Chaska Lake Unit (jurisdiction of the U.S. Fish & Wildlife Service)*
- » *Minnesota Valley State Recreation Area (jurisdiction of the MN Dept. of Natural Resources)*
- » *West Chaska Creek ravine and steep slopes*
- » *Proposed remnant Big Woods natural area*
- » *University of MN Landscape Arboretum, which is located at the northern end of the Chaska Greenbelt*

Parks

There is just one existing neighborhood park within the southwest growth area, which is Highland Park on the eastern edge of the area. This existing park, which is on the western edge of the Highland residential development, is planned to be expanded at the time residential development occurs to the west.

Nearby community parks in the downtown area include:

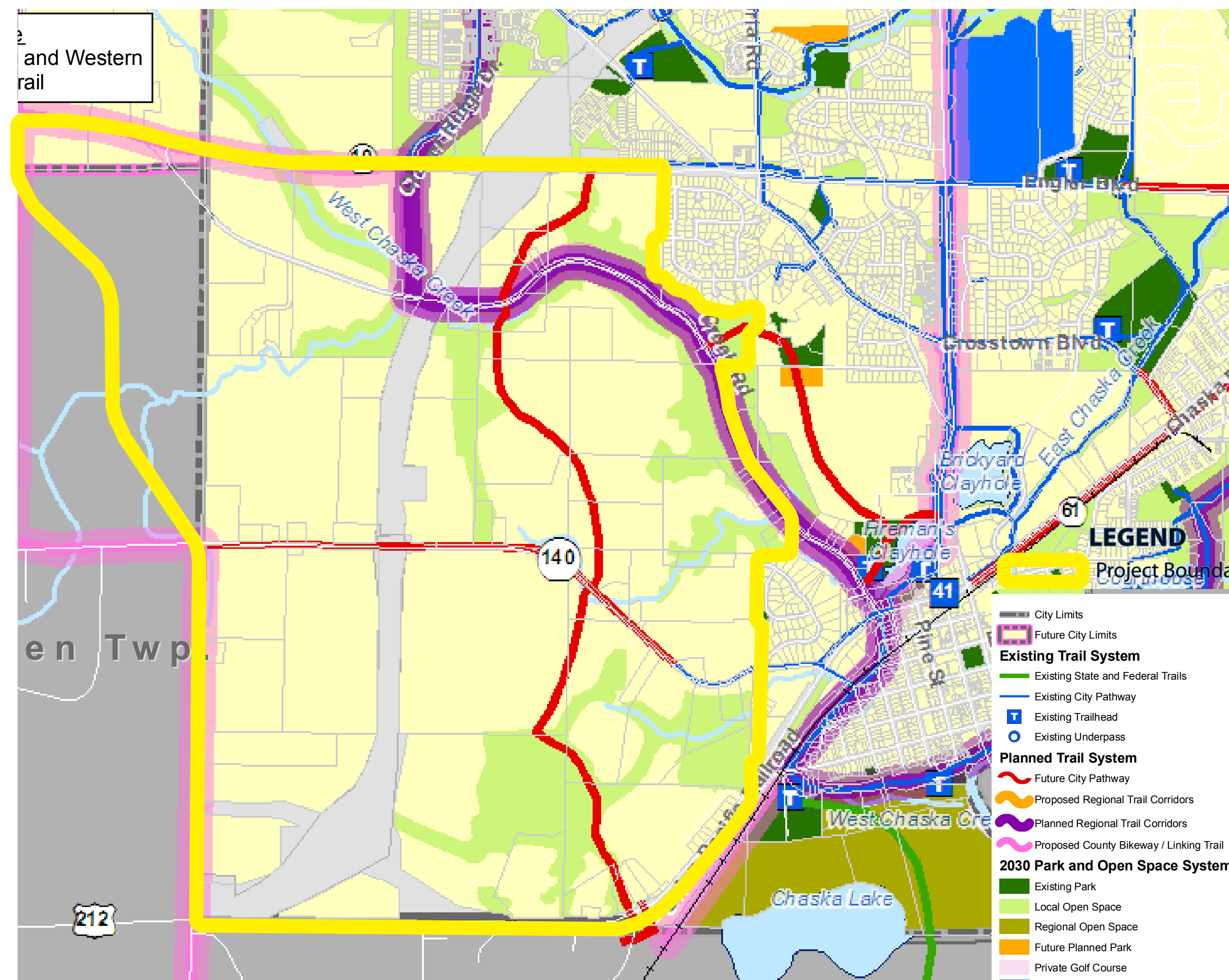
- » *Athletic Park, which is a baseball park for the community and Chaska High School that has been designated as a historic site for its "town ball" character*
- » *Firemen's Park/Schimelpfenig Park, which includes Firemen's Clayhole, many active recreational facilities, and passive natural areas and also is a designated historic site*
- » *Winkel Park/Riverbend Park, which are located adjacent to the Minnesota River and the National Wildlife Refuge*

Trails

Existing trails near the southwest growth area include:

- » *Trail along eastern segment of CR 140*
- » *River levee trail surrounding historic downtown Chaska*
- » *Chaska Lake Trail (1.7 mile unpaved trail) within the National Wildlife Refuge, accessed via a trailhead at Athletic Park*
- » *Minnesota Valley State Trail, which is located on the south side of the Minnesota River and accessed via the trail on the MN Hwy 41 bridge*
- » *City trails along Engler Blvd (CSAH 10) and Clover Ridge Drive, north of the southwest growth area*
- » *City trail through Firemen's Park, connecting to city trail system north and east*

Nearby Firemen's Park



2030 Park & Open Space System Plan

Market Analysis Summary

Purpose

An important component of this project was a market analysis to understand the economic position of the southwest Chaska growth area and the likely scenarios for future growth and development. The market analysis addressed the relevant development sectors being considered for this area, including business park/office/light industrial, retail/commercial, and residential.

The questions driving this market analysis were:

» *What type of development can occur in the southwest growth area that will be compatible with the existing community, respond to the market trends in the Twin Cities metro area, and not undermine the potential for continued revitalization of Chaska's historic downtown?*

» *Given that Chaska and the surrounding area are currently home to fairly affluent household types that tend to live on the edges of metropolitan areas, how can the community continue to retain these households and attract additional households with favorable demographic factors, as the area urbanizes?*

Chaska is currently a pleasant suburban edge small town with a solid base of primarily upper middle class households that commute into the city, young growing families looking for affordable starter homes, and a strong component of more wealthy groups that are attracted to the edges of metropolitan areas. The downtown area contributes a special quality to the community that has the potential to attract a range of income and lifestyle groups and allow for greater density than might be typical for a suburban community serviced by a regional freeway such as U.S. Hwy 212. Retaining a "small town feel" in the future planning and design of projects in the southwest growth area will help the community retain favorable household segments. These target groups of households will provide the foundation for ongoing growth in the study area and ensure significant spending power to fuel the overall Chaska economy over the next few decades.

Key Conclusions

Demand and Absorption

This analysis calculates projected demand and absorption for residential, retail, and office/business park uses within the southwest growth area over the next ten to twenty years. Current projections provided by the Metropolitan Council and City of Chaska for population and employment for the community were used for this analysis. The Met Council provides long term projections of employment and population for every community in the Twin Cities metro for the next 30 years. It is important to note that these projections should not be considered to be the final voice in terms of future projections for various land uses, but given the difficulty in projecting out into the long term future regarding market and demographic dynamics, projections from organizations such as Met Council represent the best "starting point" for discussions. Projections from Met Council and similar regional planning groups may be somewhat inaccurate due to two factors. First, these projections often extrapolate, to a certain extent, existing or historical trends in terms of population growth or employment generation for various segments of a metropolitan area. Therefore, it is usually assumed that fast growing counties will continue to grow quickly, and vice versa. However, this methodology does not take into account fully "newly emerging" suburban areas such as Chaska. Projections may need to be altered to account for rapid growth rates in newly suburbanizing communities or those located at the urban edge. Second, to a certain extent, projections are influenced by politics. Leaders from various parts of a metro area sometimes argue that their area is more likely to receive more of a metro area's growth and therefore "campaign" for changes to methodology in projections. Both of these factors may mean that, in the case of Chaska, providing an alternative scenario for consideration of future growth may make sense.

The following general assumptions govern this projection and the resulting conclusions:

» *Given that the City of Chaska features few other areas of larger parcels available for infill development of residential or commercial properties, the analysis assumes that the SW Chaska quadrant will absorb 60 percent of the future residential growth in the community, tied to long term projections of population and households for the City of Chaska. The analysis assumes that the SW Chaska area would absorb nearly all of the future growth in retail and office uses in the community, given the limited availability of sites for these land uses elsewhere in the community.*

» *In line with historical trends and recent observations in the market, the analysis assumes that the majority (60 percent) of residential development will proceed as single family detached product. The remainder will be split between townhomes (20 percent) and multi family (20 percent). This is in line with historical trends in suburban communities in the Twin Cities over the last few decades. While feedback from developers as part of the site analysis indicates that the vast majority of residential activity in suburban Twin Cities markets as of 2012 includes single family detached products and that townhomes and similar multi-family product does not sell very well, this analysis assumes that the market will return to a more traditional mix of multi-family/attached versus single family detached over the long term. As household size continues to decrease and as growth moves farther out from the urban core in the Twin Cities, demand for attached or multi-family product should increase in Chaska and similar suburbs in the region. In addition, the 40 percent allocation for multi-family includes apartment units, in addition to townhomes. As Chaska continues to develop, part of the Southwest Growth Area may include apartment complexes that would increase overall density, thereby increasing the residential base for retail and related land uses at key activity centers.*

» *The Scenario 1 considers future growth strictly based upon Met Council projections for population and employment. However, we have provided an alternative scenario (Scenario 2) in which population and employment growth exceed these official estimates by a modest 10 percent.*

OFFICE / BUSINESS PARK PROJECTIONS	**Scenario 1**	**Scenario 2**
Office / Business Park Demand Projections (Macro) 2010-2020 (Sq Ft)	480,000	528,000
Floor to Area Ratio (F.A.R.)	0.2	0.2
Total Acreage	**55.1**	**60.6**
Office / Business Park Demand Projections (Macro) 2020-2030 (Sq Ft)	450,000	495,000
Floor to Area Ratio (F.A.R.)	0.2	0.2
Total Acreage	**51.7**	**56.8**
RETAIL PROJECTIONS		
Retail Demand Projections (Macro) 2010-2020 (Sq Ft)	196,800	216,480
Floor to Area Ratio (F.A.R.)	0.2	0.2
Total Acreage	**22.6**	**24.8**
Retail Demand Projections (Macro) 2020-2030 (Sq Ft)	120,000	132,000
Floor to Area Ratio (F.A.R.)	0.2	0.2
Total Acreage	**13.8**	**15.2**
RESIDENTIAL PROJECTIONS (Housing Units)		
Single-Family Detached (SFD) 2010-2020	1,536	1,690
Multi-Family (MF)2010-2020	512	563
Townhouses (TH) 2010-2020	512	563
*Assumes 60% SFD, 20% MF, and 20% TH		
Single-Family Detached (SFD) 2020-2030	1,344	1,478
Multi-Family (MF)2020-2030	448	493
Townhouses (TH) 2020-2030	448	493
***Assumes 60% SFD, 20% MF, and 20% TH**		

Business Park / Office / Light Industrial

- *The analysis uses traditional suburban assumptions regarding density (in terms of FAR) in order to project future demand for office or business park acreage.*
- *Given the barrier of crossing the Minnesota River on Highway 41 (the prospect of crossing through Chaska on downtown city streets), and the distance from Chaska to Interstate 35 to the east, the Chaska area, and the Southwest Growth Area, are not viewed as potential locations for distribution centers, larger warehouses, or other "big box" business park or light industrial uses. Areas to the east in Shakopee and Savage enjoy a much more favorable location closer to Interstate 35 with more direct access to this major north-south connector (which of course links the Twin Cities with Iowa and points south to Texas).*
- *As Chaska gains additional residential population, locally serving office space (including spaces for lawyers and other professional services groups, medical office, dental, etc.) will clearly be in demand over time. The magnitude of these spaces is more limited, of course, compared to larger scale employers. However, as the Southwest Growth Area continues to grow, locally serving office will remain part of the potential development mix in the area.*
- *Given the level of education of the workforce in Chaska and Carver County, the presence of "C Suite" management living nearby in the Minnetonka area, and the prevalence of medical and high tech companies in the Twin Cities, over time Chaska may represent a logical location for future office or business park space for medical tech or high tech companies in general. The presence of significant fiber optic infrastructure in the Chaska area also may entice additional high tech companies to locate in the community.*
- *Office and business park land uses may proceed very slowly in phasing over several decades, given the slower economy in general (slower growth may be "the new normal") and the sense in business circles that Chaska is still just too far out on the edge of the metro area. Brokers have noted that a number of companies have considered revamping or redeveloping older office properties in older suburban communities such as Edina in order to be closer to downtown and the pool of potential younger workers, who are more apt to live in the urban core. In addition, while the office market is recovering in the Twin Cities, significant inventory remains, and it may take time to gain momentum in office park or business park uses in the Southwest Chaska area.*
- *While the office and business park numbers may not be tremendously large, the community may wish to program for an additional amount of office and business park space to provide capacity in case the community exceeds its economic development goals and is able to attract a series of larger users to the area.*
- *In terms of distinction between office and light industrial, based upon discussions with local real estate experts the future employment centers in Chaska are likely to include technology or medical related tenants. The area may feature small manufacturing or product development centers, similar to the types of uses currently located in the area. Given closer adjacency to I-35, areas to the east in Shakopee and Lakeville are more likely to attract larger format industrial or business park uses. The Chaska area is unlikely to attract distribution centers or industrial uses that create externalities. Instead, the area is more likely to attract "cleaner" business park uses (small assembly, product development, shop space, etc.) as well as normal office uses found in any business park in the country.*
- *The area is less likely given its distance from the core of the metro area to attract very large format corporate headquarters (such as a Pillsbury, etc.) While the area's adjacency to an affluent belt of residential uses means that many smaller companies may locate headquarters in Chaska in the future, major corporate headquarters are more likely to locate closer to the 494 loop.*

Retail / Commercial

- *The area around the Carver interchange has been conceived as a major retail destination serving Chaska and the growing areas of Carver County. However, the distance of the Carver area from the rest of the metro (it literally is on the edge of the corn fields) has led to some pullback in the local real estate markets. Because retailers now want to have actual residents with disposable income in place before they build, the Carver site is more speculative and therefore more unappealing given the reality of today's marketplace. In general, retailers want a "360 degree" trade area (meaning that they have potential customers located in all four directions). For the foreseeable future, the Carver interchange would represent only a "180 degree" trade area (no development to the west is anticipated) and therefore could be viewed as less appealing compared to retail sites in Chaska.*
- *Highway 10 / Engler is viewed in retail circles as a good east / west connector from US 212 and in general may represent a key location for neighborhood retail. Developing some level of retail at the Engler interchange would at least allow Chaska to have a retail presence along the 212 corridor, which the community lacks right now. Assuming residential development moves forward near Engler over the short term, developing neighborhood retail (including a grocery plus in line retail) at the interchange area may prove viable.*
- *Over time, assuming the 140 interchange is installed and residential development in the Southwest Chaska area proceeds, then the Highway 140 interchange could represent a solid neighborhood or sub-regional retail node in the future. The location of the Highway 140 crossing closer to the heart of the metro compared to the Carver interchange could actually make the Highway 140 interchange more dominant in terms of retail trade, depending on timing.*
- *Even looking three to four decades out, this part of Chaska is not viewed as a future location for regional retail (including a mall or equivalent, or destination retail such as a Bass Pro Shop, Cabela's, outlet mall, etc.). There are too many other sites in the south and southwest metro with better freeway access (on a freeway that connects to larger population signs compared to US 212) that would represent more logical locations for super regional retail.*

Residential

- *Although the market is still slowly recovering, assuming recovery continues, residential development could commence in parts of the Southwest Chaska Growth Area almost immediately, with single family detached products. Construction of apartment units could also proceed fairly quickly.*
- *The overall demand numbers assume that over time part of the population may again explore living in maintenance free or more compact housing units in the suburbs. Therefore, the demand numbers assume that townhomes or condominiums could be developed for part of the residential program over the long term. The key with all of this is that developers should be allowed to retain flexibility in the residential products they offer within the Southwest Chaska area, in order to respond to changes in the market.*
- *In keeping with existing market conditions, the near-term developments in the study area will cater primarily to traditional families with children, in selling single family detached housing.*
- *Although the analysis of demographics indicate that the area has generally favorable psychographic groups, and that a portion of these segments may wish to live in townhomes or similar products, the overall takeaways from the market analysis at this time envision these groups continuing to live in fairly conventional single family detached product in the future.*

Phasing

- *Because the exact timing of the Highway 140 interchange remains uncertain, this study recommends that development proceed in logical phases. Because the interchange may not be installed for some time, initial phases of development of all land uses should orient toward Engler, or near the edge of the bluff on the south and east sides, to take advantage of adjacency to Highway 61 and in turn to the downtown area.*
- *Phasing should also align with strategies to extend utilities from Chaska to the Southwest Growth Area.*

Chapter 3
Alternatives Analysis

Concept Plan Alternatives

The process to develop preliminary concept alternatives included extensive input from the planning team, stakeholders, city staff and property owners. Upon completion of background analysis, site studies, market analysis and goal setting, the process of developing plan options began. This process included a Growth Concept Workshop, concept development, property owner reviews and public open house to provide feedback on plan options.

Growth Concepts Workshop

The planning process began with a two-day Growth Concept Workshop in July 2012 to generate preliminary land use programs, concept drawings, diagrams, design and planning principles and themes. Participants in the workshop included the consultant team and key City staff. The workshop provided the opportunity to build consensus on common planning elements at an early stage in the process and explore a variety of development strategies.

Plan Alternatives

The planning team developed three concept plan alternatives during the workshop. Each of these provided the foundation for further concept plan development. Key plan elements common to each alternative includes:

» *Walkable, mixed-use neighborhoods*

» *Conservation design in Chaska Greenbelt area*

» *Mix of housing choices*

» *Business park uses located at Hwy 212 interchanges*

» *Commercial/retail uses located at Hwy 212 and CR 140*

» *Gateway treatment at key entrances into the community*

» *Enhance downtown street and trail connections to the Heights of Chaska*

» *Creek road decision (road and trail or just a trail?)*

» *Include a community park (approximately 50 acres)*

» *Include neighborhood parks in the residential areas*

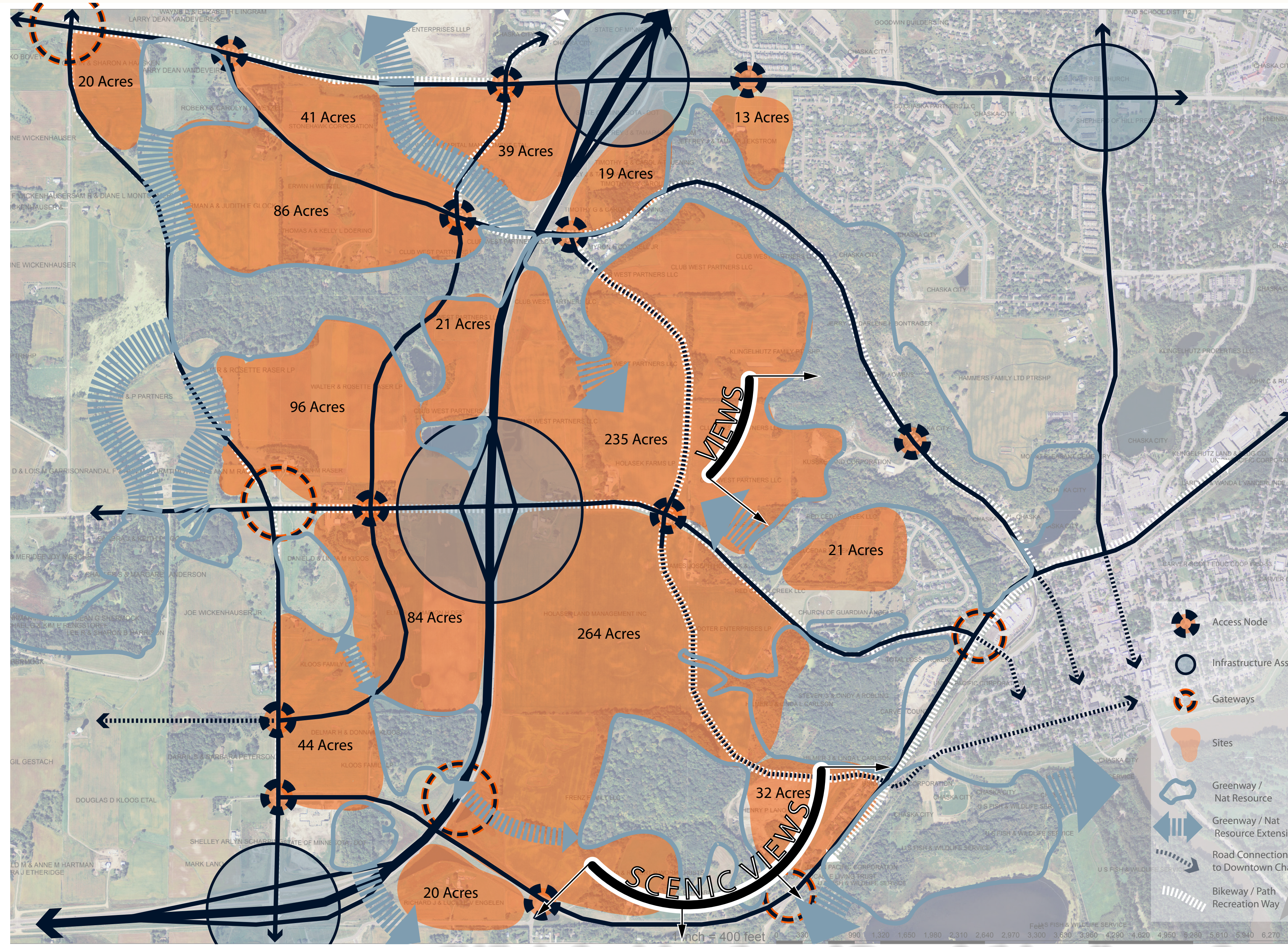
» *Provide for a potential for an elementary school*

» *Provide for an electric substation*

» *Provide for a water tower*

» *Plan for a loop trail and open space system within the growth area*

The following pages provide brief summaries of the big concept ideas, land use programs, and specific plan elements considered in each plan alternative:



SW Chaska Growth Area - Framework Diagram for Exploring Alternative Concepts

Alternative One

Big Ideas

The big idea for Alternative One is to create a community spine along County Road 140, strengthening the relationship between Southwest Chaska and downtown Chaska. The following is a list of key planning strategies and elements:

» *Locate community destinations along CR 140 (mixed-uses, retail, community park)*

» *Locate a center of activity at the CR 140 and Hwy 212 interchange (retail, business park, mixed-use)*

» *Locate retail uses on both sides of Hwy 212*

» *Concentrate business park uses along Engler Blvd (CSAH 10)*

» *Locate walkable neighborhoods on both sides of Hwy 212*

» *Locate the community park in the Greenbelt, along CR 140*

» *The Chaska Greenbelt should include conservation residential, community park and open spaces*

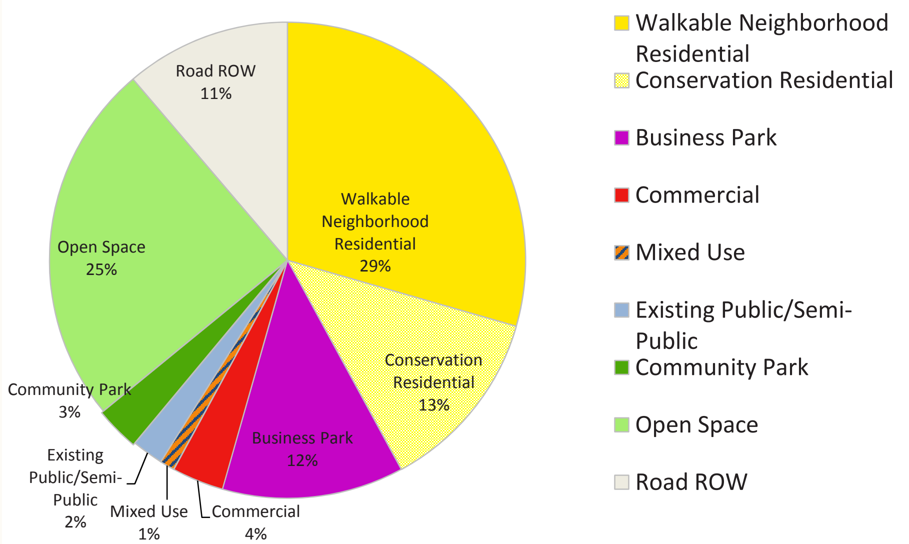
» *Design the road network to maximize street connections to downtown Chaska*

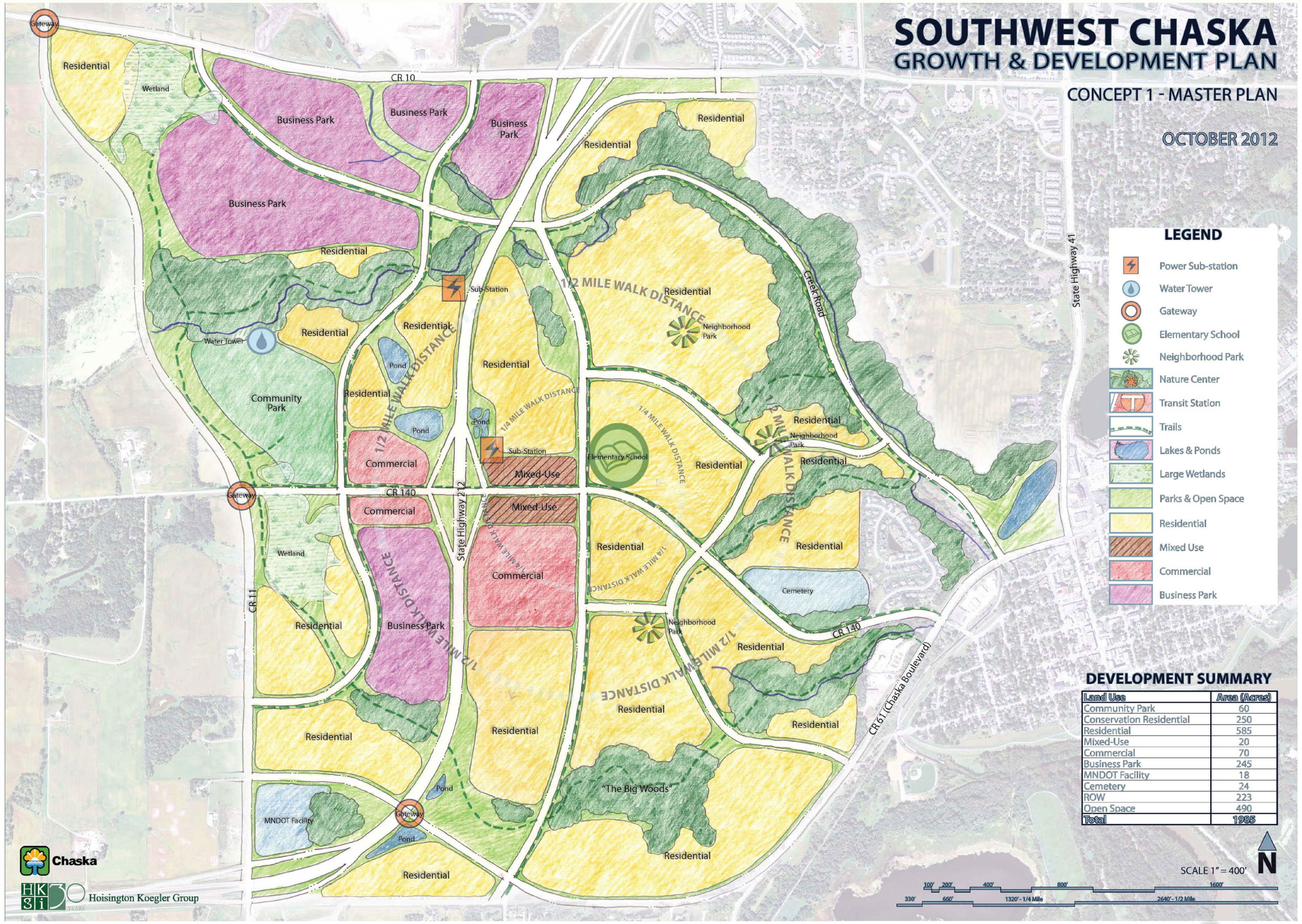
» *Maintain the entire length of Creek Road to maximize access to downtown Chaska*

Land Use Program

The land use mix for Alternative One includes the following:

Land Use	Acres	Percent of Total
Walkable Residential	585	29%
Conservation Residential	250	13%
Business Park	245	12%
Commercial	70	4%
Mixed-Use	20	1%
Existing Public/Semi-Public	42	2%
Community Park	60	3%
Open Space	490	25%
Road Right of Way	223	11%
Total	**1985**	**100%**





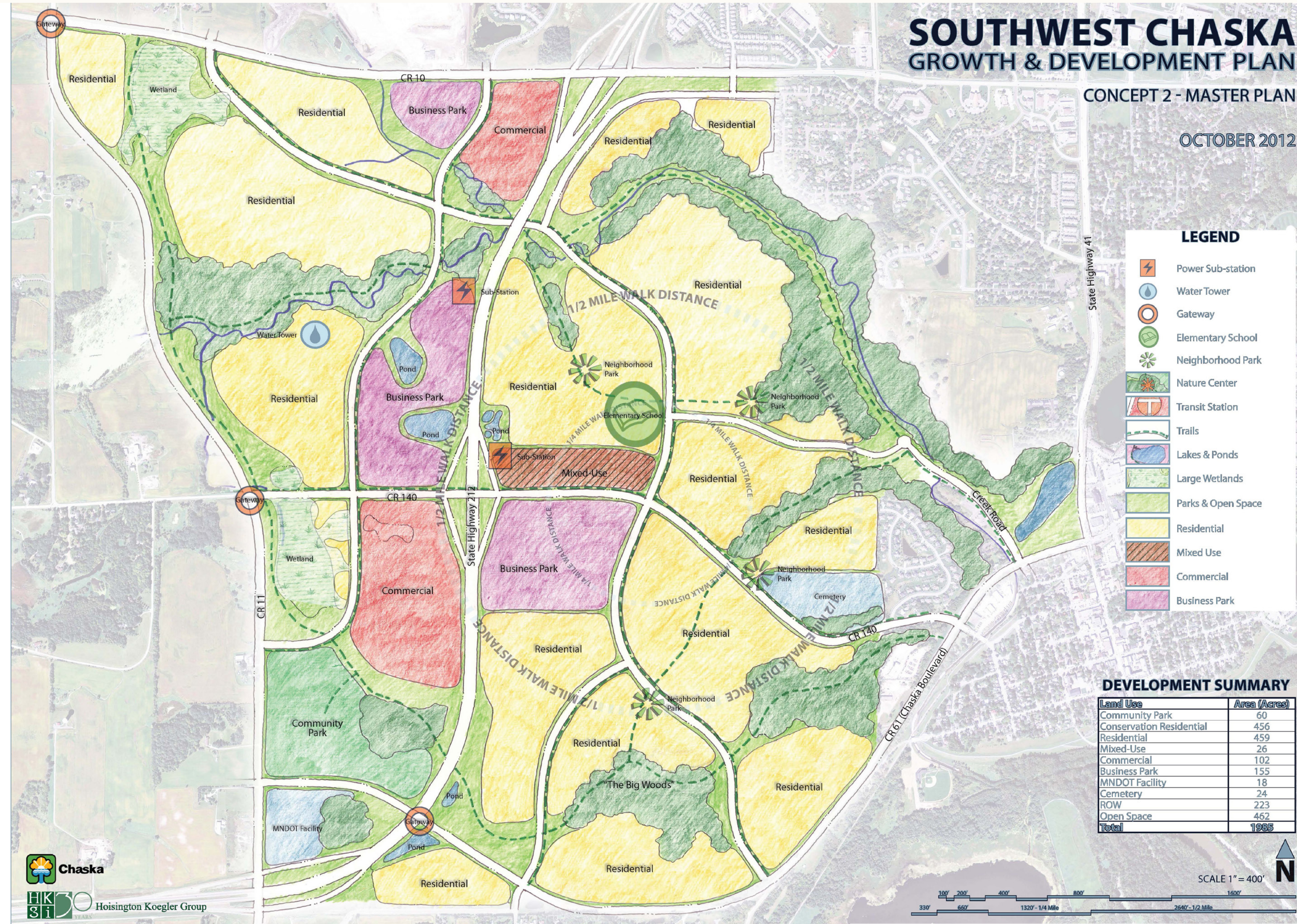
Concept 1

Alternative Two

Big Ideas

The big idea for Alternative Two is to create a community focused on residential neighborhood development. The following is a list of key planning strategies and elements:

- *Plan for more residential development*
- *Plan for a smaller business park than in Alternative One*
- *Concentrate business park uses at key interchanges (CR 140/Hwy 212 and CSAH 10/Hwy 212)*
- *Locate business park uses east and west of Hwy 212*
- *Locate a commercial retail center west of Hwy 212 at CR 140*
- *Locate neighborhood commercial retail at Hwy 212 and CSAH 10 interchange*
- *Locate a mixed-use area east of Hwy 212 along CR 140*
- *Locate the community park in the Chaska Greenbelt at the edge of the community*
- *The Chaska Greenbelt should include conservation residential, community park and open spaces*
- *Eliminate a section of Creek Road to reduce long-term City maintenance costs*
- *Locate walkable residential neighborhoods east of Hwy 212*

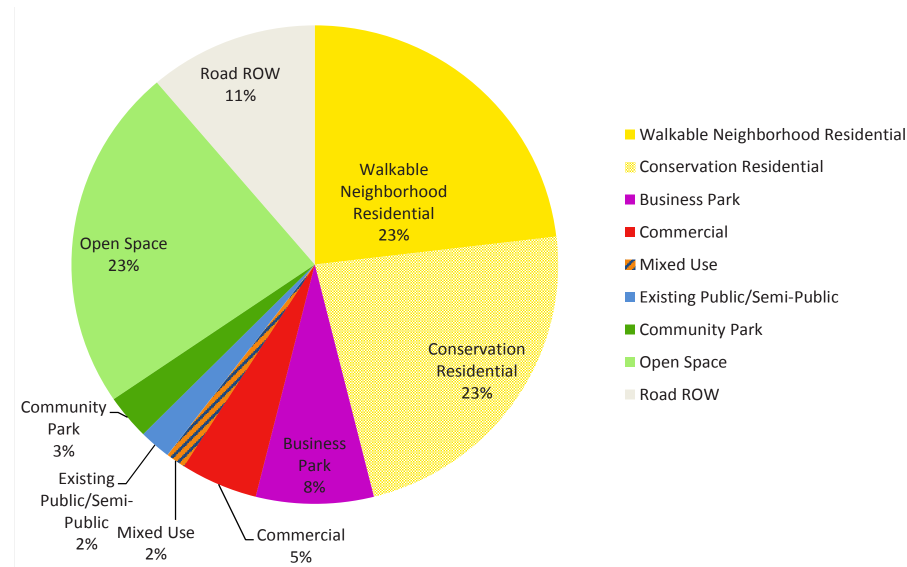


Concept 2

Land Use Mix

The land use mix for Alternative Two includes the following:

Land Use	Acres	Percent of Total
Walkable Residential	459	23%
Conservation Residential	456	23%
Business Park	155	8%
Commercial	102	5%
Mixed-Use	26	1%
Existing Public/Semi-Public	42	2%
Community Park	60	3%
Open Space	462	23%
Road Right of Way	223	11%
Total	**1985**	**100%**



Alternative Three

Big Ideas

The big idea for Alternative Three is to create a community with distinct district identities. The following is a list of key planning strategies and elements:

» *Locate walkable residential neighborhoods east of Hwy 212*

» *Locate a large business park west of Hwy 212*

» *Integrate a commercial retail center with the residential neighborhoods and a mixed-use area*

» *Locate neighborhood commercial retail at Hwy 212 and CSAH 10 interchange*

» *Locate a hub of activity along CR 140, east of Hwy 212 (retail, mixed-use, school)*

» *Include a transit station at the Hwy 212 and CR 140 interchange*

» *Preserve the Big Woods in its entirety, and locate a nature center within the Big Woods*

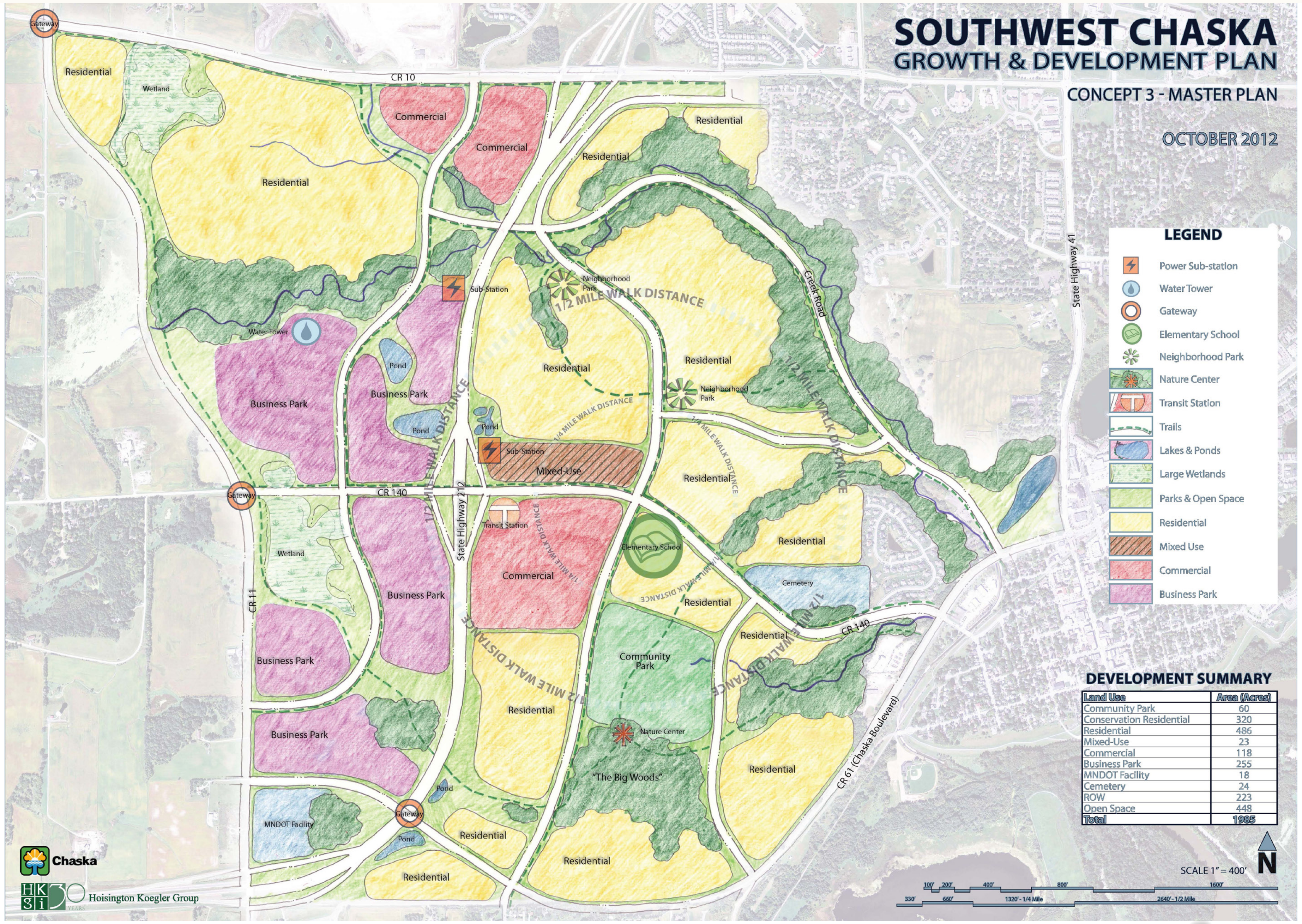
» *Locate the community park adjacent to the Big Woods*

» *Locate an elementary school adjacent to the community park*

» *Eliminate the western portion of Creek Road*

» *Locate conservation residential in the northwest portion of the growth area*

» *Include business park, conservation residential and open spaces in the Chaska Greenbelt*

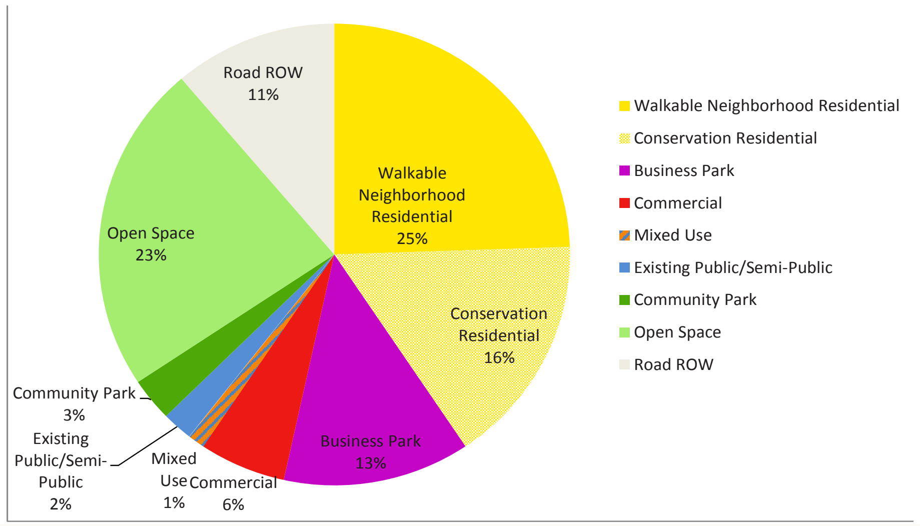


Concept 3

Land Use Program

The land use mix for Alternative Three includes the following:

Land Use	Acres	Percent of Total
Walkable Residential	486	24%
Conservation Residential	320	16%
Business Park	255	13%
Commercial	118	6%
Mixed-Use	23	1%
Existing Public/Semi-Public	42	2%
Community Park	60	3%
Open Space	458	23%
Road Right of Way	223	11%
Total	**1985**	**100%**



THIS PAGE LEFT INTENTIONALLY BLANK

Chapter 4
Community Involvement

Property Owners Meetings

Since this large study area encompasses a substantial number of property owners, the project team met with property owners almost monthly during the project. The project team held seven (7) meetings, including the June 26 listening session, which were open to all property owners within the SW growth area at the Chaska Community Center. The purpose of these meetings was to present information and draft concepts to the property owners' group to keep them up-to-date on the project and invite them to ask questions and provide feedback. Notes from the property owners' meetings are included in the Appendix of this plan.

City Staff Meetings

The project's consultant team worked closely with a City Staff team, which included representatives from the Community Development, Engineering, Utilities and Parks & Recreation departments. Since this large-scale plan involves land use, transportation, parks, trails, and utilities, it was critical to have each of these City departments represented on the project team. Meetings with the City Staff team were held during each phase of the planning process to ensure that there was input from and consensus across the various City departments regarding the directions of the growth & development plan.

Stakeholder Input

The community was involved in the planning process for this project in several ways, including City Staff, City Council, Planning Commission, Park Board, property owners within the SW growth area, developers, and other identified key stakeholders. This broad range of community involvement provided the planning team with input relating to valuable project information, identifying issues and questions, setting project goals, generating ideas, reviewing the alternative development concepts, and identifying the preferred development concept.

A Property Owner on One of Several Prgject Site Visits

Urban Design Workshops

Two urban design workshops were conducted as part of this project to generate development concept alternatives, bringing the context analysis together with the market analysis to identify key issues, opportunities, constraints and critical success factors. The urban design workshops resulted in the creation of the three (3) alternative development concepts and ultimately the preferred development concept that address the following elements:

» *Preservation of significant natural features*
» *Chaska Greenbelt concepts*
» *Development sub-areas/"places"*
» *Land uses*
» *Transportation network – streets, sidewalks and trails*
» *Street types*
» *Downtown connections*
» *Community park/open space system concepts*
» *Gateway/interchange concepts*

On July 19th & 20th, the project's urban design consultants – HKGi and Design Workshop – conducted an in-house Growth Concepts Workshop, which also involved City Staff, to generate initial concept alternatives for the SW Chaska growth area. The goal of the two-day workshop was to generate up to three sketch development concepts that addressed the following elements: preservation of significant natural features, open space network, Chaska Greenbelt concept, development sub-areas/"places", land use patterns & mix, transportation network (streets, sidewalks & trails), downtown connections, community park, neighborhood parks, community gateways, etc. On the afternoon of the second day, City Staff and the project's civil engineering consultants participated in a review and discussion of the preliminary development concepts to identify issues and opportunities for refining the three alternative concepts. Notes from the Growth Concepts Workshop are included in the Appendix of this plan.
On September 21, 2012, a Design Review Workshop was held to compare and critique the three alternative development concepts and begin to identify preferred directions for the growth & development plan. The workshop involved the project's urban design consultants and City Staff.

Joint CC/PC/PB Work Sessions

In order to keep the City Council, Planning Commission and Park Board engaged in the project's planning process, the project team held three (3) joint work sessions that included these three groups. Many members from these three groups also attended the Community Listening Session on June 26, 2012. On July 18, 2012, the work session was focused on the preliminary findings of the market analysis, context analysis, and discussion of the June listening session input. On September 20, 2012, the project team presented and received feedback on the preliminary market analysis report, the three alternative development concepts, and potential impacts on downtown Chaska revitalization goals On October 24, 2012, the work session was focused on reviewing and discussing the draft preferred development concept .

Developing Concepts During a Design Charette

Public Meetings

Three opportunities for general community input were provided during the project:

- *Community Listening Session in June 2012*
- *Community Open House in November 2012*
- *Public Hearing in January 2013*

A community listening session was held for the Southwest Chaska Growth & Development Plan project on June 26, 2012 at the Chaska Community Center. The meeting sign-in sheet showed 45 people attended the meeting, including City Staff and HKGi consultants. Following an overview presentation of the project's purpose, process, timeline and team, the consultants facilitated a group discussion based on some big picture questions. A significant amount of input was heard and the summary of the comments received was organized around these high level questions:

- *What are your preferences for developing land in the SW Chaska Growth Area?*
- *What have been some of the challenges with pursuing development in the SW Chaska Growth Area?*
- *How do you feel about the 2003 planning process that resulted in the Heights of Chaska Concept?*
- *What do you see as the most critical roles and responsibilities of the public sector in achieving successful development in the SW Chaska Growth Area?*

The full summary of comments is included in the Appendix of this plan. A community open house was held on November 7, 2012 at Chaska City Hall. The primary purpose of the community open house was to share information about the SW Chaska growth area; present the draft preferred concepts for land use patterns, roadway system, parks, trails and greenways; and invite questions and input regarding the draft preferred concepts. The format of the open house was oriented to project display boards that attendees could view and then ask questions one-on-one of the project team.

Developers Roundtable

An important aspect of creating a growth and development plan is to gain feedback, discussion and recommendations from the development community relating to the plan's feasibility. A Developers Roundtable, facilitated by HKGi consultants and City Staff, was held on November 7, 2012 with five developers. This group of developers represented the various development sectors being considered for the SW Chaska growth area, including industrial, office, retail, residential, and mixed-use. Information was presented about the SW Chaska study area, the market analysis, the alternative development concepts, the preferred development concept, and the draft phasing plan. During and following the presentation, the group provided a wide range of insightful comments relating to future development planning for the SW Chaska growth area. Notes from the Developers Roundtable are included in the Appendix of this plan.

Other Key Stakeholder Meetings

Other key stakeholders of future development in the southwest growth area include Carver County, City of Carver, Dahlgren Township, Eastern Carver County Schools District #112, Metropolitan Council and Southwest Transit. Carver County Public Works has jurisdiction of major roadways [CR 140, CR 11 (Jonathan Carver Parkway), CR 10 (Engler Blvd), CR 61 (Chaska Blvd)]. Carver County Watershed Management Organization (CCWMO) has jurisdiction of the West Chaska Creek watershed. Carver County Parks has jurisdiction of existing and future county trails, as well as the planned Southwest LRT Regional Trail. The City of Carver and Dahlgren Township share boundaries with the southwest growth area's western boundary. Additionally, Chaska has started a discussion with Dahlgren Township regarding potential future annexation of township land wedged between the City's current western boundary and new Jonathan Carver Parkway (CR 11). The school district was engaged regarding the potential for a future school to be located in the study area. Southwest Transit was engaged to discuss potential transit links and facilities. The Metropolitan Council will be required to review and approve the City's amendments to its 2030 Comprehensive Plan resulting from the Southwest Chaska Growth & Development Plan. City Staff engaged these other key stakeholders with individual meetings, since they were not involved in other project-related meetings. The purpose of these meetings was to share information with these key stakeholders about the project, get their input regarding issues related to future development in the southwest growth area, and discuss future steps relating to each stakeholder.

U.S. Highway 212 / County Road 140 Overpass

THIS PAGE LEFT INTENTIONALLY BLANK

Chapter 5
Preferred Growth & Development PLAN

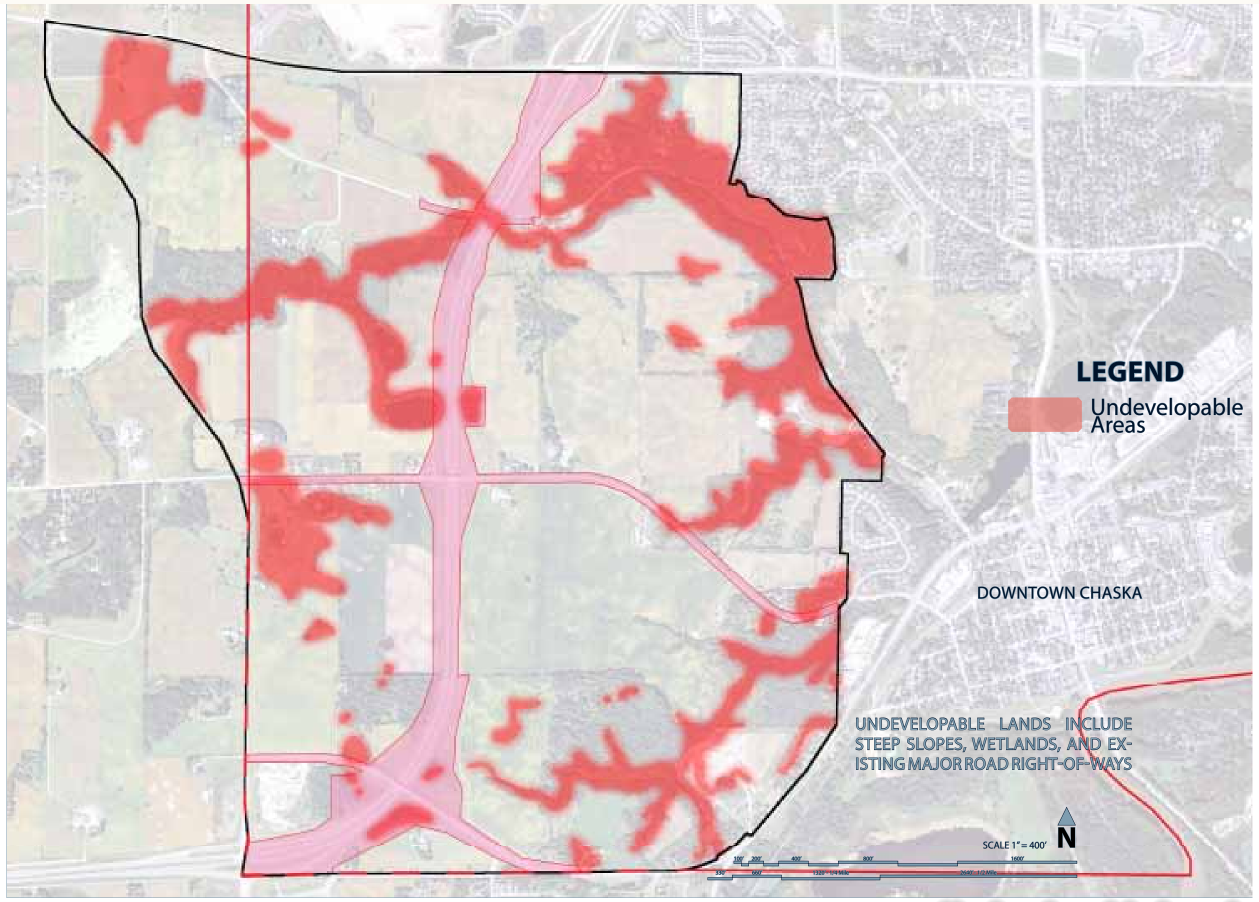
Overview

Based upon the findings from the Alternatives Analysis and feedback from key stakeholder groups, a Preferred Growth & Development Plan has been established for the southwest growth area. The preferred plan synthesizes the best features from the three alternative development concepts that were explored, relating to the future land use mix, development pattern, major roadways, and open space system. The Preferred Growth & Development Plan provides the City with a long-term vision and development framework that looks out to the year 2040. This chapter describes the preferred plan and is organized as follows:

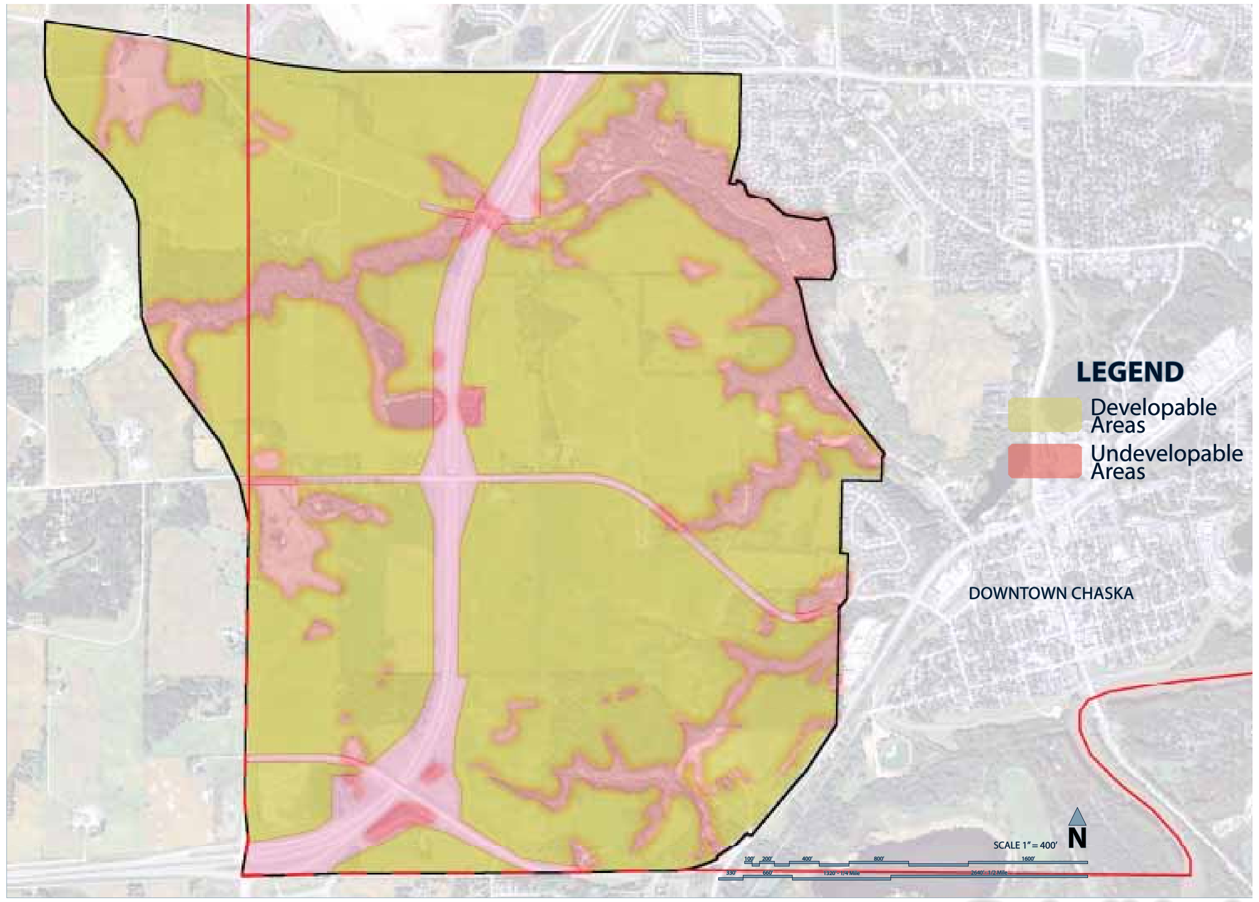
1. *Foundations of the Plan*
2. *Vision & Guiding Principles*
3. *Preferred Development Pattern*
4. *Land Use Pattern*
5. *Major Roadways Network*
6. *Chaska Greenbelt Concept*
7. *Open Space, Park & Trail System*
8. *Stormwater Management*
9. *Public Utilities*

Foundations of the Plan

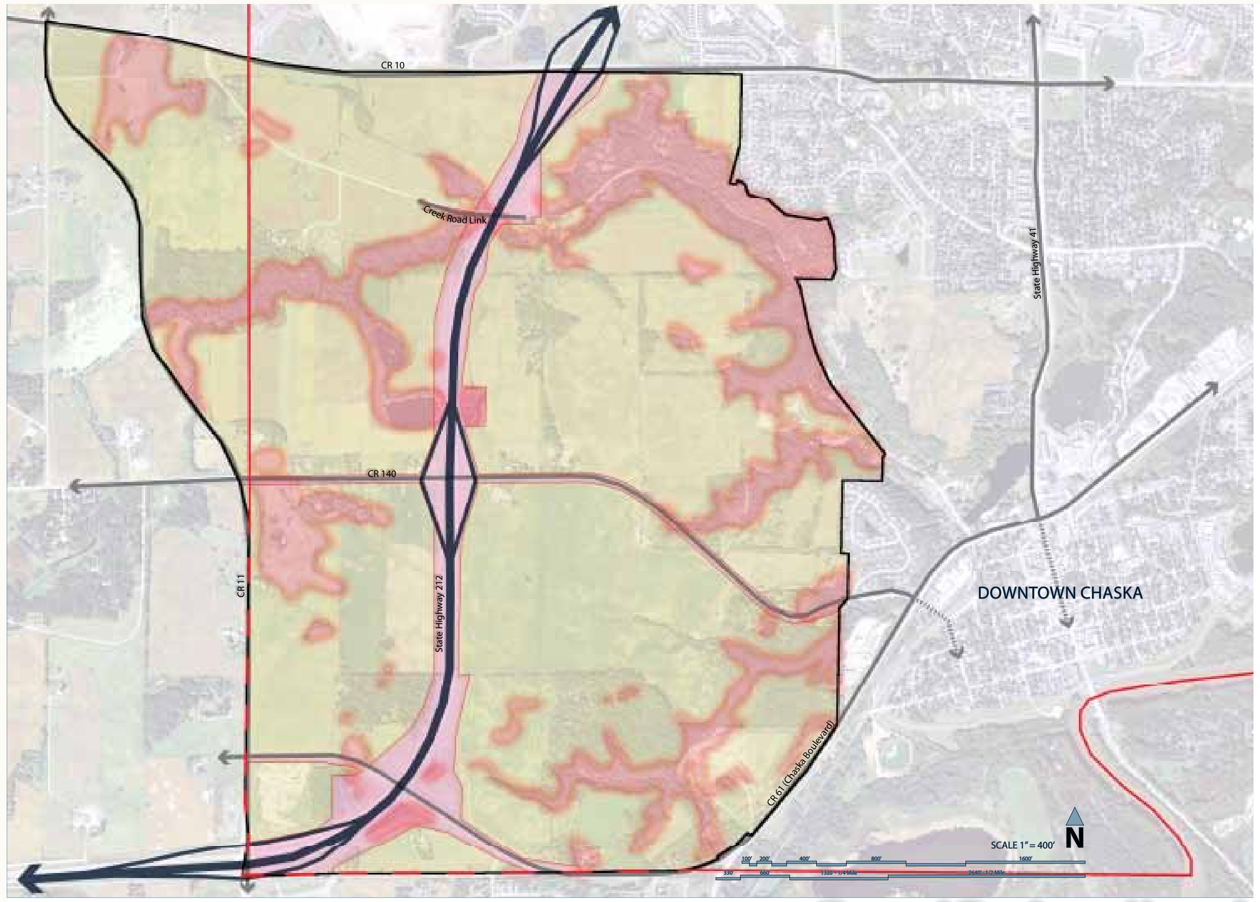
The primary foundations of the preferred development pattern are the area's natural landscape features, existing regional roadway network, existing nearby centers, the Chaska Greenbelt, and existing nearby open space/park/trail amenities. The City currently has regulations that protect lakes, creeks, rivers, floodplains, wetlands, and wooded steep slopes from development. The existing regional roadway network consists of U.S. Highway 212, Engler Blvd (CSAH 10), Chaska Blvd (CSAH 61), Jonathan Carver Pkwy (CSAH 11) and CR 140, as well as three Hwy 212 interchanges. Existing nearby centers include historic downtown Chaska, the developing business park at Engler Blvd/Hwy 212 interchange, the civic/commercial center at Engler Blvd/Hwy 41, historic downtown Carver, and the new commercial emerging at the CSAH 11/Hwy 212 interchange. Most of the land west of the Hwy 212 corridor has been designated as part of the Chaska Greenbelt, which would only allow rural residential development. Existing nearby open space/park/trail amenities include the Minnesota River Valley and National Wildlife Refuge adjacent to downtown, historic Athletic Park, Firemen's Park/Schimelpfenig Park, Highland neighborhood park, the river levee trail, and the planned regional trail (SW LRT Regional Trail).



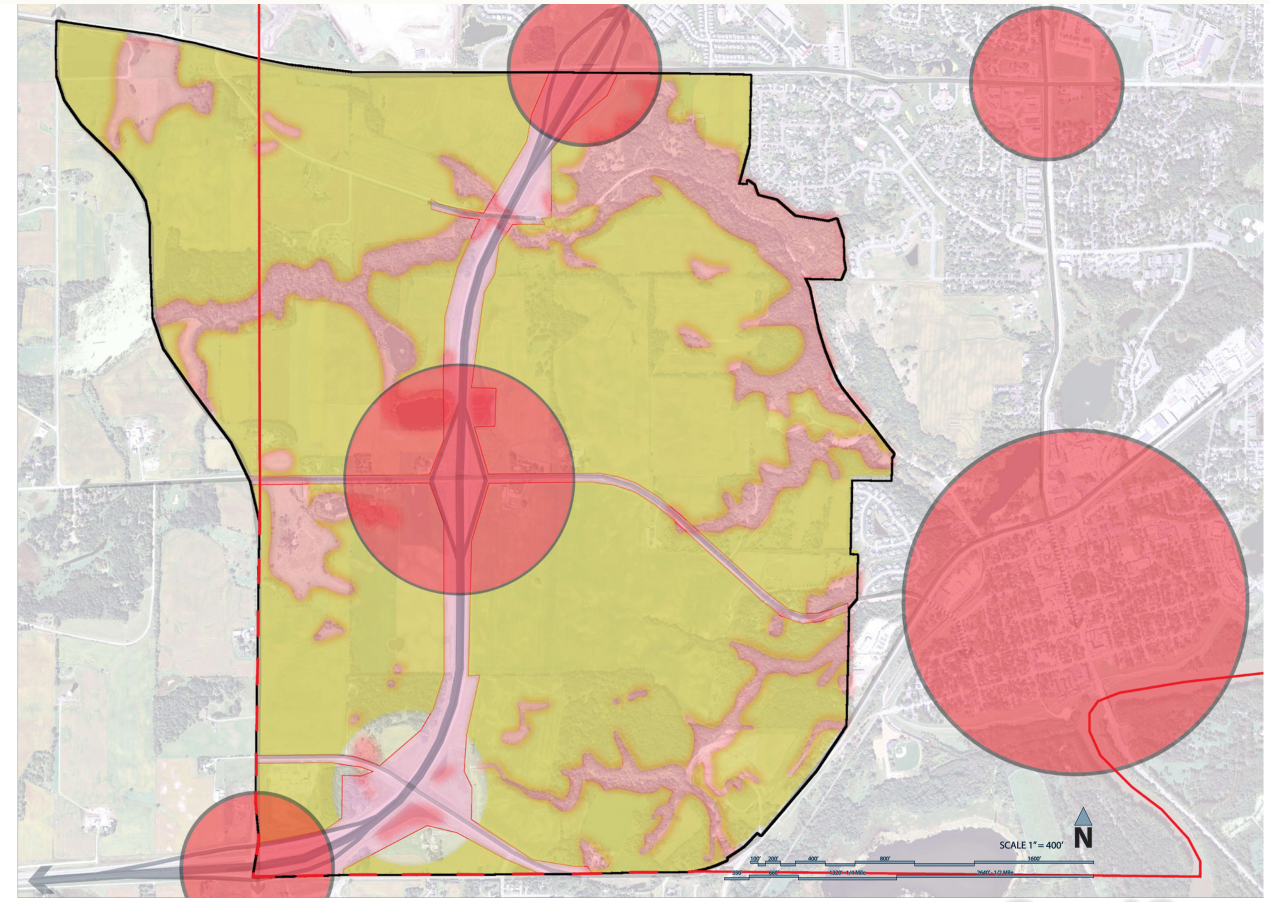
Undevelopable Lands



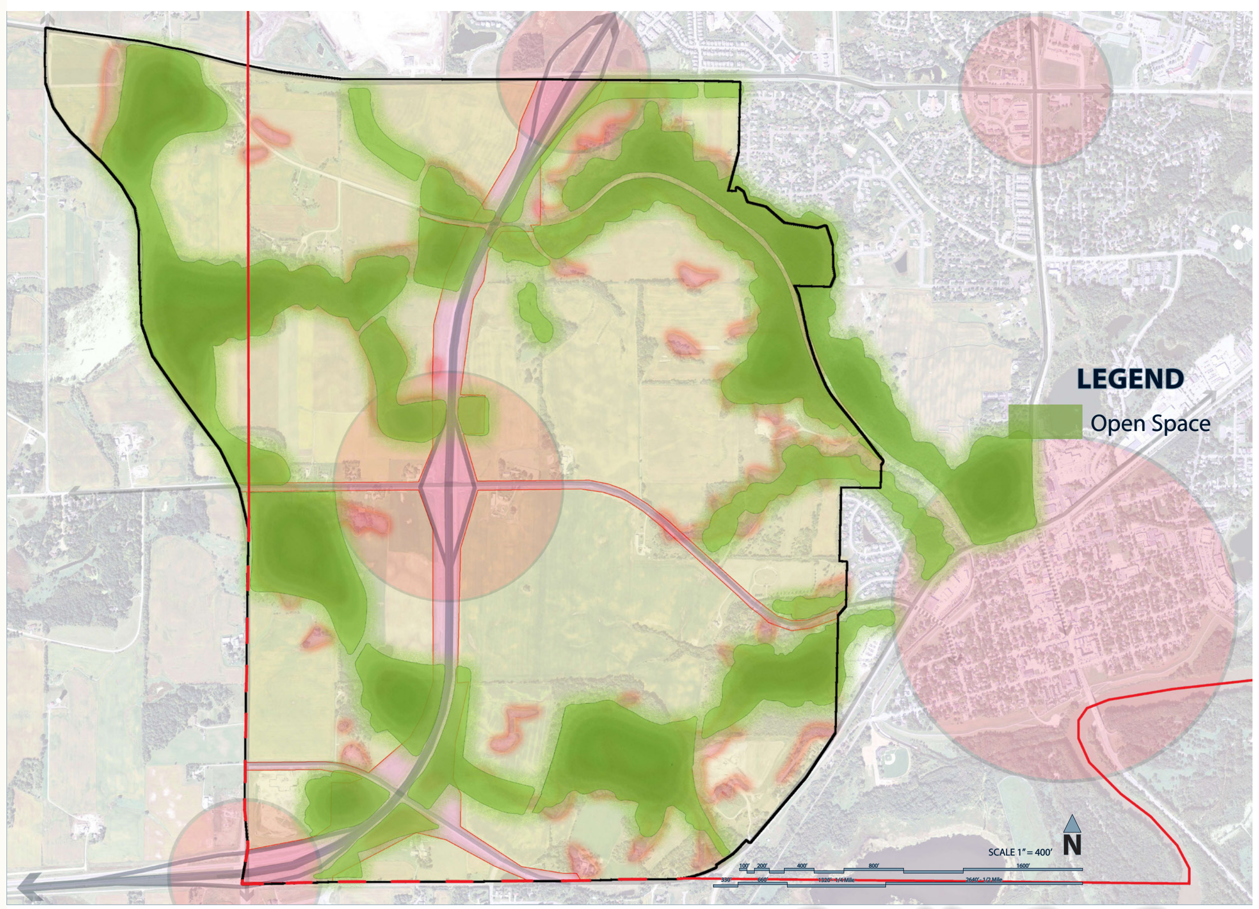
Developable Lands



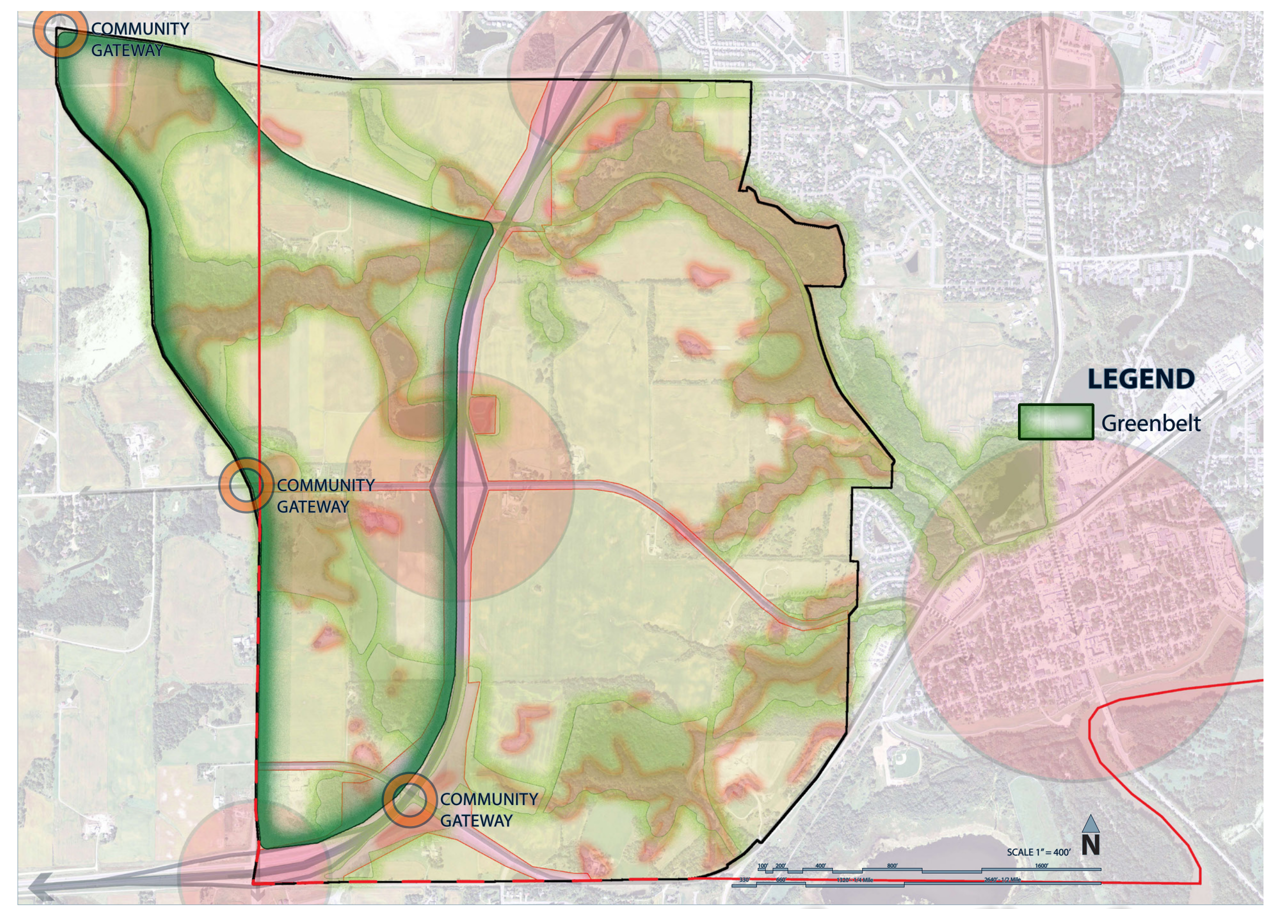
Regional Roadways Network



Potential Centers



Potential Open Space System



Community Edges & Gateways

Preferred Growth & Development Plan

Vision

Sandwiched between historic downtown Chaska and the unique Chaska Greenbelt, this 2.8 square mile area literally spans from the community's historic center to its western rural edge. This area's unique location adjacent to historic downtown Chaska, the Minnesota River Valley and new U.S. Highway 212, as well as its beautiful natural attributes, including West Chaska Creek, river bluffs, remnant Big Woods area and wetlands, offers great possibilities for creating desirable and uniquely identifiable places for living, working, shopping and recreating. Chaska's southwest growth area will integrate new neighborhoods, employment districts, neighborhood commercial nodes, a connected street network and unique open space system in ways that are environmentally, economically and socially sustainable for the entire community of Chaska. Residential neighborhoods and business park areas will have identifiable centers and edges that create a strong sense of identity and connections to the rest of the Chaska community.

The southwest growth area will leverage its recent access improvements to the regional roadway network, including completion of the new U.S. Highway 212 corridor and Jonathan Carver Parkway (CSAH 11), as well as Engler Boulevard (CSAH 10), Chaska Boulevard (CSAH 61) and CR 140. Most importantly, the new Highway 212 corridor and its interchanges within the southwest growth area offer a major catalyst to attract a desirable mix of new development to the community that can achieve the City's long-term goals for community growth, economic development, downtown revitalization and overall community building. In particular, the future CR 140 interchange with Hwy 212 will become a major new community entry and gateway to historic downtown Chaska from the regional freeway. The southwest growth area, including this new community gateway at CR 140/ Hwy 212, is envisioned to have strong connections to the historic downtown and significantly contribute to its revitalization as the community's primary hub of business, civic, social and recreational destinations.

Guiding Principles

Neighborhoods

» *Neighborhoods that have an identifiable center and edges.*

» *Neighborhoods where the most important and visible property is utilized by public gathering places (e.g. civic buildings, schools, parks, plazas).*

» *Neighborhoods whose size is limited by the distance from the edge to the center, generally a five to ten minute walk (1/4 to 1/2 mile radius).*

» *Neighborhoods that consist of an integrated network of walkable streets.*

» *Neighborhoods that have strong physical connections to the overall community, including the historic downtown, community facilities and parks, street network, open space and trails network.*

» *Neighborhoods that contain diversity in land uses, housing types, housing sizes, housing prices, and styles of ownership, thereby, providing good lifecycle and affordable housing options for residents.*

Employment Districts

» *Employment districts that can accommodate significant job growth within the community in the range of 5,000 - 7,500 jobs ultimately.*

» *Employment districts that offer a greater diversity of jobs that are generally high-skilled, head-of-household and living-wage jobs.*

» *Employment districts that strengthen the industrial/commercial share of the community's tax base.*

» *Employment districts that take advantage of Chaska's convenient freeway interchange access/visibility and wealth of green space amenities to create "world class" business campuses.*

» *Employment districts developed with strong physical connections to the overall community, including workforce housing, historic downtown, community facilities & parks, street network, open space/trails network.*

» *Employment districts that attract a higher number of jobs per acre, higher site development densities, and higher site/building design quality.*

» *Employment districts that can attract medical, technology and bioscience businesses and the clustering of related businesses.*

» *Employment districts that align with the State's Bioscience Initiative for expanding the bioscience industry within Minnesota.*

Neighborhood Commercial

» *Neighborhood commercial that primarily serves neighborhood residents and business park employees at key nodes along high traffic corridors, e.g. Engler Blvd (CSAH 10) and to a limited extent along CR 140.*

» *Neighborhood commercial oriented to local markets rather than large-scale commercial (e.g. commercial uses larger than 70,000 square feet) that is oriented to community or regional markets.*

» *Neighborhood commercial located on the edge of neighborhoods/ business parks enabling them to efficiently serve the local trade area.*

» *Neighborhood commercial that balances the access needs of pedestrians, bicyclists, drivers and transit users.*

» *Neighborhood commercial that complements existing commercial centers within Chaska rather than weaken them, particularly historic downtown Chaska.*

» *Neighborhood commercial is physically oriented to streets and connected to adjacent land uses.*

Open Space System

» *Open space system enhances and connects the area's sensitive and unique natural features.*

» *Open space system is connected to create a loop of greenways within the southwest growth area, including the West Chaska Creek corridor, remnant Big Woods area, wetlands, wooded steep slopes, natural drainage areas and the Chaska Greenbelt.*

» *Open space system encompasses a diversity of types, including natural, active, formal, informal, public and semi-public, that are located throughout the southwest growth area.*

» *Open space system incorporates a community-scale park facility that is linked to the greenways loop and potential school facilities, if feasible.*

» *Open space system allows public access.*

» *Open space system supports the Chaska Greenbelt concept as a community edge, which is natural and rural in character, in order to preserve and strengthen Chaska's community identity as a freestanding, complete community.*

» *Open space system contributes to creating identifiable centers and edges for neighborhoods and business park areas.*

Street Network

» *Street network supports strong connections to the overall community, including historic downtown, community facilities, commercial centers, schools, etc.*

» *Street network consists of complete streets that balance the needs of vehicles, pedestrians, bicyclists and transit, as much as possible.*

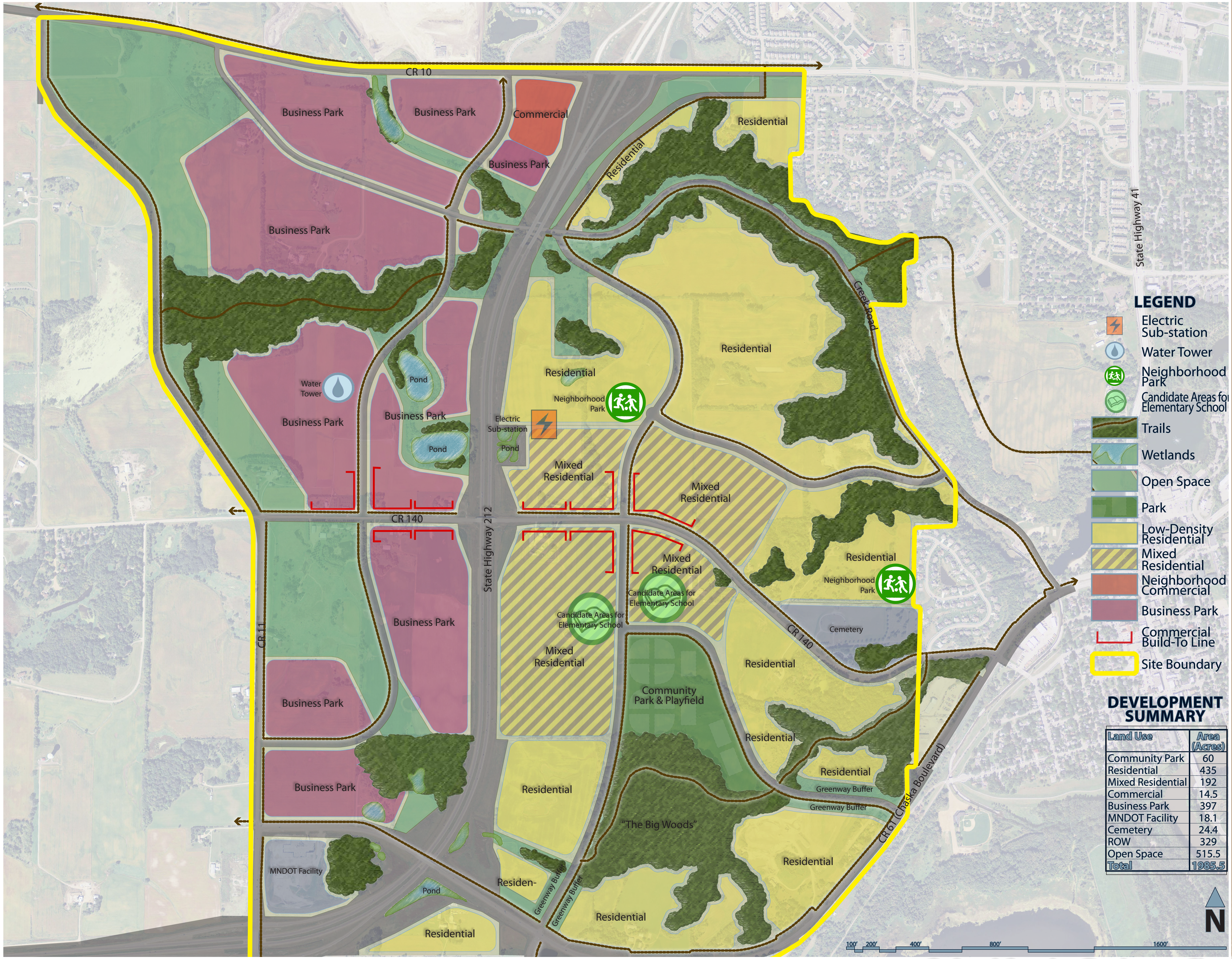
» *Street network generally designed as a grid network with as small of blocks as practical in order to provide multiple route options, disperse traffic and shorten walking distances.*

» *Street network contains sufficient collector streets to provide convenient connections to surrounding areas and regional roadways.*

» *Street network contains streets that are designed as attractive public space that aligns with the street's transportation function needs.*

» *Street network includes sidewalks on both sides of streets.*

» *Street network provides attractive gateway entries into the community, such as at the CR 140 highway interchange.*



Land Use	Area (Acres)
Community Park	60
Residential	435
Mixed Residential	192
Commercial	14.5
Business Park	397
MNDOT Facility	18.1
Cemetery	24.4
ROW	329
Open Space	515.5
Total	**1985.5**

Preferred Growth & Development Plan

Preferred Development Pattern

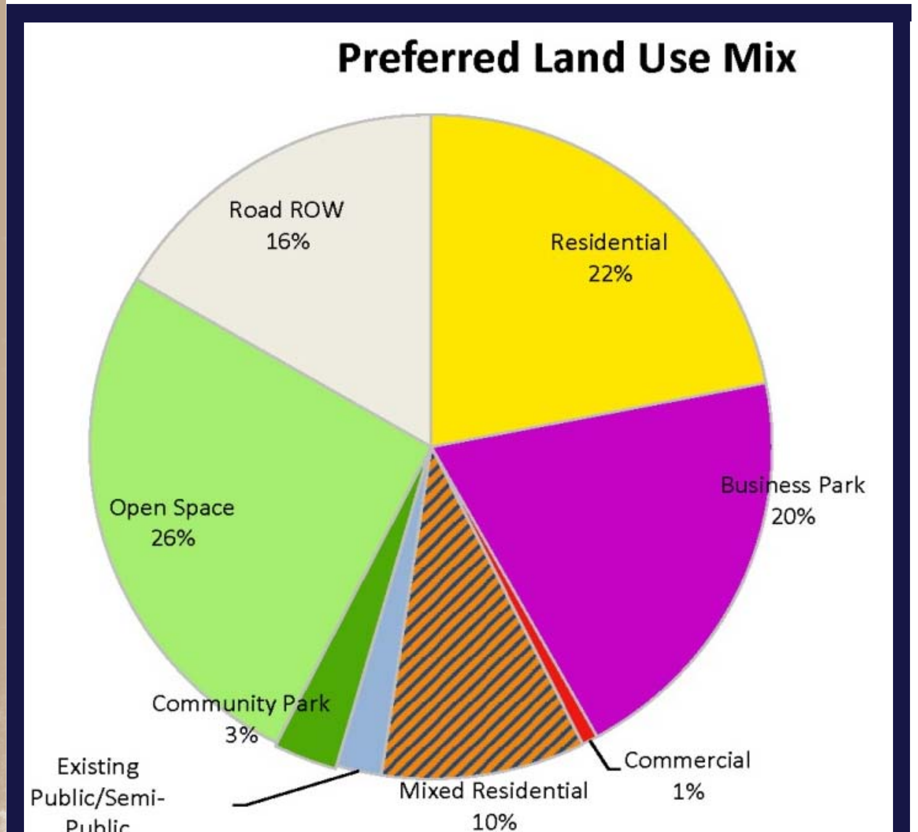
The preferred development pattern of the southwest growth area is intended to accommodate balanced and sustainable growth of both households and jobs within the community over the long-term. The development pattern is designed to reflect the existing community pattern and context, the area's unique natural landscape, and recent major changes in the regional roadway network. In particular, the recent completion of the Hwy 212 corridor in 2008 and the future addition of the CR 140 interchange with Hwy 212 will have a major impact on future development patterns in the southwest area. The future CR 140 interchange is viewed as creating a new entrance into the community as well as the closest connection to downtown from Hwy 212. As a result, CR 140 is planned to become a minor arterial roadway with the completion of the Hwy 212 interchange. In support of the City's policies for downtown revitalization, the development pattern is intended to contribute to strengthening the historic downtown area rather than creating competing commercial areas that significantly compete with downtown and residential areas that are disconnected from downtown.

A primary reason for the City's annexation of this area was to enable growth of a significant residential population base adjacent to downtown that could support a viable downtown business district, including retail, restaurants, entertainment and services. Unlike most recent residential development in Chaska, which has occurred a substantial distance north of the downtown area, the SW Chaska area is directly adjacent to downtown. Therefore, the preferred development pattern locates walkable residential neighborhoods east of the new Hwy 212 corridor and closest to downtown. These neighborhoods should be designed with strong physical connections to and benefit from the services and amenities of the historic downtown area. The development pattern shows three major roadways providing connections from the residential neighborhoods to downtown. West of the new Hwy 212 corridor, three business park areas, oriented to the highway interchanges, are envisioned between the regional freeway and the Chaska Greenbelt. The largest business park area will be located west of the CR 140 interchange and affords the most visibility of development from the freeway. It is anticipated that this business park area could attract the most intensive development, including the possibility of a corporate campus or taller office buildings. Building upon the existing business park development north of Engler Blvd, the area west of the Engler Blvd interchange is envisioned as a major business park area also. A future neighborhood commercial node will be located at this interchange and is intended to serve the needs of local business park employees and nearby neighborhood residents.

The primary spine connecting the southwest growth area will be CR 140 as a major new community gateway for future residential neighborhoods, business parks, and historic downtown Chaska. Reflecting the significance of this future Hwy 212 interchange, CR 140 as a main street and this general area as a neighborhood center, the development pattern shows more intense development along CR 140 near the future interchange. The neighborhood center is envisioned along CR 140 east of Hwy 212 between the future neighborhoods north and south of CR 140. A business park center could develop west of the interchange with supporting commercial for business park employees.

Building upon the area's natural landscape features, the development pattern shows a connected loop of open spaces or greenways that would be conveniently accessible to both residential neighborhoods and business park areas. The Chaska Greenbelt is located along the area's western edge, the community's western border, and contributes to both the area's and community's open space system. The greenbelt will preserve a natural and rural character at key community entrances from the west, including Engler Blvd, CR 140 and Hwy 212. The greenbelt will be comprised of natural landscape features, including West Chaska Creek, large wetland and woodland areas, and rural residential uses. A network of trails will provide public access to the open space system, including city, county and regional trails. The SW LRT Regional Trail is planned to connect from downtown through the SW growth area north to the Clover Ridge neighborhood, downtown Victoria, Carver Regional Park Reserve, and the proposed Hwy 5 Regional Trail.

A new community park will be located adjacent to the Big Woods natural area and greenway, including playfields and a nature center. At a minimum, neighborhood parks will include an expanded Highland Park on the east side and a new neighborhood park in the center of the northern neighborhood. The community park will provide neighborhood park needs of the southern neighborhood. It is envisioned that the neighborhood parks would be directly connected to the open space system of greenways



Land Use	Acres	Percent of Total
Residential	435	22%
Mixed Residential	192	10%
Business Park	397	20%
Commercial	15	1%
Existing Public/Semi-Public	42	2%
Community Park	60	3%
Open Space	515	25%
Road Right-of-Way	329	17%
Total	1,985	100%

Key Elements

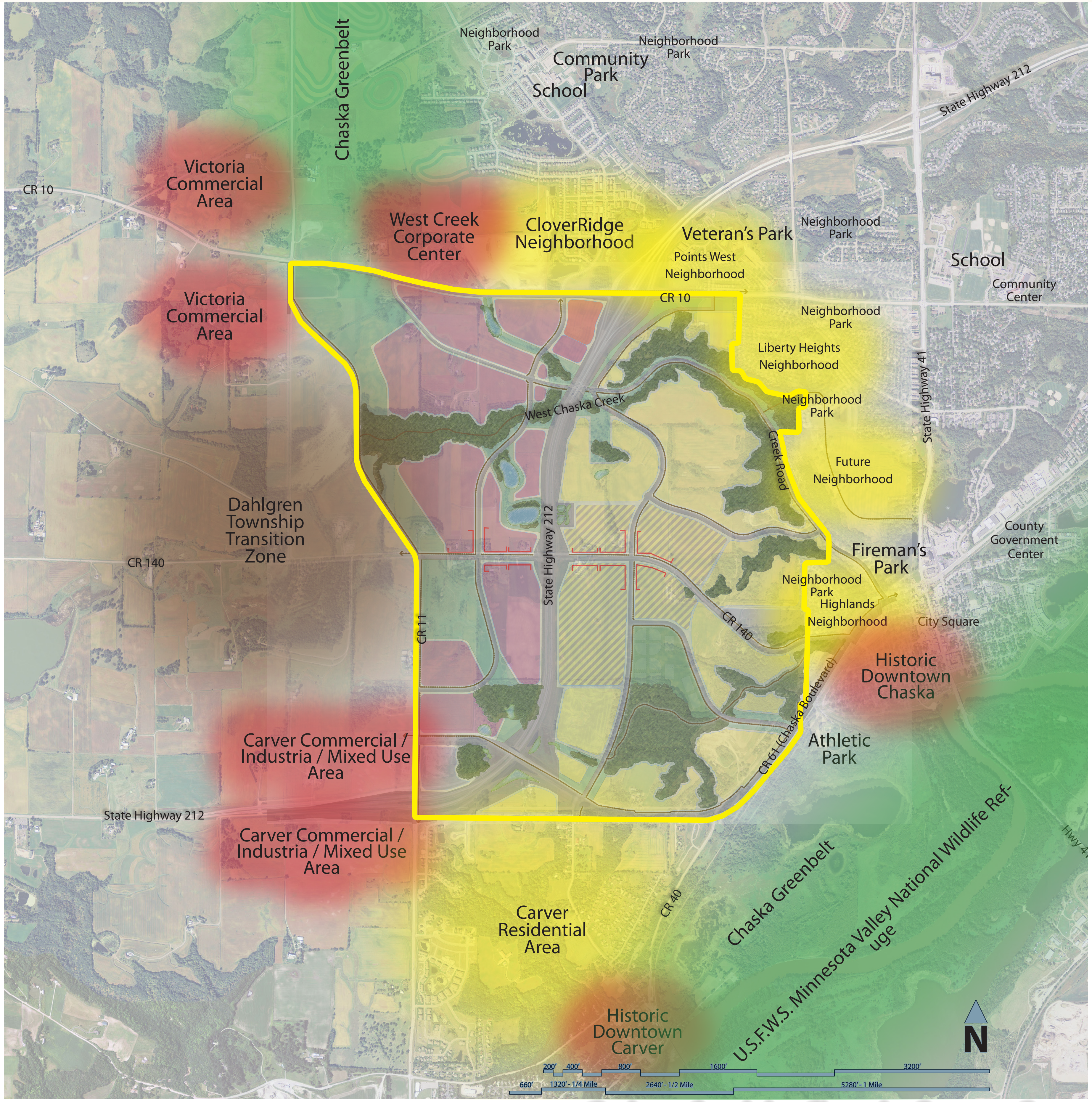
- *Preserve the area's sensitive and attractive natural resource features, including creek ravines, steep slopes, wetlands, and woodlands.*
- *Attract business parks to the three Hwy 212 interchange areas that optimize their valuable site assets, including regional freeway access, high visibility, plentiful open space, proximity to workforce and unique character of Chaska*
- *Create identifiable and walkable residential neighborhoods in the core area between downtown and Hwy 212 that are well connected to downtown, neighborhood commercial nodes, civic facilities, and recreational facilities.*
- *Provide a balanced mix of housing options from medium and high density attached housing in the neighborhood centers to larger single-family lots at the neighborhood edges, including lifecycle and affordable housing options located near services (commercial, bus/bike/walk routes, parks, schools, etc.)*
- *Design CR 140 corridor as a major new gateway into the community and historic downtown Chaska.*
- *Provide a pedestrian-oriented neighborhood commercial node along CR 140 with convenient connections from surrounding neighborhoods.*
- *Provide an auto-oriented neighborhood commercial node at the Engler Boulevard interchange to serve Chaska's western neighborhoods both north and south of Engler Boulevard.*
- *Preserve and provide public access to the remnant "Big Woods" as a unique and beautiful element of the community's natural landscape heritage.*
- *Locate a community park, playfields and nature center adjacent to the "Big Woods".*
- *Locate a future school adjacent to the community park/playfields and "Big Woods" nature center, if feasible.*
- *Maintain and improve Creek Road/West Chaska Creek ravine as a unique and beautiful element of the community's natural/rural landscape heritage as well as an important connection to historic downtown.*
- *Establish a greenway system that loops around the southwest Chaska growth area, including the West Chaska Creek ravine, Chaska Greenbelt and proposed Big Woods Greenway.*
- *Connect the neighborhoods and employment districts to community destinations, commercial areas, parks and open spaces with a comprehensive trail network.*

Southwest Growth Area Plan within Community Context

The southwest growth area presents the community with a major opportunity to leverage future population and job growth for enhancing and strengthening the community as a whole. The southwest growth area is the last big puzzle piece the City has to work with in preserving Chaska as a complete community with a strong sense of identity. Some of the most critical opportunities for future development of this area include strengthening downtown as the City's most vibrant center of activity, adding unique housing and neighborhood options adjacent to downtown, creating major new employment districts for the community and region, optimizing the advantages of freeway access and identity, creating a major new community gateway area at the future CR 140/ Hwy 212 interchange, protecting the area's unique natural landscape features, and expanding the community park/open space and trail network. In short, this area's growth and development plan is a golden opportunity to establish the desired patterns of the last big piece in the puzzle that enables the community to truly achieve its mission "To Be the Best Small Town in Minnesota".

The preferred growth & development plan is grounded in the City's long-term vision of leveraging the unique and strategic attributes of the southwest growth area to create a balanced mix of residential neighborhoods, business parks, and commercial nodes that enhance the identity and sustainability of the entire community. A well-connected, attractive and unique public realm is an important aspect of this development vision, including preservation of sensitive and valued natural landscape features, community and neighborhood parks, a connected open space & trail system, and the roadways network.

It should be noted that wetland, woodland and open space areas shown on the Preferred Development Pattern are intended to be general areas. For example, wetlands shown on the concept are based on the wetlands identified in the City's 2007 LSWMP, which also includes a ranking of wetlands based upon their quality. Even though wetlands have varying quality, all wetlands are required to comply with federal and state WCA processes prior to any disturbance of existing wetland conditions.



Southwest Growth Area Plan within Community Context

Land Use Pattern

The land use pattern for the southwest Chaska growth area provides a broad mix of neighborhood residential, business park, supporting commercial, parks, open space system, and rural residential. As this area is anticipated to be the City's last significant growth area, it is important that this growth area contribute to ensuring a long-term balance between the community's quantity of households and jobs.

Low Density Residential

With the new Hwy 212 corridor approximately 1.5 miles west of downtown, the land use plan guides the land closest to downtown for primarily residential land uses. These neighborhood areas are guided for Low Density Residential which would be predominantly single-family (SF) detached houses. Low Density Residential also allows SF attached and mid-rise multi-family housing.

Key Elements

» *Housing is predominately single-family detached houses.*

» *A mix of single-family detached lot sizes, housing sizes, prices and ownership styles provided within the two neighborhoods.*

» *A mix of single-family attached and mid-rise multi-family housing incorporated into neighborhoods in a complementary manner that provide lifecycle and affordable housing options.*

» *Large-lot, higher-priced housing opportunities are located proximate to downtown, at neighborhood edges and adjacent to natural areas.*

» *Block sizes and curvilinear grid street network that support a walkable residential neighborhood environment; smaller blocks near the neighborhood center with larger blocks allowed on neighborhood edges.*

» *Housing is oriented to streets to create an attractive and walkable residential neighborhood environment.*

» *Overall residential net density is 3-5 dwelling units per acre.*

» *Streets designed to balance walking, biking and driving needs.*

Mixed Residential

The neighborhood center located east of the CR 140 interchange with Hwy 212 is guided for a broader mix of housing types, as well as uses non-residential appropriate for a neighborhood center. This area is guided for the Mixed Residential designation, which allows a mix of residential land uses from low to high density plus limited commercial, office, civic, park and open space.

Key Elements

» *Block sizes and curvilinear grid street network that support a walkable residential neighborhood environment.*

» *Broad mix of housing types with higher density housing located closest to neighborhood center amenities, including neighborhood commercial, civic facilities, parks, and potentially a school and transit services, that provide good lifecycle and affordable housing options.*

» *Development of single-family detached housing along arterial and collector streets is limited.*

» *Neighborhood commercial uses primarily serve adjacent neighborhoods and contain businesses/buildings supportive of a neighborhood commercial center in scale and character.*

» *Neighborhood commercial uses have buildings predominately oriented to major roadways, parking areas sited and designed to enhance the pedestrian environment, and convenient walk/bike accessibility.*

» *Neighborhood commercial uses intended to support multiple commercial tenants with no single tenant or use occupying an entire site.*

» *Publicly accessible open space is integrated within the neighborhood center.*

» *Potential school adjacent to community park and within neighborhood center.*

» *Minimum residential net density is 3 dwelling units/acre for all housing types.*

» *Streets designed to balance walking, biking and driving needs.*

Business Park

The new Highway 212 corridor and its three interchanges in SW Chaska provide valuable opportunities for attracting significant employment growth to the community. In recognition of Hwy 212 being a regional freeway corridor, the existing large industrial area in northern Chaska, and current business sector trends, the City is targeting the Hwy 212 interchanges for higher intensity business park development rather than traditional industrial. Business Park uses include a broad range of office and light industrial uses as well as supporting commercial uses.

Key Elements

» *Desired business park uses include office, office-showroom, research and development services, high-tech electronic manufacturing, and medical.*

» *Business park uses intended to broaden Chaska's variety of jobs, increase the number of jobs per acre, achieve high quality site/architectural design, and generate higher tax revenues.*

» *Three distinct business park areas oriented to the three Hwy 212 interchanges, reflecting their unique regional roadway access, visibility, land use mix, traffic patterns and boundaries.*

» *Business park buildings present an attractive identity for Chaska along major roadways and community entrances.*

» *Opportunities for flexible parcel sizes, regional highway access and visibility, and access to attractive open space system.*

» *Commercial uses are secondary uses that primarily serve needs of business park employees, such as healthcare, fitness, child daycare, drycleaning, bank, coffee shop, restaurant, and convenience store.*

» *Commercial buildings and commercial uses within mixed-use buildings predominately oriented to the major roadways and complement the high quality site/architectural design of the business park area.*

» *Commercial uses within business park areas intended to support multiple commercial tenants with no single tenant or use occupying an entire site.*

Neighborhood Commercial

In alignment with the market analysis findings for this area, there is limited development potential for commercial uses at the highway interchange areas that would serve the local market of neighborhood residents and/or business park employees. The land use plan specifically guides commercial uses for a small neighborhood/business park node at the Engler Blvd (CSAH 10) interchange. This approximately 15-acre site could accommodate a neighborhood-scale commercial development of up to 100,000 sq. ft, including an approximately 65,000 sq. ft. grocery store. Limited commercial land uses are also allowed within the Mixed Residential and Business Park land use designations. The land use plan anticipates limited neighborhood commercial uses along CR 140 both east and west of the highway interchange, depending upon future market support, density levels, and traffic volumes.

Key Elements

» *Commercial uses include retail, services, professional offices, hotel/motels and entertainment businesses.*

» *A small neighborhood-scale commercial node located at the Engler Blvd/Hwy 212 interchange intended to serve the needs of local business park employees and nearby neighborhood residents.*

» *Commercial uses intended to support multiple commercial tenants with no single tenant or use occupying the entire site.*

» *Limited neighborhood commercial uses along CR 140 corridor, east and west, as part of the Mixed Residential and Business Park land use categories.*

Park & Open Space

In light of the substantial amount and variety of natural features in the southwest growth area and the presence of the Chaska Greenbelt at the community's western edge, the land use plan guides a significant amount of land for Open Space. An area adjacent to the remnant Big Woods natural area is guided for development as a new community park.

Key Elements

» *Preservation of sensitive and valued natural areas, including creek corridors, floodplains, wetlands, bluffs, steep slopes and woodlands.*

» *A loop open space system comprised of greenway corridors, including the West Chaska Creek greenway, Big Woods greenway, Chaska Greenbelt, and necessary green corridor connections.*

» *Remnant Big Woods preserved as unique and valuable community natural resource area with public access, such as trails and a nature center.*

» *Community park/playfields located next to the Big Woods natural area, nature center and greenway. Community park provides neighborhood park facilities for southern neighborhood.*

» *A neighborhood park located in the center of the northern neighborhood.*

» *Highland Park serves as neighborhood park for eastern neighborhood areas.*

» *All parks have direct connections to the larger open space loop.*

» *Trail network that provides public access to loop open space system.*

Rural Residential

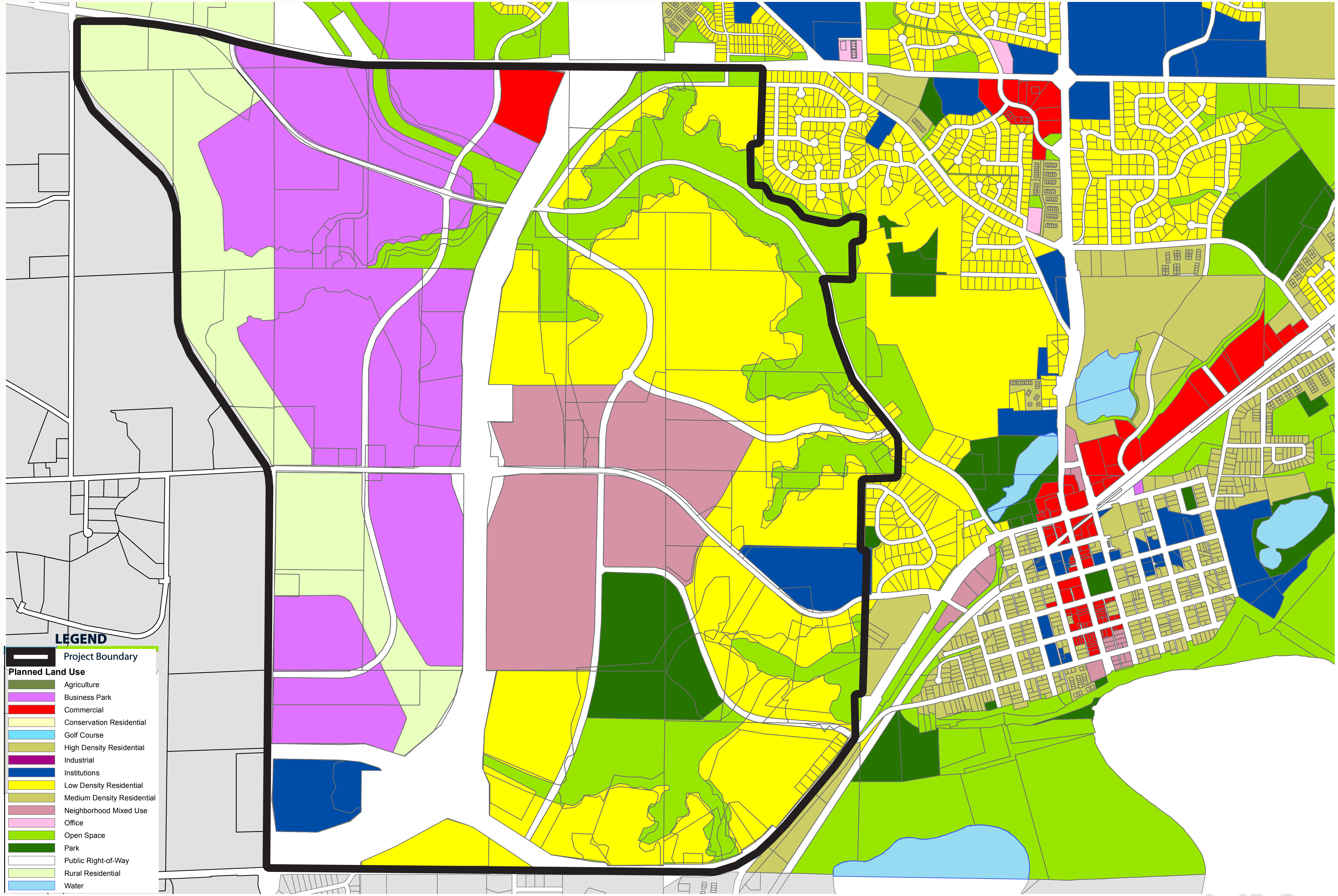
In alignment with the Chaska Greenbelt designation along the community's western edge, land within the greenbelt area is guided for Rural Residential land uses.

Key Elements

» *Sensitive and valued natural areas and open spaces preserved to contribute to the natural and rural character of the Chaska Greenbelt as a means to strengthen Chaska's sense of identity as a freestanding complete community.*

» *Rural residential area supports Chaska Greenbelt with a minimum width of 1/8 mile in general along community's western border.*

» *Rural residential buildings located outside of viewsheds from major roadways and at community entrances.*



Land Use Pattern

Major Roadways Network

The southwest growth area is surrounded and bisected by an existing regional roadway network. Engler Blvd (CSAH 10) forms the growth area's northern boundary, recently completed Jonathan Carver Pkwy (CSAH 11) its western boundary, Chaska Blvd (CSAH 61) its southern boundary, and MN Hwy 41 is just to the east, which are all Principal Arterial roadways. Creek Road, which is a former County roadway recently turned back to the City, forms the area's eastern boundary. Creek Road is a valued roadway in the community for its natural beauty within the West Chaska Creek ravine and heritage as a farm-to-market road. However, the future development area located on the uplands is relatively disconnected from the Creek Road corridor, which is located in the creek ravine. U.S. Highway 212, which is a Principal Arterial, and CR 140, which was just recently reclassified as a Minor Arterial, both bisect the growth area north/south and east/west, respectively. The three Hwy 212 interchanges will have a major impact on future development patterns in the southwest area. The limited access design of the new Hwy 212 corridor and the steep topography of the river bluffs/West Chaska Creek ravine present significant challenges for providing connections between the southwest growth area and the rest of Chaska. The future major roadways network for the southwest growth area will be expanded with north-south roadway connections east and west of the Hwy 212 corridor and east-west connections between downtown Chaska and the Hwy 212 corridor.

Vehicular Circulation

The Major Roadways Network plan identifies a future network of major roadways that will provide circulation within the southwest growth area. These future roadways also are intended to provide connections to and support the existing regional roadway network, as well as connections to the rest of Chaska. In addition, the future residential neighborhoods are intended to be designed with strong physical connections to and benefit from the services and amenities of the historic downtown area.

Key Elements

- *CR 140, recently reclassified as a Minor Arterial, redesigned and reconstructed as the primary east-west spine of the growth area and major new gateway into the community for future residential neighborhoods, business parks, and historic downtown Chaska.*
- *A new north-south roadway connection west of the Hwy 212 corridor from Engler Blvd (CSAH 10) and its interchange with Hwy 212, as well as a future neighborhood commercial node, south to CR 140 and then to recently completed Jonathan Carver Pkwy (CSAH 11).*
- *A new north-south roadway connection east of the Hwy 212 corridor from Engler Blvd (CSAH 10) and its interchange with Hwy 212 south to CR 140 and then to Chaska Blvd (CSAH 61).*
- *Retaining and enhancing the existing Creek Road connection under new Hwy 212 as a key east-west street connection.*
- *Major roadway connection between downtown Chaska and the future northern neighborhood via the southern portion of existing Creek Road.*
- *Major roadway connection between downtown Chaska and the future southern neighborhood, Big Woods natural area, community park and potential school.*
- *Future role of existing Creek Road will either be as a local roadway with unique natural and historic character between downtown Chaska and the Engler Blvd business park area or as a greenway trail corridor. The physical narrowness and environmental sensitivity of the West Chaska Creek ravine most likely will not enable an environmentally and financially feasible option for accommodating both a roadway and trail.*

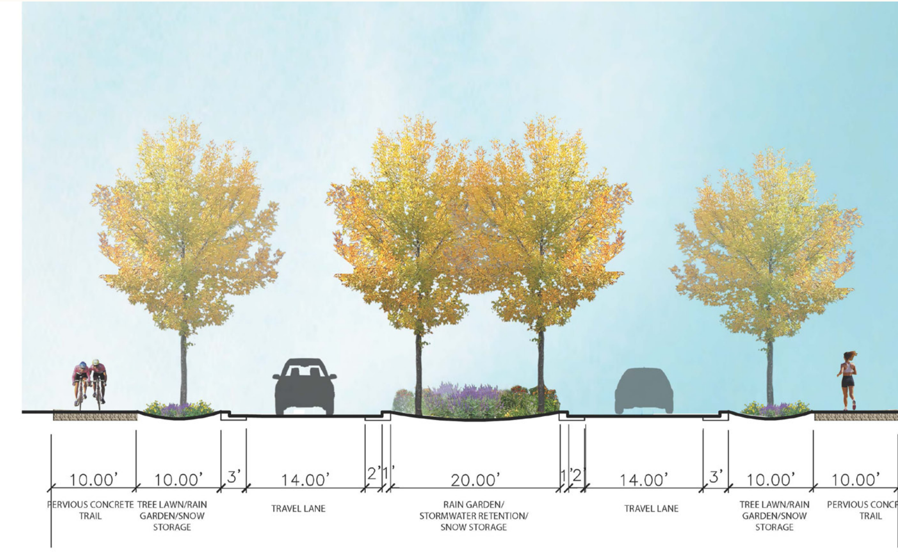
Pedestrian and Bicycle Circulation

The future residential neighborhoods east of the Hwy 212 corridor and adjacent to the historic downtown Chaska area are envisioned as traditional walkable residential neighborhoods. Pedestrian and bicycle circulation will be accommodated by a street network with sidewalks and trails, as well as a trail network within the loop open space system. As future streets are designed, it will be critical for streetscape designs to incorporate features that provide safe and attractive travel zones and street crossings for pedestrians and bicyclists.

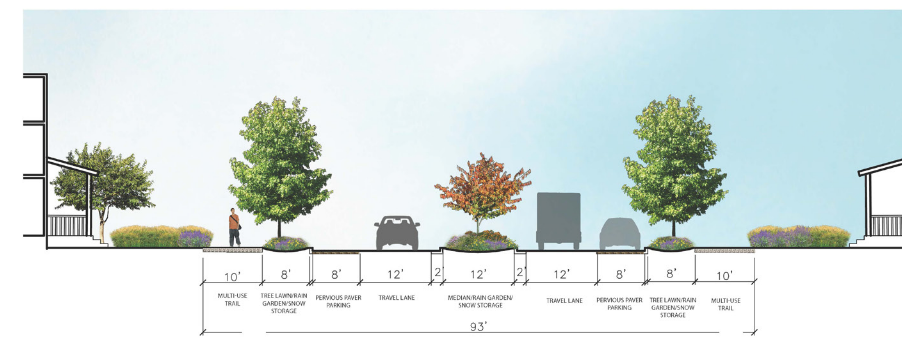
Key Elements

- *Block sizes and curvilinear grid street network that support a walkable residential neighborhood environment.*
- *System of "complete streets" that balance the needs of vehicles, pedestrians and bicycles.*
- *Sidewalks provided on both sides of all neighborhood streets.*
- *Multi-use trails along the three major roadways providing connections between the future residential neighborhoods and downtown Chaska.*
- *Sidewalks and multi-use trails that provide convenient connections to the open space system, community facilities, schools, commercial areas, and public gathering places.*
- *Multi-use trails within the loop open space system that provides public access to open spaces within the southwest growth area as well as the community's open space, park and trail system.*

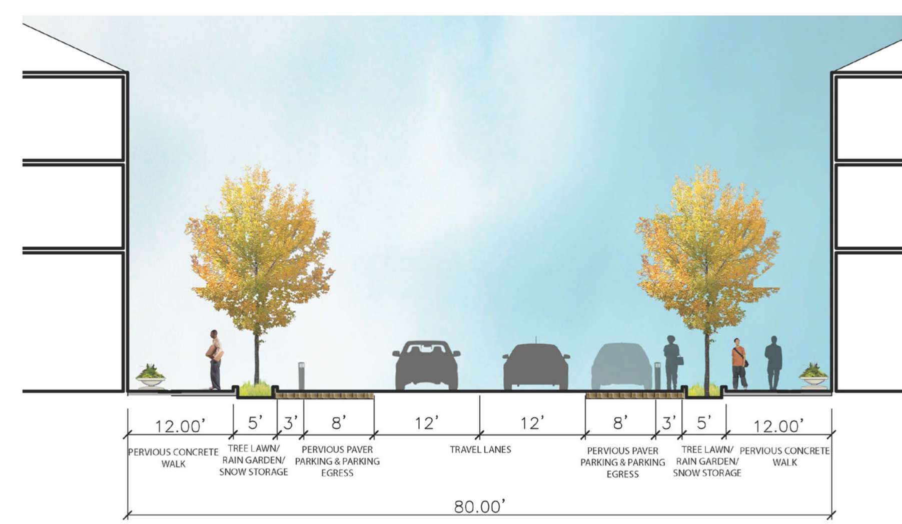
Mutli-use Trail



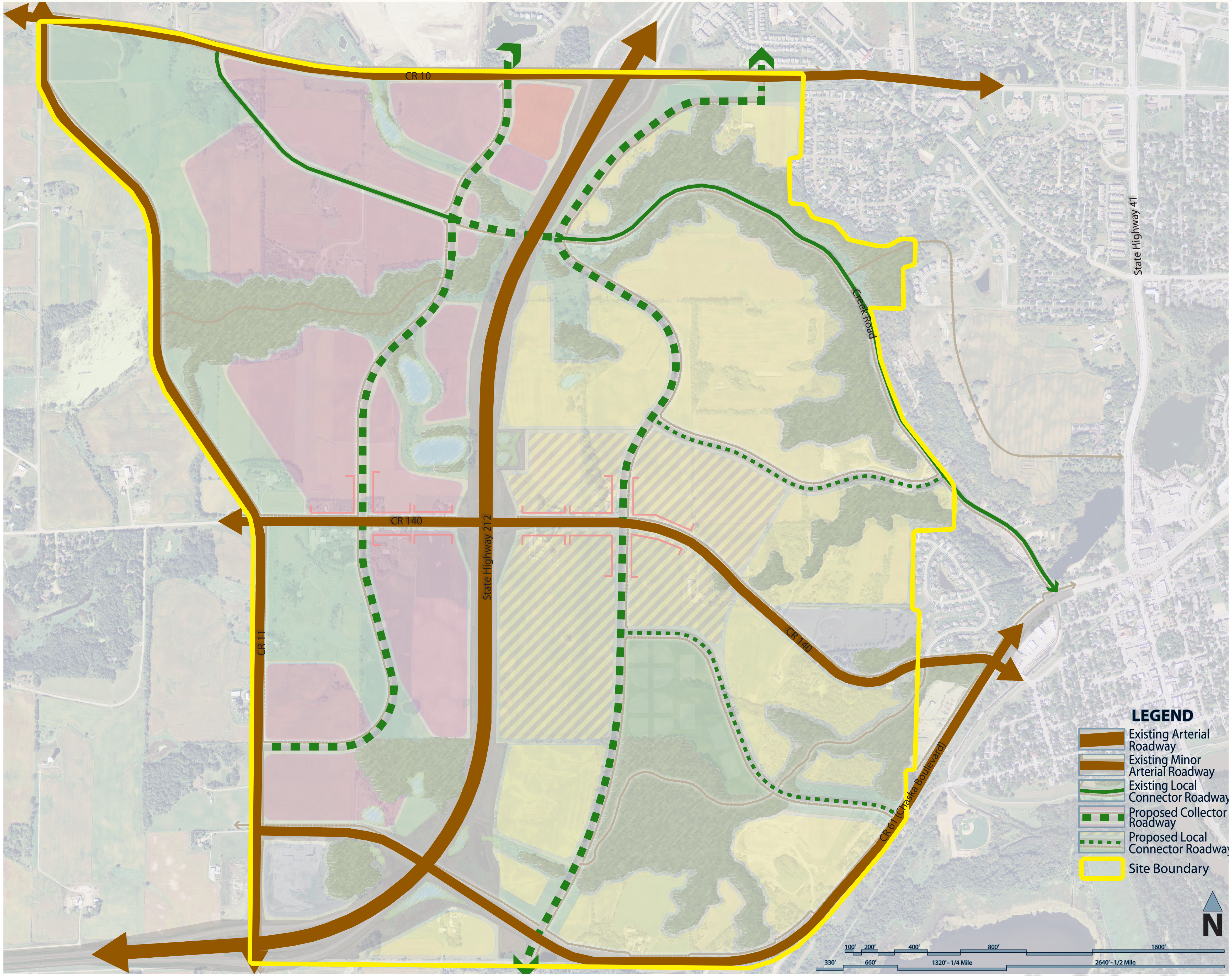
CR 140 Gateway Street Section



Residential Collector Street Section



Mixed Residential Collector Street Section



Major Roadways Network

Open Space, Park & Trail System

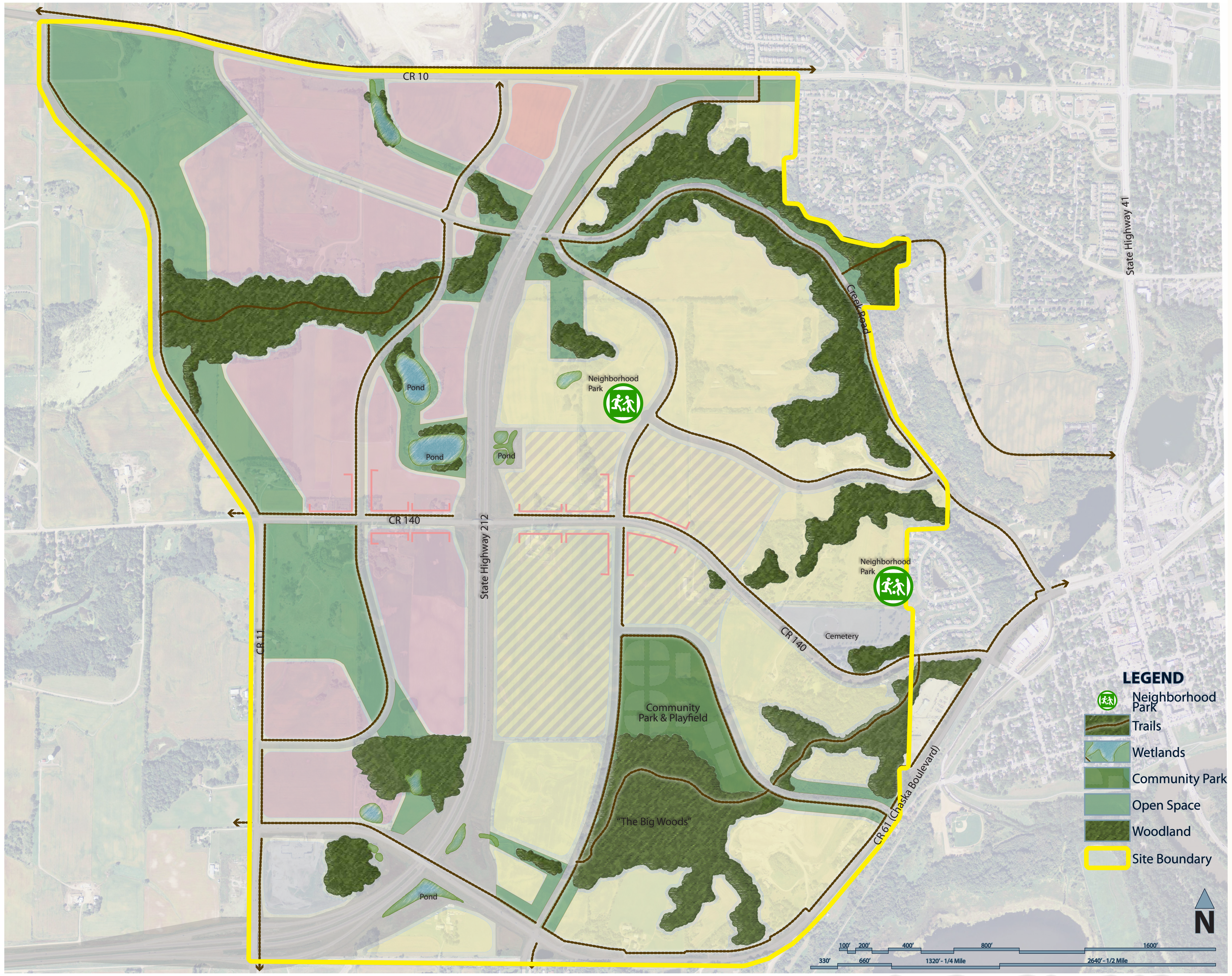
A key feature of the vision for the SW Chaska area is an open space system that forms a complete loop around the core residential and employment areas, providing easy access to the open space system for both neighborhood residents and business park employees. In general, the open space loop will consist of preserved natural areas, including the West Chaska Creek ravine, river bluffs, steep slope areas, woodlands and wetlands, which are connected into a greenway loop. While this natural and recreational open space loop will provide a unique amenity for SW Chaska residents and employees, it will also provide an important green connection for the community between the Chaska Greenbelt along the western edge of the city and the Minnesota River Valley and National Wildlife Refuge adjacent to downtown.

The West Chaska Creek ravine forms the northern segment and most of the eastern segment. The river bluffs and remnant Big Woods area form the southern segment. The Chaska Greenbelt, which consists of significant wetlands and woodlands, forms the western segment. On the eastern edge, between CR 140 and the future east-west roadway to the north, a north-south greenway connection should be identified as residential development occurs in this area. This strategic link could connect the Big Woods greenway north up to Highland Park, the nearby ravine and Creek Road. The greenway connection across Highway 212 between and the Chaska Greenbelt area, west of the freeway, and the Big Woods area will utilize the Chaska Boulevard (CSAH 61) bridge.

A future community park with playfields and a nature center is envisioned adjacent to the remnant Big Woods area. Located on the north side of the Big Woods and the greenway, the community park could extend the open space system into the southern neighborhood and the neighborhood center at CR 140. Other “green fingers” are shown as part of the open space system concept that reaches into the northern neighborhood and the business park areas. Ideally, both the expanded Highland neighborhood park and the future northern neighborhood park would be connected directly to the open space loop. If a future school is located in the SW Chaska area, the plan supports locating it adjacent to the community park. Linking school facilities to the community park would enable sharing of recreational facilities between the community and the school, as well as parking needs, and also connect the school to the Big Woods greenway.

Key Elements

- *Sensitive and valued natural landscape features preserved as open spaces, including creek ravines, river bluffs, steep slopes, wetlands and woodlands.*
- *Remnant Big Woods area is preserved as a unique community open space and identity area.*
- *A loop open space system is created within the southwest growth area connecting the West Chaska Creek ravine, a future Big Woods greenway and the Chaska Greenbelt.*
- *A future community park is located adjacent to the future Big Woods open space area, nature center and greenway.*
- *Neighborhood parks are directly connected to the open space system.*
- *A trail network connects through the entire open space loop and to adjacent community open space areas, such as the Minnesota River Valley, National Wildlife Refuge, Athletic Park and the Chaska Greenbelt.*



Open Space, Parks, & Trail System

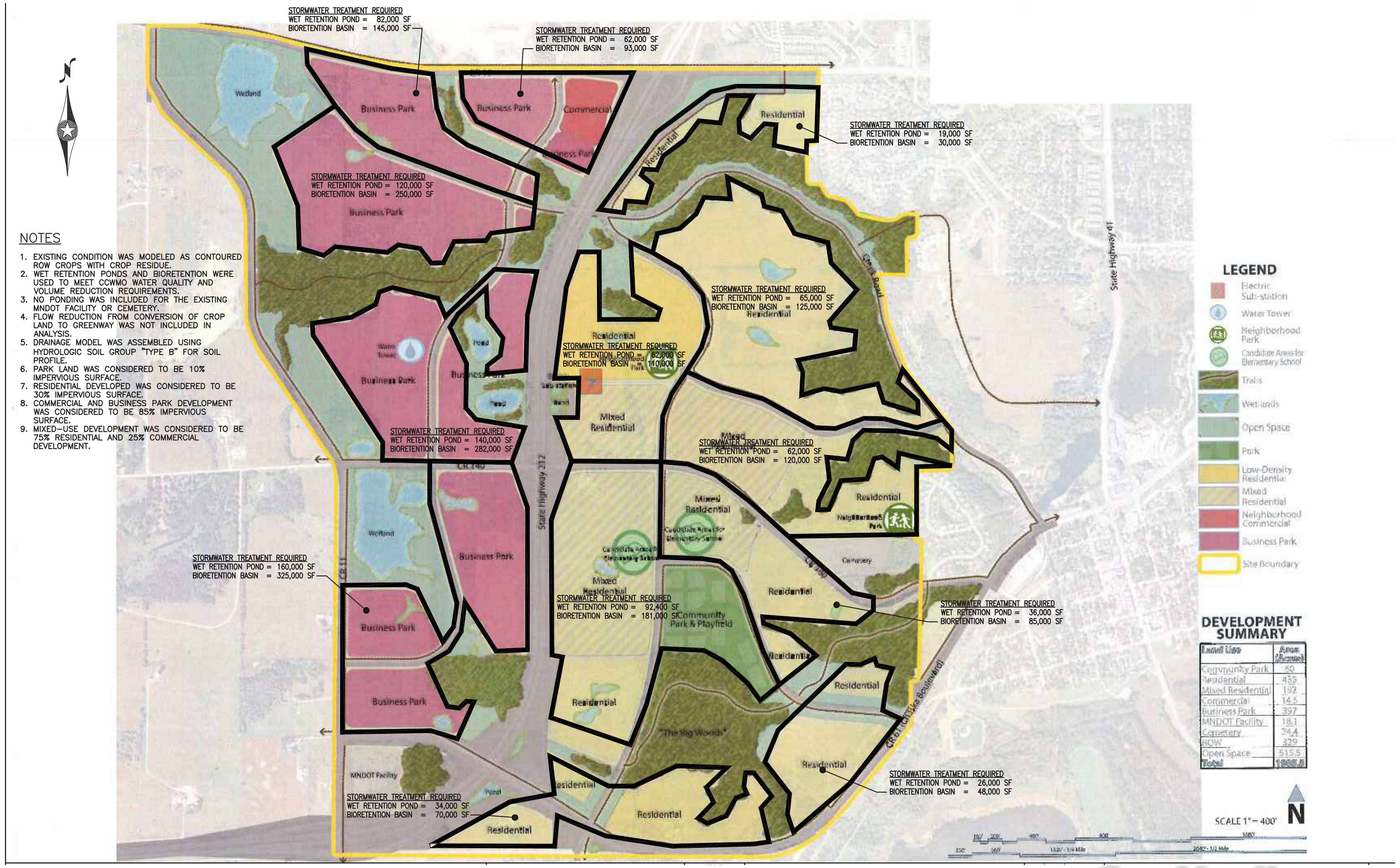
Storm Water Management

A preliminary stormwater management analysis was completed for the preferred development pattern and land uses. This preliminary analysis meets the current requirements of all regulatory agencies, specifically the Carver County Watershed Management Organization (CCWMO). The estimated total area needed for stormwater treatment throughout the entire southwest growth area is 64.9 acres (22.1 acres for ponding and 42.8 acres for bioretention).

Stormwater treatment areas were calculated to meet rate control, volume control, and water quality standards set forth by the CCWMO for the land uses of the preferred development pattern and corresponding impervious surface assumptions. For rate control, existing peak runoff rates were modeled assuming 100% existing cropland. For volume control, bioretention basins were modeled at 40% efficiency in volume reduction per CCWMO allowable credit. For water quality, wet retention ponds in series with bioretention basins were modeled to achieve 90% Total Phosphorus (TP) and Total Suspended Solids (TSS) removal per CCWMO allowable credit. By using wet retention ponds in series with bioretention basins, the proposed peak runoff rate was reduced 45% from the existing rate, the volume reduction requirement equal to 0.5" from new impervious surfaces was achieved, and the water quality requirement of 90% removal of TP and TSS was met. Since the MnDOT facility and Guardian Angel Cemetery are existing sites, no stormwater treatment should be required for these areas, and none was included in the modeling.

The stormwater treatment features were modeled to generally serve regions outlined on the Stormwater Management Analysis diagram. Exact locations are not indicated since stormwater features are dependent on final development plans and ultimate phasing of development. In general, stormwater features should be located in low areas adjacent to wetlands, woodlands, greenways, ravines, and creeks. For each general region, one location for stormwater features could be used to serve the entire area or multiple stormwater features could be distributed throughout the region to achieve required stormwater treatment.

Only wet retention ponding and bioretention basins were used in the modeling to achieve required stormwater treatment and control. Other stormwater management approaches may be considered that would achieve the same results or reduce the stormwater treatment area required; however, some of these stormwater approaches require soil profiles that may not be present or may be cost prohibitive. These other approaches include amended soils, infiltration basins, stormwater reuse for irrigation, preservation or restoration of native upland, green roofs, iron enhanced sand filters, and pervious pavement.



Storm Water Management

Public Utilities

Extension of public utilities to the southwest growth area will be instrumental to the pattern, sequence and timing of future development. The City's comprehensive sanitary sewer and water plans identify the necessary sanitary sewer and water extensions for development of the southwest growth area. Although much of the land west of the new Hwy 212 corridor has been previously guided for rural residential uses without public utilities, previous sanitary sewer and water system planning accounted for alignment and costs for extending sewer lines across the freeway in the event that land use plans would be modified to allow more intense urban development. Extension of public utilities will be phased dependent upon the pace of future development but in general will be extended westward to Hwy 212, then to the west of Hwy 212 via Creek Road, and finally south along Chaska Blvd (CSAH 61).

Sanitary Sewer

Three (3) major sewer districts are located within the West Chaska Creek watershed that will ultimately provide sanitary sewer services for the southwest growth area: Heights, Southwest and South. The existing Heights District trunk sewer line extends along CR 140 up the river bluff to a point in the vicinity of the Guardian Angels Cemetery. The existing Southwest District trunk sewer line only extends from downtown to the north side of CSAH 61 at Creek Road. Construction of the South District trunk line has not progressed yet.

The future residential neighborhoods east of Hwy 212 will primarily be served by the Heights District trunk line, which consists of four (4) minor sewer districts: H-1, H-2, H-3 and H-4. The existing Heights District trunk line serves most of H-1 today; three trunk line extensions will be necessary for the other minor sewer districts.

The Southwest District trunk line will ultimately provide sanitary services for development along West Chaska Creek, including a large area west of Hwy 212 that reaches into Dahlgren and Laketown Townships. The Southwest District consists of 13 minor districts. The southwest growth area encompasses five (5) minor sewer districts west of Hwy 212 and three (3) east of Hwy 212. Construction of the Southwest District trunk line is anticipated to be initiated in concert with business park development demand west of Hwy 212. Some of the Engler Blvd (CSAH 10) business park and commercial area lies within the W-8 minor sewer district and is thus tributary to the Jonathan District trunk line which does have an increment of capacity for this development. In addition, on an interim basis some of the SW-4 minor sewer district may also be directed to the Jonathan trunk line until such time as the Southwest trunk line is constructed.

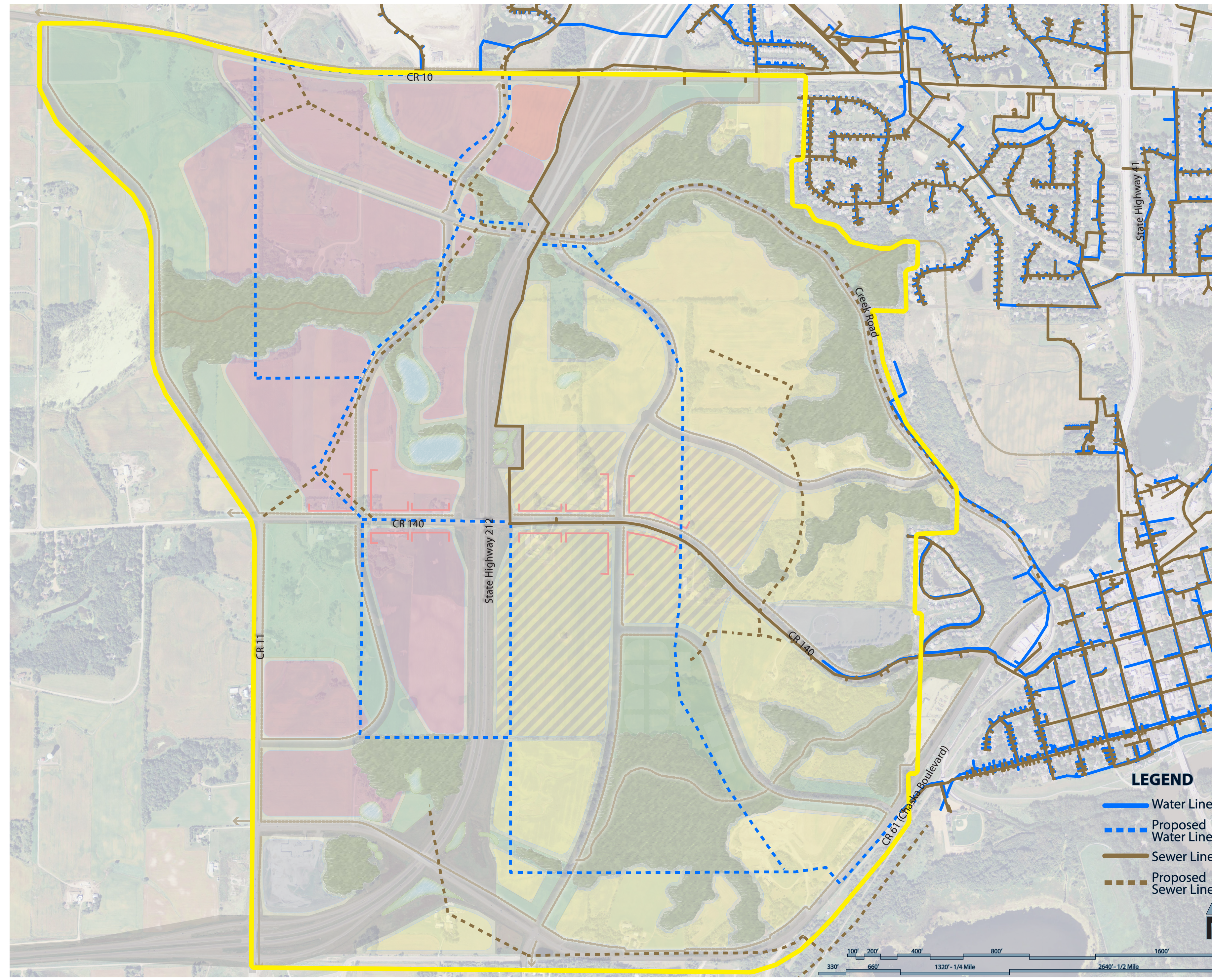
The construction of the South District trunk line needs to be determined by development needs of the current MUSA area west of existing Highway 212. A trunk crossing of Chaska Blvd (CSAH 61) should be built in coordination with construction of the continuation of the MCES Interceptor to Carver. The remaining portions of the South trunk line will need to be built when the areas near the intersections of CSAH 61 and CSAH 11 with new Highway 212 are developed or when areas south of the Big Woods area are developed.

Water

The southwest growth area has existing water main lines that run in the CR 140 right-of-way out to new Hwy 212 and then loop north along Hwy 212 to Engler Blvd (CSAH 10). Future development west of Hwy 212 and south of CR 140 is planned to be served by extension of water main lines, including along CR 140, Creek Road, Engler Blvd (CSAH 10), Chaska Blvd (CSAH 61) and others. As development occurs, an additional water tower will be needed in the southwest growth area as well, northwest of the CR 140/Hwy 212 interchange.

Electricity

Electricity will be provided by Chaska Electric east of the Hwy 212 corridor, which is the western boundary of Chaska Electric's service area. West of the Hwy 212 corridor, electricity will be provided by Minnesota Valley Electric Cooperative (MVEC). A new Chaska Electric sub-station will be needed in the future in the vicinity of the electric transmission line that runs along CR 140. The preferred development plan identifies a general area northeast of the CR 140/Hwy 212 interchange for siting a future sub-station, which will require a 3-5 acre site.



Sanitary Sewer and Water System Plans

Chaska Greenbelt Concept

Chaska Greenbelt Legacy

Since the early 1990's, the City has had a policy to provide, to the extent possible, a "greenbelt" around the edge of the City as a physical separation between Chaska and adjacent communities. The Chaska Greenbelt concept creates a community edge, which is natural and rural in character, in order to preserve and strengthen Chaska's community identity as a freestanding, complete community. The Chaska Greenbelt segment in Chaska's southwest growth area was designated in the late 1990's prior to annexation of Chaska Township and the actual construction of Hwy 212. The City did not know when the freeway would be built and had not done any development planning for this large area. As growth is now being planned for the southwest growth area, the vision for the Chaska Greenbelt segment that runs through this area must adapt to align with the evolving roadway network and planned future development patterns.

Evolving Roadway Network

MnDOT's completion of new Hwy 212 in 2008 and Carver County's completion of Jonathan Carver Parkway (CSAH 11) in 2012 have significant impacts on the southwest growth area as well as the location and character of the Chaska Greenbelt. In particular, the freeway brings significantly increased roadway access and visibility for future development on adjacent land. Guiding the adjacent land on the west side of the freeway as part of the Chaska Greenbelt and Rural Residential land uses severely underutilizes the regional investment in the freeway and the development potential of this land. One of the County's main objectives in the development of its future roadway network is to create more continuous north/south routes through the county. The recent completion of Jonathan Carver Parkway (CSAH 11) provides a continuous north-south arterial roadway connection between Hwy 212 and Hwy 5. The alignment of Jonathan Carver Parkway (CSAH 11) as it angles northwest between CR 140 and Engler Blvd (CSAH 10) is planned to define Chaska's ultimate western city boundary, which will involve an annexation of land in Dahlgren Township.

Preferred Development Pattern

With a future Hwy 212 interchange planned at CR 140, the Preferred Development Pattern guides the land to the west of the interchange for business park uses. Likewise, business park uses are guided adjacent to the Engler Blvd (CSAH 10) and Jonathan Carver Parkway (CSAH 11) interchanges with Hwy 212. These interchange areas will provide strong regional freeway access and visibility for the development of future business parks and significant job growth for the community. Consequently, the Chaska Greenbelt designation is shifted away from the freeway interchange areas and oriented toward creating a community edge along new CSAH 11 and the City's ultimate western boundary.

Southwest Chaska Greenbelt

The preferred development pattern establishes the Chaska Greenbelt from Engler Blvd (CSAH 10) south to Hwy 212 along Jonathan Carver Parkway (CSAH 11) and incorporating several natural resource areas. This natural and rural community edge includes large wetland, creek ravine, steep slopes and wooded upland areas that provide a natural basis for the Chaska Greenbelt.

The designated Greenbelt area links these natural resources into a green corridor. In the spaces between these natural resource areas, a minimum width of generally 1/8 mile has been established to define the Chaska Greenbelt. The Land Use Plan guides the land within the designated Chaska Greenbelt as either Rural Residential or Open Space Preservation. The proposed Big Woods greenway east of Hwy 212 that will provide a connection between the Chaska Greenbelt area west of Hwy 212 and the Chaska Greenbelt area within the Minnesota River valley. The Big Woods greenway is envisioned to provide an east-west greenway connection, including a trail, along the CSAH 61 bridge over Hwy 212, up to the Big Woods via CSAH 61 and the N-S collector street, through the Big Woods, along the wooded ravine, and connecting to CR 140 trail just west of the intersection of CR 140 & CSAH 61. The implementation of the Southwest Chaska Greenbelt and Big Woods greenway has the potential to create an open space system that connects from the Minnesota River Valley all the way up to the U of M Landscape Arboretum.

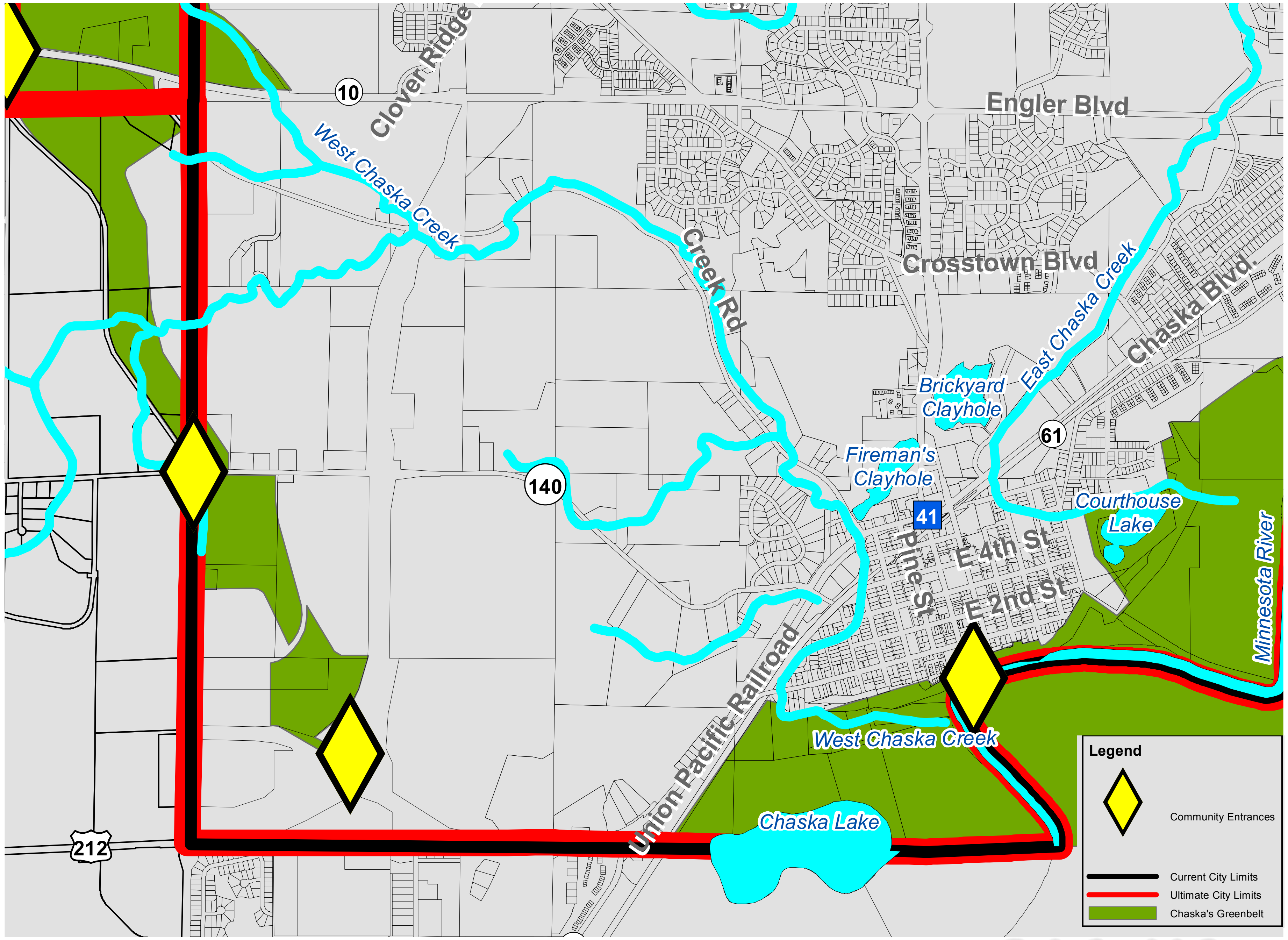
Key Elements

» *Preserved natural landscape features, including creek ravine, floodplain, steep slopes, wetlands and woodlands.*

» *Minimum width of Chaska Greenbelt is generally 1/8 mile or 660 feet in areas lacking natural landscape features.*

» *Community entrances identified along Jonathan Carver Parkway at Engler Blvd (CSAH 10) and CR 140, and Hwy 212 as it crosses under Chaska Blvd (CSAH 61).*

» *Viewsheds from major roadways and community entrances along the community's western edge are preserved to be natural and/or rural in character.*



Chaska Greenbelt Concept

THIS PAGE LEFT INTENTIONALLY BLANK

Chapter 6
Design Guidelines

Purpose and Intent

The purpose of these design guidelines is to allow for a mixed-use development area in Southwest Chaska, including residential, business park, neighborhood commercial, civic, parks and open space, that complements the community as a whole and promotes sustainable development practices.

The intent of the design guidelines is to promote the following design and development objectives:

- *Promote best practices in sustainable development including environmental, economic and social equity objectives.*
- *Promote the development of a diverse mix of land uses, including housing, employment, civic and retail uses.*
- *Create neighborhoods and development patterns that consist of an integrated network of walkable streets.*
- *Promote the development of a variety of building types, sizes and costs.*
- *Encourage alternative modes of transportation including pedestrian, bicycle, public transit and auto.*
- *Provide common usable open spaces for social gathering, recreation and environmental purposes that are of mutual benefit to surrounding property owners, businesses and residents.*
- *Create a built environment that is in scale and character with pedestrian oriented activities.*

This chapter first establishes General Design Statements for land uses, street pattern, transportation systems, streetscapes, access/connectivity, building relationship to streets, parks/open space/natural features, and sustainability. Design Guidelines are then established for the following development area types:

- *Residential*
- *Mixed Residential*
- *Commercial*
- *Business Park*

General Design Statements

Land Uses

Southwest Chaska will be developed to contain a balanced mix of residences, civic institutions, recreational places, shops and workplaces. An integrated mix of land uses will help maintain the City's jobs to housing balance goals, enhance the region's economic development potential and allow residents the opportunity to meet more of their daily needs through shorter and less frequent vehicular trips.

The community should be designed and developed to provide a variety of employment opportunities in the business park and a variety of housing types and choices in the residential and mixed-use neighborhoods. This includes single family residential (detached and attached), condominiums and apartments to address the needs of a diverse population.

The areas designated for commercial use should be developed with neighborhood serving retail shops, restaurants and services. The mix and density of uses and types of businesses should complement and contribute to the success of nearby downtown Chaska and not compete with downtown.

Important civic buildings and spaces may be necessary to serve the needs of the residents. These may include schools, parks, libraries, or community buildings. Civic buildings and spaces should be prominently located and designed to provide a positive civic statement, orient visitors and establish community identity.

Street Pattern, Transportation Systems and Streetscapes

Streets will be designed to accommodate the needs of all modes of transportation. The community will consist of an interconnected network of walkable streets. The street pattern will be designed to afford as small of blocks as practical in order to calm traffic, disperse it more effectively and shorten walking distances. The street pattern should be designed to keep regional traffic off local streets and local traffic off regional roadways.

A hierarchy of street types should be designed to provide equitably for pedestrians, bicyclists, automobiles and transit users. A network of "complete streets" should be designed to encourage greater neighborhood connectivity and provide important open space to infiltrate stormwater runoff. Specific street design elements and strategies are encouraged:

- *Provide "complete street" solutions including facilities for all modes of travel (pedestrian, bicycle, auto and public transit).*
- *Provide a ten-foot wide boulevard adjacent to the street.*
- *Promote roadway and streetscape design solutions to calm traffic, particularly in residential neighborhoods.*

- *Provide narrow traffic pavement widths to calm traffic and reduce infrastructure costs.*
- *Encourage on-street parking.*
- *Reduce street radii at intersections to slow traffic and accommodate pedestrians.*
- *Build-to setbacks are established along all streets.*
- *Streetscape amenities (plantings, furnishings, lighting and signage) should occupy consistent, well defined zones behind the curb and parallel to the pedestrian zone. Incorporate bumpouts at local street intersections to slow traffic and shorten pedestrian crossings.*

- *Provide continuous concrete sidewalks along both sides of public streets with safe and clearly marked pedestrian crossings at each corner.*
- *Combine and limit curb cuts that interrupt the sidewalk.*
- *Provide street trees every 40-50 feet along each side of the street.*
- *Provide sufficient room to accommodate multi-use regional trails through the development where indicated on the plan.*
- *All streets physically terminate at other streets within neighborhoods and connect to existing and projected through streets outside the development.*
- *Design buildings so that their main entrance is onto a street or a square.*
- *Streets are designed such that their long axis visually terminates with either open space vistas, specifically designed building facades, or gateways to the ensuing spaces. Streets that terminate across from single family homes are inappropriate.*
- *Encourage small outdoor gathering spaces adjacent to sidewalks, particularly near restaurants, cafes, and other small businesses within the neighborhood centers.*

Access and Connectivity

Southwest Chaska will be developed to enhance access and connectivity to and from all neighborhoods, businesses and destinations within the community and to the broader region. The street network should be designed to encourage connectivity within the community. A comprehensive system of trails, sidewalks, bike lanes and routes, and roadways should be designed to provide opportunities for all modes of transportation, including pedestrians, bicyclists, automobiles and transit users.

Landscape easements, parks, parkways, and natural open spaces should be considered, planned and designed with connectivity in mind, providing convenient and interesting access and movement throughout the community. This will promote a more active lifestyle among the residents and employees of the community and help to reduce greenhouse gas emissions.

Relationship of Building and Street

Historic communities, such as Chaska, are often characterized by the spatial relationship formed by the interplay between the residential homes and businesses, and the street. The relationship consists of three zones: the public zone (street, boulevard and sidewalk); the semi-public zone (front yard, balcony, stoop and front porch); and the private zone (house, business and backyard).

These historic building to street relationships are played out in lower Chaska, because its development occurred prior to the automobile era, when communities were built for pedestrians. This pedestrian sense of character and scale is an important consideration for development within Southwest Chaska. Design elements and strategies that support this relationship include:

- *Streets that are designed first to accommodate the pedestrian and then to allow for bicycles and motorized vehicles.*
- *Streets that allow on-street parking where feasible, which slows traffic and provides a physical barrier between pedestrians and moving traffic.*
- *Homes and businesses built close to the street, which helps to slow traffic, formalize the semi-public space and provide an interesting set of uses along the public sidewalk for pedestrians to enjoy.*
- *Incorporate street trees and plantings to provide character, comfort and shadow along the street. Street trees slow traffic and provide a more safe and comfortable environment for pedestrians.*
- *Encourage the incorporation of front porches, stoops, balconies, windows and doors that engage the street and sidewalks along each street. These elements enliven the street edge.*

Parks, Open Spaces and Natural Features

Formal, informal, public and semi-public parks and open spaces will be located throughout the community. The Growth and Development Plan gives priority to open spaces within the community. Parks, open spaces and natural features provide important places and environments to support social gathering, healthy lifestyles, recreational, environmental and wildlife habitat needs. When designed well and integrated into a comprehensive public realm plan, they also contribute to community identity and civic pride.

Development of Southwest Chaska's Growth Area should include a hierarchy of public and semi-public open spaces including natural open spaces along bluffs, ravines and wetlands, a 50-60 acre community park, neighborhood parks, squares, plazas and play areas. These should be connected by an integrated system of greenways, parkways, trails and sidewalks.

Natural features like steep slopes, streams, ponds, wetlands and significant upland forest areas should be preserved and enhanced. These areas provide natural relief from the built environment, wildlife habitat and corridors, stormwater infiltration zones and important soil and erosion protection environments. They may also provide important buffer areas between different land uses and densities.

Programmed parks, plazas, recreation and play areas should be located near the neighborhoods and districts they serve. Each should fulfill a role for social gathering and/or recreational purposes. Each should also address

stormwater management needs by incorporating infiltration areas and/or permeable pavement systems.

Sustainability

The Southwest Chaska Growth and Development Plan provides a comprehensive approach for sustainable community development for the benefit of present and future generations. The land use program presents a balanced model to meet environmental, social and economic needs of the community while accommodating the financial commitments and realities of the development environment. The guiding principles of the plan support sustainability by incorporating a mix of uses within a compact environmental footprint.

Attributes of the community promote connectivity, walkability and diversity in both employment and housing choices. Centrally located neighborhoods, parklands, schools, trail systems, and gathering facilities become primary educational, recreational and social venues for community interaction. These combined attributes create a sense of place.

Specific design elements and strategies that support sustainable development include:

- *Mixed-use development program.*
- *Variety of housing choices, types and costs.*
- *Compact development patterns.*
- *Employment opportunities/job creation.*
- *Transportation facilities that support all modes of transportation, promoting connectivity throughout the community and automobile trip reduction.*
- *Integrated system of walkable streets.*
- *Comprehensive park and open space systems.*
- *Community supportive civic uses and institutions – schools, libraries, etc.*
- *Integrated, low-impact and regional stormwater management systems.*
- *Water conservation and improved water quality strategies.*
- *Energy efficiency and green construction.*
- *Environmental education.*

Residential Design Guidelines

These residential design guidelines provide design and development direction for the areas guided for residential development in the Southwest Chaska Growth and Development Plan. The following provides specific goals and guidelines for residential design and development:

Use

Residential uses, including single family (detached and attached), and multi-family (condominium and apartment) residential types are permitted in areas guided for residential development. Guidelines for this area focus on single family detached residential uses. Refer to the Mixed Residential section of these guidelines for guidelines addressing attached and multi-family residential.

Goals

- *Within each neighborhood, a mix of housing choices (types, sizes and costs) is encouraged to address a variety of housing needs for a diverse population.*

Guidelines

- *Provide a mix of housing types and lot sizes.*
- *An accessory building is allowed on each lot.*

Block and Street Patterns

Block and street patterns in the areas guided for residential development should meet the following design criteria:

Goals

- *Ensure that homes integrate well with each other and share design elements which make neighborhood streets safe and enjoyable to walk along.*

- *The street pattern should be designed to afford as small of blocks as practical in order to calm traffic, disperse traffic more effectively and shorten walking distances.*

- *The residential neighborhoods should consist of an interconnected network of walkable streets.*
- *A network of "complete streets" should be designed to encourage greater neighborhood connectivity.*

Guidelines
- *Block sizes should strive to be a minimum of 330 feet wide and a maximum of 660 feet long.*
- *A hierarchy of streets, including arterials, collectors, parkways and local streets should be designed to accommodate all modes of transportation, with priority given to pedestrians.*
- *The street system should be designed to provide enhanced connectivity within each neighborhood – an interconnected network of walkable streets.*
- *Streets should be designed to be as narrow as possible, slowing traffic and shortening the walking distance at pedestrian crossings.*
- *Encourage the use of bumpouts at local street intersections to shorten walking distances across streets.*

Lots and Buildings
Single family lot and building design in the areas guided for residential development should meet the following design criteria:

Goals
- *Home lots and building sizes should vary to provide accommodation for a variety of home types, densities and costs.*
- *Scale and character of homes should be context sensitive, reflecting the small town character and rural history of Chaska.*
- *Encourage buildings that area well-designed, human scaled and enhance neighborhood identity.*

- *Homes should be built of quality materials and incorporate best practices in energy efficiency and green construction if feasible.*
- *It is not the intent of these guidelines to impose a particular style or styles upon new construction. These guidelines are intended to encourage creativity and diversity of design and construction.*

Guidelines
- *A variety of lot sizes should be provided, typically ranging from 5,000 square feet to 15,000 square feet.*
- *A variety of lot widths should be provided, typically ranging from 40 feet to 100 feet.*
- *Maximum building heights should be 35 feet for principal structures and 20 feet for accessory structures.*
- *Properties adjacent to sensitive natural resources (e.g wetlands, wooded steep slopes, etc.) should provide adequate setbacks as established in City Code and Policy.*
- *Building facades should be varied and articulated to provide visual interest.*
- *The primary entry and frequent window openings should face the street.*
- *Unenclosed porches may encroach into the front yard setback a maximum of 8 feet.*
- *The single-family house, not the garage, should be the primary visual and massing focus along public rights-of-way.*
- *Side-loaded garages should have windows on the front facade facing the street.*

Parking
Parking allocation and design in the areas guided for residential development should meet the following design criteria:

Goals
- *Single-family residential parking requirements should be accommodated on each lot.*
- *Parking requirements for attached and multi-family residential is addressed in the Mixed Residential Design Guidelines.*
- *While parking is an important and necessary component of residential development, it should not be the primary visual focus from neighborhood streets.*

Guidelines
- *Provide a minimum 8 foot setback from the homes primary façade to a front-loaded attached garage door.*
- *On-street parking for visitors should be provided where feasible.*

Landscape
Landscape design in the areas guided for residential development should meet the following design criteria:

Goals
- *Landscaping and the use of plant materials should be encouraged throughout the community to reduce the amount of permeable surfaces and the visual impact of parking areas, and integrate the built environment with the natural landscape.*

Guidelines
- *Hardy plant species are encouraged for resistance to extremes in climate change, road salt, and disease.*
- *Native plant materials are encouraged to reduce water consumption needs for plant irrigation.*
- *Parking, outdoor storage, service and trash areas should be screened with landscape plantings.*
- *Increase stormwater permeability where possible by creating planting beds rather than paving materials.*

Mixed Residential Design Guidelines

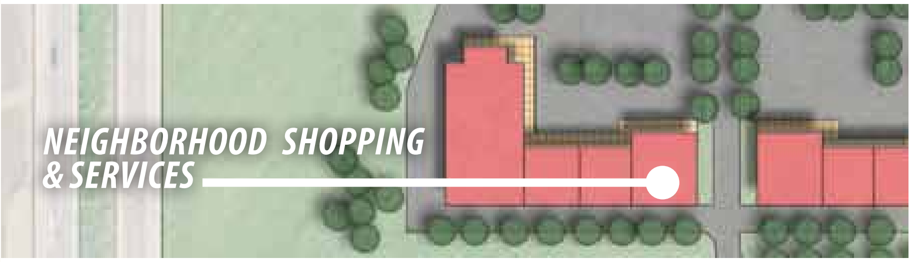
These mixed residential design guidelines provide design and development direction for the areas guided for mixed residential development in the Southwest Chaska Growth and Development Plan. The following provides specific goals and guidelines for mixed residential design and development:

Use

A wide range of land uses are permitted in areas guided for mixed residential development including residential uses (single family detached and attached, and multi-family), retail/commercial, office, civic/institutional and open space uses. Up to 25% of the land uses may be dedicated to non-residential uses. Neighborhood centers should contain a greater mix of non-residential uses that support the neighborhood, such as neighborhood retail, services, office and civic uses. Guidelines for this area focus on the mix of land uses including single family attached and multi-family residential uses, retail, office and civic uses. Refer to the Residential section of these guidelines for guidelines addressing detached single-family residential.

Goals

- *Provide a mix of land uses that support the economic, social and environmental sustainability of the community.*
- *Neighborhood serving shops, restaurant, services, employment and civic uses should be concentrated with higher density residential uses in compact, walkable neighborhood centers.*



- *A mix of housing choices (types, sizes and costs) at greater housing densities should be encouraged near neighborhood centers to address a variety of housing needs for a diverse population.*

Guidelines

- *Civic and institutional land uses should be strategically located in or near neighborhood centers to serve broader community functions and strengthen community identity.*

- *Higher density housing (attached single family and multi-family) is encouraged in neighborhood centers.*

- *Transition to lower density residential uses away from neighborhood centers and arterial roadways.*
- *Compact development patterns that incorporate a greater mix of uses at higher densities are encouraged in strategically located neighborhood centers. These may be located near major roadway intersections and/or adjacent to significant public uses and spaces.*
- *Ground level retail is encouraged in walkable neighborhood centers if economically feasible.*

Block and Street Patterns

Block and street patterns in the areas guided for mixed residential development should meet the following design criteria:

Goals

- *Neighborhood centers should be characterized by smaller and more compact block and street patterns.*

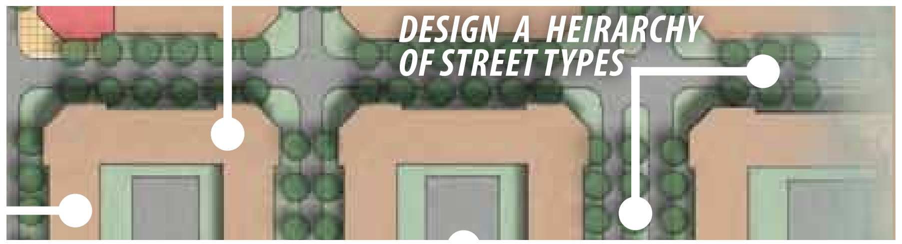
- *Ensure that buildings and homes integrate well with each other and share design elements which make neighborhood center streets safe and enjoyable to walk along.*
- *The street pattern should be designed to afford as small of blocks as is practical in order to calm traffic, disperse traffic more effectively and shorten walking distances.*
- *Neighborhoods and neighborhood centers should consist of an interconnected network of walkable and active streets.*
- *A network of "complete streets" that accommodate all modes of transportation should be designed to encourage greater neighborhood connectivity.*

Guidelines

- *Streets should be planted with trees in boulevards and medians where possible to calm traffic and promote a safe pedestrian environment.*

- *Streets should be designed to be as narrow as possible, slowing traffic and shortening the walking distance at pedestrian crossings.*
- *Encourage the use of bumpouts at local street intersections to shorten walking distances across streets.*
- *Provide safe, well lit, signed and visible pedestrian crossings.*

- Residential neighborhood block sizes should strive to be a minimum of 330 feet wide and a maximum of 660 feet long.
- Neighborhood center block sizes are encouraged to be as small, compact and walkable as reasonably possible.
- The street system should be designed to provide enhanced connectivity within each neighborhood – an interconnected network of walkable streets.
- A hierarchy of streets, including arterials, collectors, parkways, and local streets should be designed to accommodate all modes of transportation, with priority given to pedestrians.



Lots and Buildings

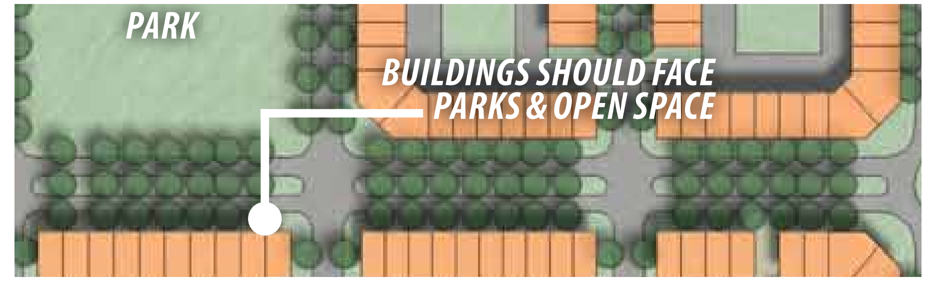
Lot and building design in the areas guided for mixed residential development should meet the following design criteria:

Goals

- *Scale and character of buildings should be context sensitive, reflecting the small town character and rural history of Chaska.*
- *Buildings should be oriented outward so that they face the street to enhance the character of the neighborhood and street and provide a more pedestrian friendly environment.*

- *Encourage buildings that are well-designed, human scaled and enhance neighborhood identity.*

- *All buildings should be built of quality materials and strive to incorporate best practices in energy efficiency and green construction.*
- *Lots and building sizes should vary according to their specific uses and density patterns. Higher density housing and mixed use buildings will be larger and set more closely to the street.*
- *When buildings are adjacent to parks and open scpae, they should orient towards these civic and aesthetic amenities to enhance their value and improve the aesthetic character of the park and street.*



- *It is not the intent of these guidelines to impose a particular style or styles upon new construction. These guidelines are intended to encourage creativity and diversity of design and construction.*

Guidelines

- *A variety of building types, including attached single family (townhouse, rowhouse, duplex, etc.), multi-family (condominium, apartment), mixed-use, office and civic buildings are encouraged in the neighborhood centers.*
- *Building height and mass should be consistent with the buildings use and density. Higher density (larger and taller) buildings should be developed in more compact patterns within neighborhood centers.*
- *Setbacks for mixed-use buildings in the neighborhood centers should be 0-5 feet. Buildings in these areas are encouraged to build-to the right of way line and front the street with active ground level uses.*
- *Setbacks for stand-alone high density residential buildings should be 8-15 feet from the right of way line to provide some area to transition from public to private space. These areas should be landscaped and/or used for patios, front stoops and porches.*
- *Buildings in the neighborhood centers should be placed to occupy the street edge to the greatest degree possible, creating a continuous pedestrian-oriented façade along the street.*
- *Encourage recessed space for front door entries, outdoor dining, and sales areas of plazas intended to invite pedestrian activity.*
- *Building facades should be varied and articulated to provide visual interest.*
- *Primary building entries and frequent window openings should face the street.*
- *Building corners at primary intersections should be treated as prominent features, taking advantage of the opportunity to create a unique district identity by incorporating attractive entrances and architectural features.*
- *Minimize gaps and openings between buildings in order to maintain continuity of the pedestrian environment*
- *Garages should be encouraged to be setback 20 feet behind the primary building facade or be located to gain access via an alley, if one is located at the rear of the lot.*
- *Properties adjacent to wetlands should have all buildings and parking setback a minimum of 30 feet from the wetland/water edge.*

Parking

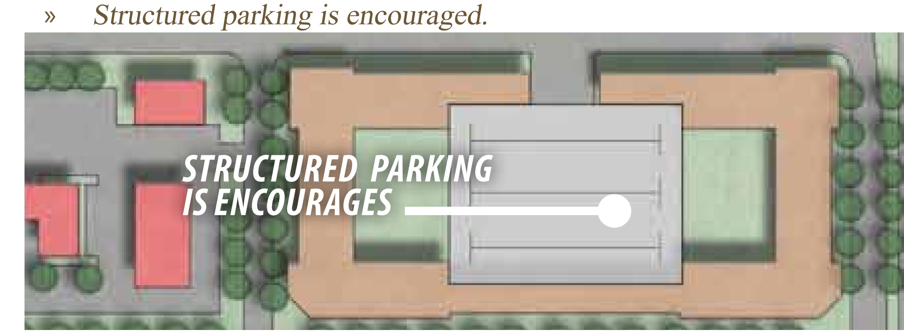
Parking lot design in the areas guided for mixed residential development should meet the following design criteria:

Goals

- *Provide adequate and well-designed parking facilities to serve residents, visitors, businesses, shops and services.*
- *Parking is necessary to support development but should not be the focus of the development from public view.*
- *Wherever possible, parking areas should be located behind primary buildings to support the goal of pedestrian emphasis in the community.*

Guidelines

- *A combination of on-street public parking and off-street private parking facilities should be encouraged in neighborhood centers to meet parking requirements.*
- *Provide well-designed, convenient easily accessible and identifiable parking facilities.*
- *Structured parking is encouraged.*



- *Landscaping and other screening devices are encouraged to buffer parking garages and surface parking lots at the street level from pedestrian view.*
- *Where feasible, parking should be located behind or beneath primary buildings.*
- *Entrances to parking facilities should be located on secondary streets, not along the primary streets.*
- *Shared parking supplies should be encouraged in neighborhood centers.*

- *All parking facilities should be designed to be safe and secure.*
- *Design and plan for adequate lighting levels for auto and pedestrian safety, while minimizing disturbance of light pollution to adjacent land uses.*
- *Design parking facilities to limit conflicts between pedestrians and autos.*

Landscape

Landscape design in the areas guided for mixed residential development should meet the following design criteria:

Goals

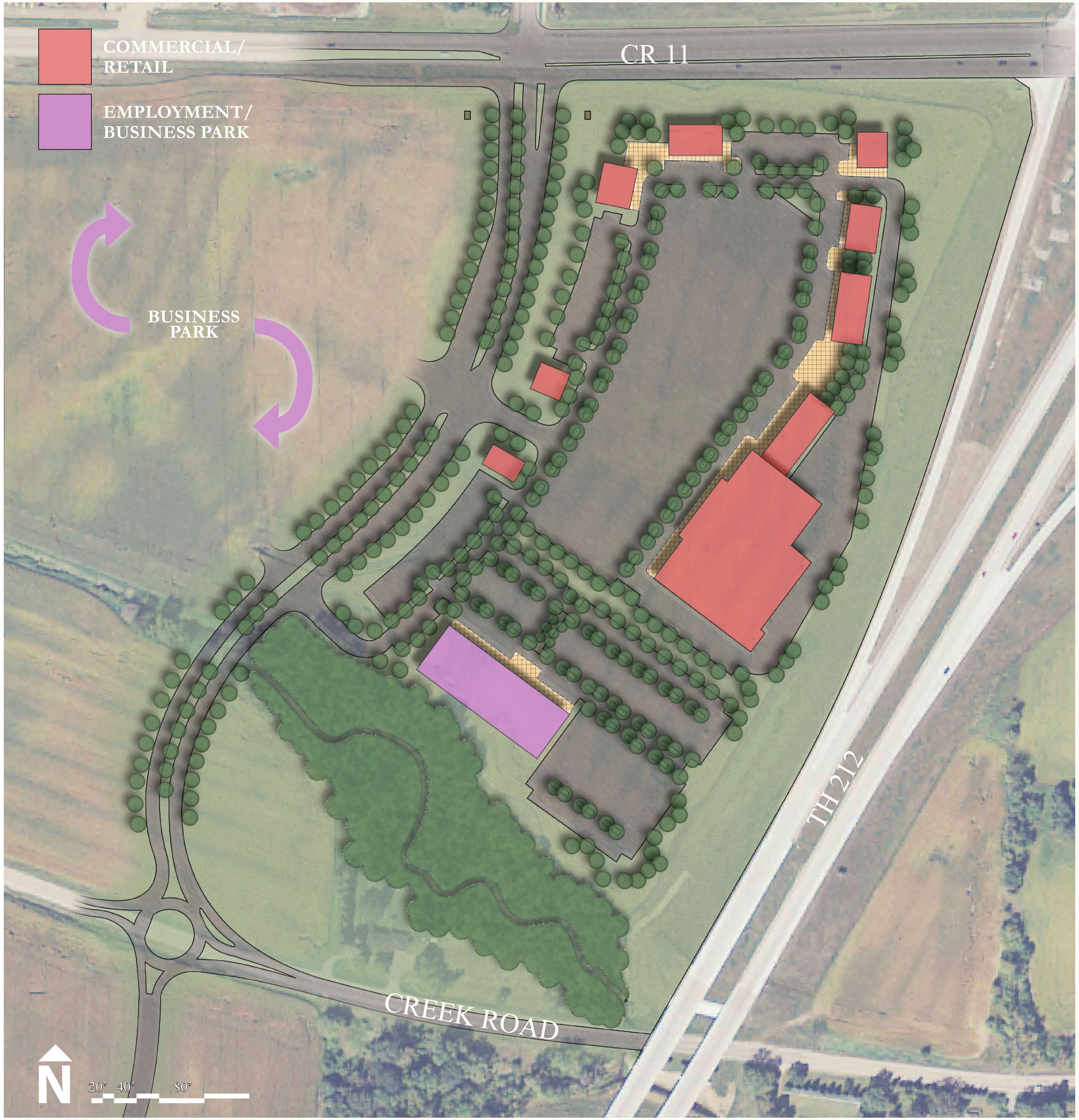
- *Landscaping and the use of plant materials should be encouraged throughout the community to reduce the amount of permeable surfaces and the visual impact of parking areas, and integrate the built environment with the natural landscape.*

Guidelines

- *Outdoor spaces/plazas should incorporate ornamental and shade trees, planting beds, and potted plants with plant materials that emphasize seasonal color and change.*
- *Landscaped plazas and courtyards are encouraged in the neighborhood centers.*
- *Hardy plant species are encouraged for resistance to extremes in climate change, road salt, and disease.*
- *Native plant materials are encouraged to reduce water consumption needs for plant irrigation.*
- *Parking, outdoor storage, service and trash areas should be screened with landscape plantings.*
- *Increase stormwater permeability where possible by creating planting beds rather than paving materials. Permeable paving systems are encouraged.*
- *Encourage landscaped connections between private and public amenities and spaces.*
- *Encourage tree and shrub plantings in and around parking areas to reduce heat island effect and improve air quality.*

Commercial Design Guidelines

These commercial design guidelines provide design and development direction for the areas guided for commercial development in the Southwest Chaska Growth and Development Plan. The following provides specific goals and guidelines for commercial design and development:



Use

Neighborhood serving commercial land uses are permitted in areas guided for commercial development.

Goals

» *Neighborhood serving shops, restaurant, services, and employment uses should be provided in areas guided for commercial development.*

Guidelines

» *Neighborhood serving shops, restaurant, services, and employment uses are encouraged in strategically located commercial centers. The Growth Area Plan identifies a neighborhood commercial center located at the southwest quadrant of CR 10 and TH 212.*

» *Pedestrian-oriented neighborhood commercial uses are permitted to serve the day-to-day needs of neighborhood residents including but not limited to small grocery, branch bank, day care, laundry/cleaners pick-up, barber/beauty shop, and similar personal services, small restaurant, medical and veterinarian clinic.*

Block and Street Patterns

Block and street patterns in the areas guided for commercial development should meet the following design criteria:

Goals

» *Insure that buildings integrate well with each other and share design elements which make commercial streets safe and enjoyable to walk along.*

» *The street pattern should be designed to afford as small of blocks as is practical in order to calm traffic, disperse traffic more effectively and shorten walking distances.*

» *Commercial centers should consist of walkable and active streets.*

» *A network of "complete streets" that accommodate all modes of transportation should be designed to encourage greater connectivity with surrounding neighborhoods and districts.*

Guidelines

» *Commercial center block sizes are encouraged to be as small, compact and walkable as reasonably possible.*

» *The street system should be designed to provide enhanced connectivity to and from the commercial center.*

» *Streets should be designed as "complete streets" that accommodate all modes of transportation with emphasis on the pedestrian.*

» *Provide safe, well lit, signed and visible pedestrian crossings.*

Lots and Buildings

Lot and building design in the areas guided for commercial development should meet the following design criteria:

Goals

» *Scale and character of buildings should be context sensitive, reflecting the small town character and rural history of Chaska.*

» *Buildings are encouraged to address and front the public streets as much as possible.*

» *Encourage buildings that area well-designed, human scaled and enhance neighborhood identity.*

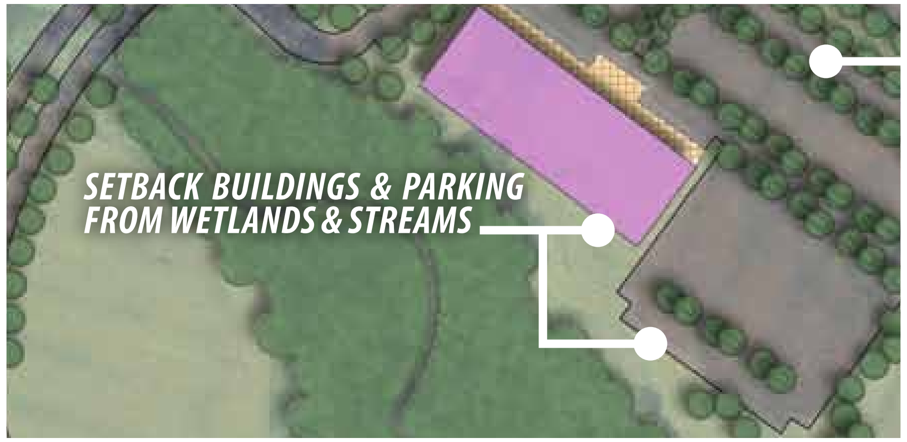
» *All buildings should be built of quality materials and strive to incorporate best practices in energy efficiency and green construction.*

» *It is not the intent of these guidelines to impose a particular style or styles upon new construction. These guidelines are intended to encourage creativity and diversity of design and construction.*

Guidelines

» *Maximum building height should be 50 feet.*

» *Properties adjacent to wetlands should have all buildings and parking setback a minimum of 30 feet from the wetland/water edge.*



» *Setbacks for commercial buildings in the neighborhood centers should be 0-5 feet where feasible. Buildings are encouraged to build-to the right of way line and front the street with active ground level uses with interesting façade treatments.*

» *Building facades should be varied and articulated to provide visual interest.*

» *Ground level building facades should be attractive and inviting.*

» *Primary building entries and frequent window openings should face the street.*

» *Buildings should engage to the ground. The use of heavy bases and built up platforms for the buildings should be minimized.*

» *Buildings should enhance the character of existing land forms and site features. Consider breaking very large buildings into modules or sub-parts to reduce perceived scale.*

» *Site and building design shall accommodate pedestrian circulation onsite from parking areas to plazas, open space, pedestrian pathways, and to adjoining buildings.*

Parking

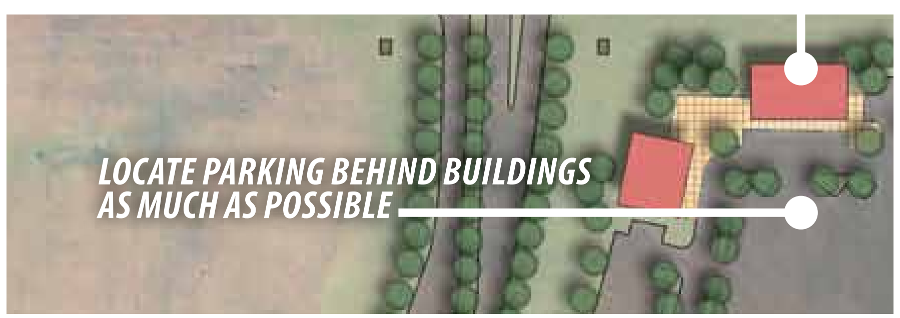
Parking lot design in the areas guided for commercial development should meet the following design criteria:

Goals

» *Provide adequate and well-designed parking facilities to serve residents, visitors, businesses, shops and services.*

» *Parking is necessary to support development but should not be the focus of the development from public view.*

» *Wherever possible, parking areas should be located behind primary buildings to support the goal of pedestrian emphasis in the community.*



Guidelines

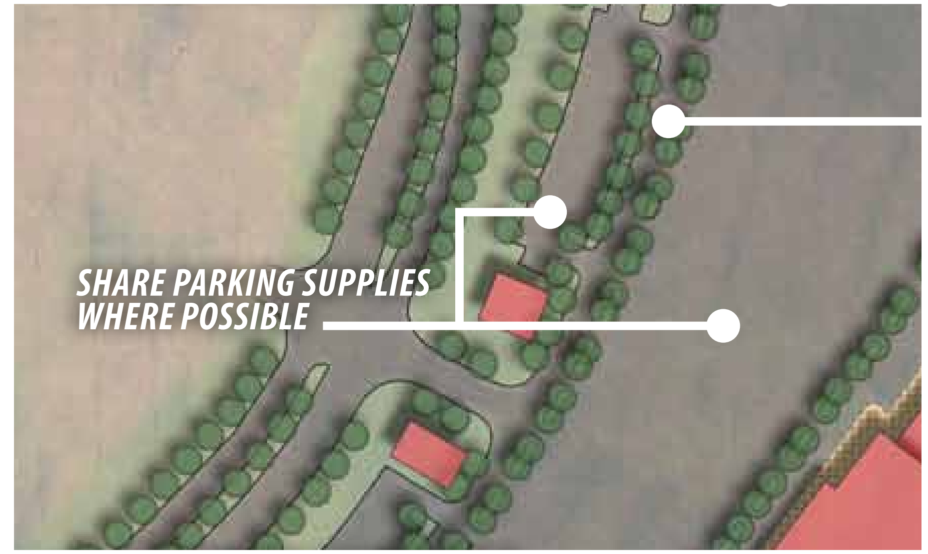
» *Provide well-designed, convenient easily accessible and identifiable parking facilities.*

» *All parking facilities should be designed to be safe and secure.*

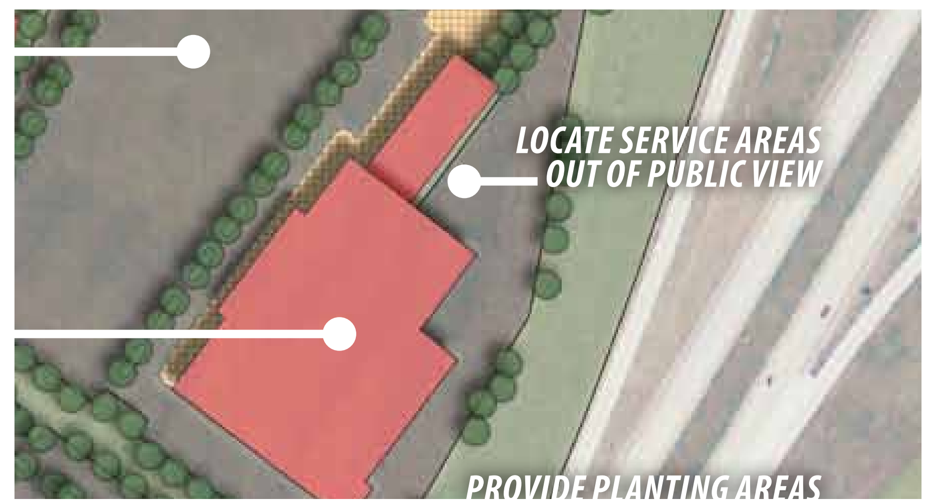
» *Design and plan for adequate lighting levels for auto and pedestrian safety, while minimizing disturbance of light pollution to adjacent land uses.*

» *Design parking facilities to limit conflicts between pedestrians and autos.*

» *Shared parking supplies should be encouraged.*

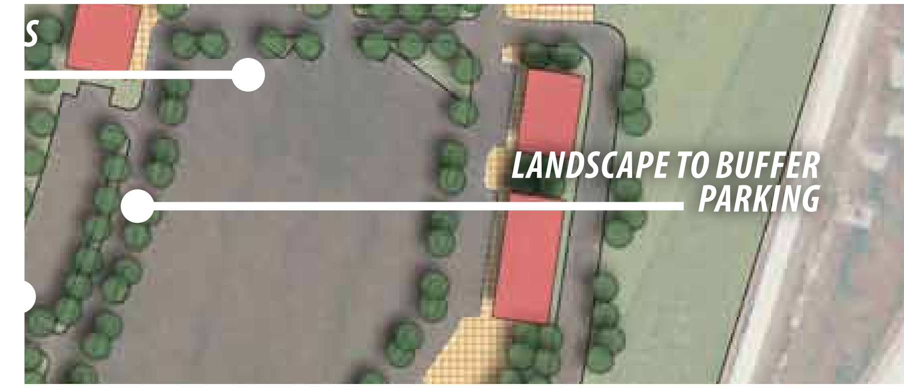


» *Service areas should be located away from the public view in order to maintain visual quality. and limit pedestrian conflict*



» *Where feasible, parking should be located behind or beneath primary buildings.*

» *Landscaping and other screening devices are encouraged to buffer parking garages and surface parking lots at the street level from pedestrian view.*



Landscape

Landscape design in the areas guided for commercial development should meet the following design criteria:

Goals

» *Landscaping and the use of plant materials should be encouraged to reduce the amount of permeable surfaces and the visual impact of parking areas, and integrate the built environment with the natural landscape.*

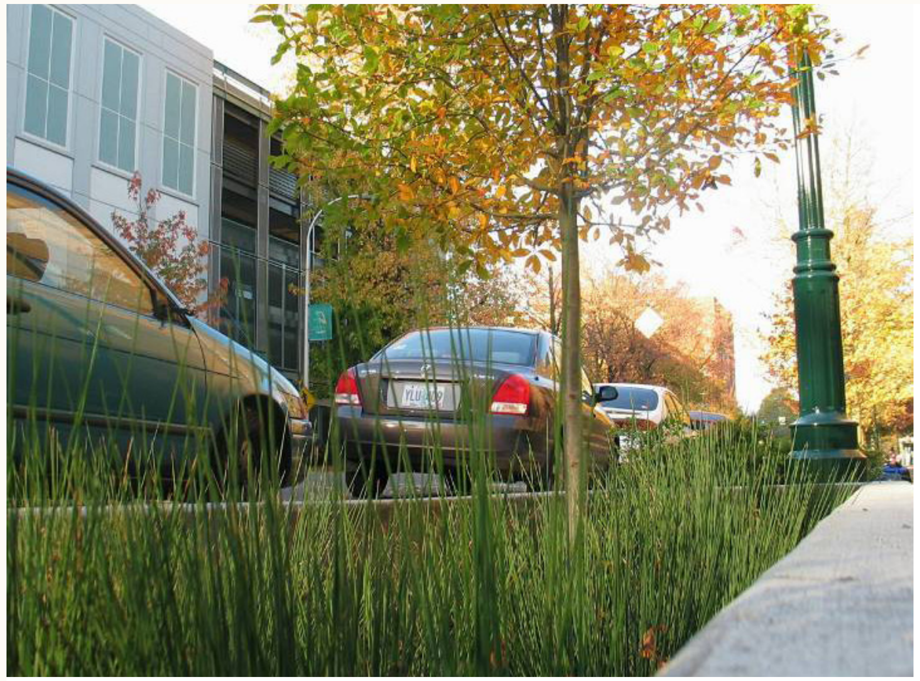
Guidelines

» *Outdoor spaces/plazas should incorporate ornamental and shade trees, planting beds, and potted plants with plant materials that emphasize seasonal color and change.*

» *Landscaped plazas and courtyards are encouraged.*

» *Hardy plant species are encouraged for resistance to extremes in climate change, road salt, and disease.*

» *Native plant materials are encouraged to reduce water consumption needs for plant irrigation.*



» Increase stormwater permeability where possible by creating planting beds rather than paving materials. Permeable paving systems are encouraged.

» Encourage tree and shrub plantings in and around parking areas to reduce heat island effect and improve air quality.

» Encourage landscaped connections between private and public amenities and spaces.

» Parking, outdoor storage, service and trash areas should be screened with landscape plantings.

Business Park Design Guidelines

These business park design guidelines provide design and development direction for the areas guided for business park development in the Southwest Chaska Growth and Development Plan. The following provides specific goals and guidelines for business park design and development:

Use

Land uses permitted in areas guided for Business Park development include office, light industrial and a small amount of residential, lodging and/or retail/commercial land use. The primary emphasis should be on employment based land uses such as office and light industrial.

Goals

» *Provide employment based land uses that support the economic sustainability of the community.*

Guidelines

» *Emphasize the development of employment based land uses (office, light industrial) in the areas guided for business park to provide meaningful jobs within the community.*

Block and Street Patterns

Block and street patterns in the areas guided for business park development should meet the following design criteria:

Goals

» *Insure that buildings integrate well with each other and share design elements which make business park streets safe and enjoyable to walk along.*

» *The street pattern should be designed to afford as small of blocks as is practical in order to calm traffic, disperse traffic more effectively and shorten walking distances.*

» *A network of "complete streets" that accommodate all modes of transportation should be designed to encourage greater connectivity with surrounding neighborhoods and districts.*

Guidelines

» *Business park block sizes are encouraged to be as small, compact and walkable as reasonably possible without compromising truck access and movement.*

» *The street system should be designed to provide enhanced connectivity to and from the business park.*

» *Streets should be designed as "complete streets" that accommodate all modes of transportation.*

» *A hierarchy of streets that include identifiable planted parkways should provide convenient and easy access to all businesses within the business park.*

» *Provide safe, well lit, signed and visible pedestrian crossings.*

Lots and Buildings

Lot and building design in the areas guided for business park development should meet the following design criteria:

Goals

» *The overall site design should be in harmony with the natural setting, contribute to the growing sense of place and character of Chaska, and reduce potential conflicts between pedestrians and vehicles.*

Guidelines

» *Where feasible and appropriate, keep buildings low and oriented to the contours of the topography so that the form of the rolling landscape continues to be dominant.*

» *The siting and orientation of the buildings should protect and enhance existing views and vistas.*

» *Structures should be positioned to provide maximum visibility into adjacent public spaces and main points of entry and exit should be located on the public space.*

» *Building placement that creates opportunities for plazas, courtyards, patios, or outdoor dining is strongly encouraged.*

» *Building entrances should address and front the street.*

» *Buildings should engage to the ground. The use of heavy bases and built up platforms for the buildings should be minimized.*

» *Buildings should enhance the character of existing land forms and site features. Consider breaking very large buildings into modules or sub-parts to reduce perceived scale.*

» *Buildings should relate to the terrain and each other in their massing and forms. Larger masses should be located at the centers of building compositions, with smaller forms stepping outwards and down.*

» *Site and building design shall accommodate pedestrian circulation onsite from parking areas to plazas, open space, pedestrian pathways, and to adjoining buildings.*

» *Existing and proposed pedestrian and/or bicycle circulation systems and easements shall be integrated into site design and a convenient exterior entrance shall be provided from the trail system.*

Parking

Parking lot design in the areas guided for business park development should meet the following design criteria:

Goals

- *Provide adequate and well-designed parking facilities to serve employees, residents, and visitors.*
- *Parking is necessary to support development but should not be the focus of the development from public view.*
- *Wherever possible, parking areas should be located behind primary buildings to support the goal of pedestrian emphasis in the community.*

Guidelines

- *Provide well-designed, convenient easily accessible and identifiable parking facilities.*

- *Where feasible, parking should be located behind or beneath primary buildings.*
- *Shared parking supplies should be encouraged.*
- *All parking facilities should be designed to be safe and secure.*
- *Design and plan for adequate lighting levels for auto and pedestrian safety, while minimizing disturbance of light pollution to adjacent land uses.*
- *Design parking facilities to limit conflicts between pedestrians and autos.*
- *Landscaping and other screening devices are encouraged to buffer parking garages and surface parking lots at the street level from pedestrian view.*

Landscape

Landscape design in the areas guided for commercial development should meet the following design criteria:

Goals

- *Landscaping and the use of plant materials should be encouraged to reduce the amount of permeable surfaces and the visual impact of parking areas, and integrate the built environment with the natural landscape.*

Guidelines

- *Outdoor spaces/plazas should incorporate ornamental and shade trees, planting beds, and potted plants with plant materials that emphasize seasonal color and change.*
- *Hardy plant species are encouraged for resistance to extremes in climate change, road salt, and disease.*
- *Native plant materials are encouraged to reduce water consumption needs for plant irrigation.*

- *Parking, outdoor storage, service and trash areas should be screened with landscape plantings.*
- *Landscaped plazas and courtyards are encouraged.*

- *Increase stormwater permeability where possible by creating planting beds rather than paving materials. Permeable paving systems are encouraged.*

- *Encourage landscaped connections between private and public amenities and spaces.*
- *Encourage tree and shrub plantings in and around parking areas to reduce heat island effect and improve air quality.*

THIS PAGE LEFT INTENTIONALLY BLANK

Chapter 7
Implementation

Introduction

This chapter of the Growth & Development Plan identifies several key implementation strategies for realizing future private and public development and the necessary investments in public infrastructure. These strategies include amending the 2030 Comprehensive Plan, phasing of public infrastructure, phasing of public financing, establishing a marketing strategy, and annexation. The large size of the southwest growth area and the anticipated 30-year timeline for full development requires the City to have an implementation approach that is phased and affords flexibility over time. Things will change as growth and development progresses, such as market demand, developer interest, demographics, public financing capacity, types of funding sources available, and policies at various levels. It will also be important to continue engaging the community, property owners and key stakeholders in each step of the planning, designing and development process of the southwest growth area to ensure that implementation of this plan's vision continues to reflect the community's desires.

2030 Comprehensive Plan Amendment

Implementing the vision and key elements of this plan will require amendments to the 2030 Comprehensive Plan. Bottom line, the impetus for undertaking the Southwest Chaska Growth & Development Plan project was the need for the City to amend the Comprehensive Plan to align with the proposed highway interchange at CR 140/Hwy 212. Mn DOT and the Metropolitan Council gave conditional approval of this proposed interchange with their approval of CR 140/Hwy 212 Interchange Warrant Analysis in December 2011. Submission to and approval by Mn DOT/Metropolitan Council of a Formal Access Request is still required for formal approval of the proposed interchange. In order for the interchange to gain formal approval, the City must show that its 2030 Comprehensive Plan is in alignment with the proposed interchange, including the local collector roadway network and land uses. The Southwest Chaska Growth & Development Plan itself can be referred to in the Comprehensive Plan as part of amending it and/or specific policies and maps can be directly included in the Comprehensive Plan chapters, including Land Use, Transportation, Park/Recreation/Open Space, and Pedestrian Movement/Trails. Additionally, the City's Sanitary Sewer, Water Supply and Local Surface Water Management Plans may also need to be amended to identify projects and phasing related to the southwest growth area.

Phasing Strategy

Overview

The southwest growth area encompasses approximately 2,000 acres of land which is anticipated to achieve full build-out over approximately 30 years and require significant public investments in numerous infrastructure projects. The area's large scale and long-term development timeline demand that growth, development, infrastructure extension and public financing be planned in strategic phases. This phasing strategy consists of five (5) phases, which are identified below. Within each phase, the anticipated public infrastructure projects are briefly described, including roadways, utilities, stormwater management, and land acquisition, as well as development.

Phase 1

Roadways

» *Construction of first segment of new north-south collector street, west of Hwy 212, from Engler Blvd (CSAH 10) south to Creek Road.*

Utilities

» *Extend water main line along Engler Blvd (CSAH 10), west of Clover Ridge Drive.*

» *Extend water main line along Creek Road, west of Hwy 212.*

» *Extend existing West District sanitary sewer trunk line located north of Engler Blvd (CSAH 10) to south side of Engler Blvd. This solution is an interim one until such time that the Southwest District sewer trunk line is extended up Creek Road and to the west side of Hwy 212.*

» *Extend sanitary sewer trunk line and water main line within north-south collector street right-of-way developed during Phase 1.*

Stormwater Management

» *Develop adequate wet retention ponds and bioretention basins for identified stormwater treatment areas on Stormwater Management Analysis diagram.*

Land Acquisition

» *City will acquire the right-of-way necessary for a future CR 140/Hwy 212 full interchange.*

Development

» *As this phase is generally consistent with the existing 2030 Comprehensive Plan, the City supports the immediate development of Phase 1.*

» *Phase 1 development near the eastern segment of CR 140 is guided for low density residential uses that can be served by an existing sanitary sewer trunk line and water main line, and will have direct roadway access from existing CR 140.*

» *Phase 1 development near the Engler Blvd/Hwy 212 interchange is guided for business park and commercial uses that will require extension of the City's utility system and construction of the first segment of the new north-south collector street, west of Hwy 212, connecting to Engler Blvd (CSAH 10).*

Phase 2

Roadways

» *Redesign and reconstruction of the short segment of Creek Road, where it passes under Hwy 212 and will provide the connection between the two new north-south collector streets.*

» *Redesign and reconstruction of eastern segment of CR 140 west to the new north-south collector street on the east side of Hwy 212. The easternmost segment of CR 140 was recently reconstructed, including the addition of a multi-use trail along the north side of the roadway.*

» *Construction of the central segment of the new north-south collector street, east of Hwy 212, from Creek Road south to CR 140.*

» *Construction of new east-west street that will connect the new northern residential neighborhood, north of CR 140, to Creek Road and downtown Chaska. This street will connect between the new north-south collector street, east of Hwy 212, and the southernmost segment of Creek Road.*

» *Redesign and reconstruction of the southernmost segment of Creek Road between downtown Chaska and the new east-west street that traverses up the creek bluff.*

» *Construction of new east-west street that will connect the new southern residential neighborhood, the new community park and Big Woods natural area to downtown Chaska. This street will connect between the new north-south collector street, east of Hwy 212, and Chaska Blvd (CSAH 61).*

Utilities

» *Extend Heights District sewer trunk line west along CR 140 to provide sanitary sewer services for all four (4) minor sewer districts above the river bluff and east of Hwy 212.*

» *Extend sanitary sewer trunk line and water main line within street right-of-way developed during Phase 2.*

Stormwater Management

» *Develop adequate wet retention ponds and bioretention basins for identified stormwater treatment areas on Stormwater Management Analysis diagram.*

Land Acquisition

» *Land acquisition of approximately 50 acres will be necessary for the future community park adjacent to the Big Woods natural area.*

Development

» *As this phase is generally consistent with the existing 2030 Comprehensive Plan, the City supports the immediate development of Phase 2.*

» *Phase 2 development is guided for low density residential and mixed residential uses that can be served by existing water main lines and relatively small extensions of Heights District trunk sanitary sewer lines. This development will also require significant new street construction, including the central segment of the north-south collector and the local connector streets to the downtown Chaska area, as well as reconstruciton of a portion of CR 140 and a portion of Creek Road.*

Phase 3

Roadways

» *Construct partial interchange at CR 140/Hwy 212.*

» *Redesign and reconstruction of the central segment of CR 140 east of the new interchange with Hwy 212 east to the new north-south collector street on the east side of Hwy 212.*

» *Construction of the southern segment of the new north-south collector street, east of Hwy 212, from CR 140 south to Chaska Blvd (CSAH 61).*

Utilities

» *Extend water main line south along the Hwy 212 corridor to provide water services for areas south of CR 140.*

» *Extend sanitary sewer trunk line and water main line within street right-of-way developed during Phase 3.*

Stormwater Management

» *Develop adequate wet retention ponds and bioretention basins for identified stormwater treatment areas on Stormwater Management Analysis diagram.*

Land Acquisition

» *Land acquisition of 3-5 acres will be necessary for the new electric sub-station that will be located northwest of the future CR 140/Hwy 212 interchange.*

» *Land acquisition of 5-10 acres will be necessary for a new neighborhood park for neighborhood north of CR 140.*

Development

» *Since this phase is generally inconsistent with the existing 2030 Comprehensive Plan, the development of Phase 3 should occur after the Comprehensive Plan amendment is approved.*

» *Phase 2 development is guided for low density residential and mixed residential uses that can be served by existing water main lines and relatively small extensions of Heights District trunk sanitary sewer lines. This development area will also require construction of the CR 140/Hwy 212 interchange, reconstruction of a segment of CR 140 near the interchange, and construction of the southern segment of the new north-south collector street (east of Hwy 212).*

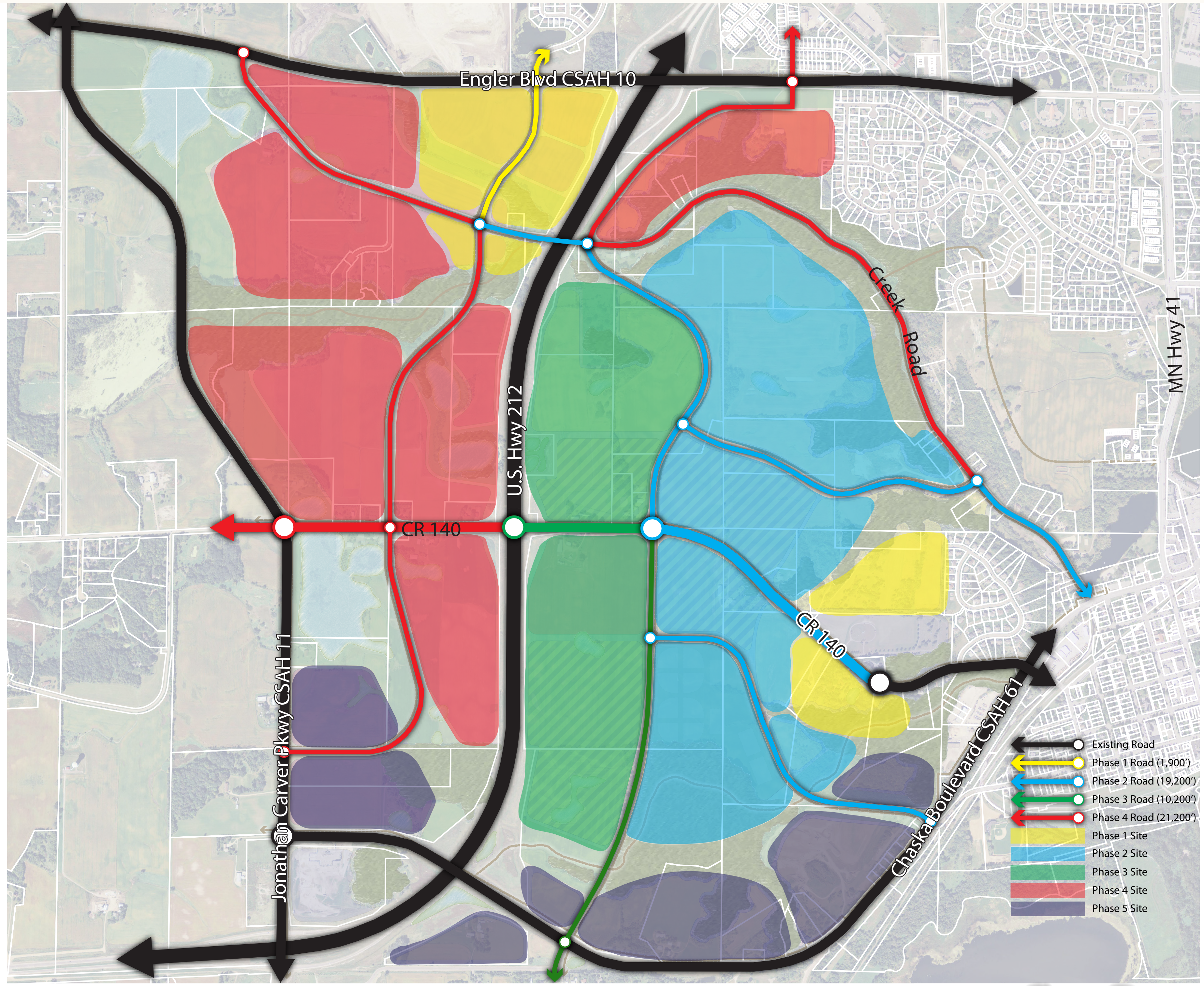
Phase 4

Roadways

» *Construction of new north-south collector street, west of Hwy 212, from Creek Road south to Jonathan Carver Parkway (CSAH 11).*

» *Redesign and reconstruction of the western segment of CR 140 west of the new interchange with Hwy 212 west to the new Jonathan Carver Parkway (CSAH 11).*

» *Redesign and reconstruction of existing Creek Road either to an upgraded roadway with unique character (e.g. Wisconsin's Rustic Roads) or primarily a trail corridor without a roadway that connects all the way through the creek ravine.*



Phasing Diagram

» *Construction of the northern segment of the new north-south collector street, east of Hwy 212, between Engler Blvd (CSAH 10) and Creek Road.*

Utilities

» *Extend the Southwest District sewer trunk line up Creek Road and west of Hwy 212 to provide sanitary sewer services for development west of the freeway corridor.*

» *Extend water main line along CR 140 west of Hwy 212.*

» *Potentially extend water main line north-south in the vicinity of the CR 11 corridor depending on the degree of development along the CSAH 11 corridor, which is designated as part of the Chaska Greenbelt and rural residential land uses.*

» *Construct a new water tower in the general area northwest of the future CR 140/Hwy 212 interchange.*

» *Extend sanitary sewer trunk line and water main line within street right-of-way developed during Phase 4.*

Stormwater Management

- *Develop adequate wet retention ponds and bioretention basins for identified stormwater treatment areas on Stormwater Management Analysis diagram.*

Annexation

- *Annexation of the wedge of land between the City's current western municipal boundary and the new alignment of Jonathan Carver Parkway (CSAH 11) will be necessary to preserve the community's edge as rural and natural in character and the Chaska Greenbelt concept.*

Development

- *Since this phase is generally inconsistent with the existing 2030 Comprehensive Plan, the development of Phase 4 should occur after the Comprehensive Plan amendment is approved.*
- *Phase 4 development is guided for business park uses west of Hwy 212, which will require extension of the Southwest District trunk sanitary sewer line and extension of water main lines west of Hwy 212. Development of this area will also require construction of the rest of the new north-south collector street (west of Hwy 212), as well as reconstruction of CR 140 (west of Hwy 212) and Creek Road.*
- *Phase 4 development also includes a future low density residential area east of Hwy 212. Development of this area will require extension of the Southwest District trunk sanitary sewer line and construction of the northern segment of the new north-south collector street between Engler Blvd (CSAH 10) and Creek Road.*

Phase 5

Utilities

- *Extend the South District sewer trunk line along Chaska Blvd (CR 61) to provide sanitary sewer services for future development below the river bluff, including west of Hwy 212.*
- *Extend water main line west to provide water supply services for future development below the river bluff, including west of Hwy 212.*

Stormwater Management

- *Develop adequate wet retention ponds and bioretention basins for identified stormwater treatment areas on Stormwater Management Analysis diagram.*

Development

- *Since this phase is generally inconsistent with the existing 2030 Comprehensive Plan, the development of Phase 3 should occur after the Comprehensive Plan amendment is approved.*
- *Phase 5 development is guided for low density residential uses, which will require extension of the South District trunk sanitary sewer line and water main lines.*
- *Phase 5 development also includes the future development area west of Hwy 212 at the intersection of Chaska Blvd (CSAH 61) and Jonathan Carver Pkwy (CSAH 11), near the interchange with Hwy 212. This area will also require extension of the South District trunk sanitary sewer line and water main lines.*

Public Finance

One of the keys to implementing the Chaska Southwest Growth & Development Plan is the City's capacity to finance or ability to coordinate multi-jurisdictional financing of the public improvements necessary to facilitate future preferred development patterns. Given the scope and long-term horizon of the plan, it is not possible to establish a specific public finance strategy for implementation the plan. This section of the plan describes the critical public investments and financing tools needed to implement the plan's vision and key elements.

Critical Improvements

The plan identifies and estimates the costs of public improvements. Several general recommendations apply to financing these improvements.

Careful financial planning is required. The plan describes five (5) phases of development and related public improvements. More detailed financial planning is needed to guide the implementation of this plan. Some critical financial planning issues are:

- *How does the construction of infrastructure coordinate with development? What improvements should be built in advance of development?*
- *The City has limited financial resources available to implement the plan. These resources include utility reserves/revenues, utility connection charges and property taxes. Financial planning will help the City to evaluate the potential demand on these resources for improvement alternatives. The City should evaluate innovative financing techniques to advance these critical improvements, including public-private partnerships.*
- *Financial planning is needed to evaluate the financial feasibility of the proposed public infrastructure phasing strategy.*
- *Current City policy requires the developer to build the infrastructure within a development area. This approach may not work in the business park area. Unless a "master developer" is willing to prepare larger areas for development, the City may face the need to build (and finance) the improvements needed to open land for development. Financial planning allows the City to better understand the financial implications of this approach.*

The remainder of this section explores the implementation issues associated with specific public investments.

Connection to the City's Utility Systems

The City must make utility improvements to extend trunk sanitary sewer and water main lines to the future development sites. Strategies for undertaking and financing connections to the City's utility systems include:

- *These improvements should be made prior to the initial development project. Creating utility capacity to serve the area allows the City to react promptly to development proposals.*
- *The extension of sanitary sewer services to the west side of Hwy 212 is tied to decisions about the ultimate function of Creek Road as a roadway or trail corridor.*
- *The improvements can be financed from utility funds, the issuance of bonds or a combination of both.*
- *These costs should not be assessed to properties, which would increase the cost of development, unless required as part of the overall financing strategy.*
- *Reserve funds will be replenished from capital charges (SAC and WAC) paid by future development.*

Water Tower

A water tower will eventually be needed to serve future development to the west. Some of the financing issues to be considered are:

- *The water tower should be financed through the issuance of bonds and paid for through trunk area charges or water utility funds.*
- *Such system improvements are not financed through property assessments.*

Stormwater Management System

The plan creates a regional approach to stormwater management improvements. Under State Law, one of the public financing options to consider is a storm sewer improvement district, which is a special taxing district. The area within the district is defined by ordinance. A property tax is levied on property in the district to raise revenues needed for the construction and maintenance of the improvements. Several factors shape the use of a storm sewer improvement district:

- *Will the district cover the entire site or will each phase have a separate district?*
- *Are the improvements built all at once (up front)?*
- *Assuming that improvements precede development (and the tax base needed to pay for the improvements), what other funds are needed to make this approach feasible? Any analysis of a storm sewer improvement district requires assumptions about the timing, type and scale of future development. These assumptions shape the projection of tax base and revenue capacity of a district.*

These questions should be explored as more detailed infrastructure and development planning takes place.

CR 140 / Hwy 212 Interchange

One of the biggest challenges of promoting future development in the southwest growth area is assembling the needed funding sources for planning, designing and constructing this future highway interchange. Although Mn DOT's approval and partnership is required for this interchange, their approval does not necessarily correlate with their participation in funding. This issue was a major discussion topic during this project's planning process, particularly with the property owners. The City has estimated the costs of both a partial and full highway interchange, Thus far, the City's approach to funding of the interchange has been to identify the anticipated impacts and benefits of this interchange on properties in the southwest growth area, explore potential funding sources, estimate cost-sharing strategies, and plan for the appropriate phasing needed for funding and construction of the interchange. At a minimum, the City anticipates that the funding of the interchange will involve the City and the property owners. Other potential funding sources could be the State, Metropolitan Council, and County. Some critical financing considerations identified during the southwest growth area planning process were:

- *Assign benefit of this infrastructure improvement to specific development areas.*
- *Develop an implementation financing strategy tha will allow this infrastructure improvement to be built in Phase 1 or 2.*
- *Seek grant assistance to lower construction cost of interchange, e.g. State's Transportation Economic Development (TED) program.*

CR 140 Redesign / Reconstruction

CR 140 is envisioned as the primary spine of the southwest growth area, providing the primary east-west street connection, access to and across Hwy 212, and a new entrance to the community and downtown Chaska, while accommodating high levels of traffic. As the most important street in this area of the community, for all transportation modes, it will be important to redesign and reconstruct this roadway to meet these needs and create a signature street for the community. CR 140 is currently under jurisdiction of Carver County. Funding for CR 140 will likely involve the City and the County.

New Collector Roadways

New collector roadways are planned for the southwest growth area to facilitate local traffic, so that local traffic generally uses local streets rather than regional streets and providing access to the regional roadway network for regional trips. At a minimum, new north-south collector streets will be needed on each side of the Hwy 212 corridor. Collector roadways are generally under City jurisdiction and will require at least partial funding by the City, as well as potential state aid funding.

Site Improvements

The Phasing Strategy identifies the public infrastructure (street, sanitary sewer, water, storm sewer and other improvements) needed to allow properties to develop. As noted earlier, additional planning is needed to evaluate options for building and financing these improvements. Issues to be considered in this evaluation include:

- *Given the incremental nature of future development and the environment for commercial-industrial development, it seems unlikely that requiring developers to build this infrastructure is a reasonable strategy. Infrastructure cannot be built on a parcel-by-parcel basis. The evolution of the Plan should consider the scope of improvement projects that best facilitate development.*
- *Some of these costs are related to "oversizing" of utilities and street to serve a broader area. The oversizing costs are typically not assessed to the adjacent property. What costs can be attributed to oversizing and what will be assessed? Are some oversizing costs "City" expenses? Are some to be assessed to future phases?*
- *The keys for describing the financial implications of financing these improvements are the amount of assessable costs and the timing of development. Money will be borrowed to make the improvements. If costs are assessed and payable, then the property owner carries the cost until development. If the City defers payment, the City must provide monies to support the debt until property develops and assessments paid.*
- *Assessing costs to benefitted property increases the cost of development in the City. At what level does the amount of assessment combined with the cost of land become a financial barrier to development?*

Parks / Open Space

The plan anticipates the acquisition of land for a community park, neighborhood park and open space/trail system through park dedication. Implementation of this element of the plan raises several financial issues:

- *More detailed land use planning is needed to more clearly define the location and amount of park land to be acquired. If that amount is in excess of current park dedication policies, then the City needs some other form of funding to acquire this property.*
- *The plan seeks the acquisition of specific areas rather than pieces from all property as it is platted. This approach requires a combination of land dedication and cash payment in lieu of dedication. Coordination of acquisition and development is needed to project a flow of funds for implementation.*
- *Land shown for parks and open space include area for stormwater infiltraton and retention. Costs for these improvements have not been estimated.*

Financing Tools for City Actions

State Law provides a broad array of powers and tools that may assist the City in undertaking the public investments needed to implement the Plan these initiatives. The following section provides a brief discussion of the tools currently available to the city. This information is designed as a point of reference in continued financial planning.

Overview of Statutory Authority

Every statutory power contains a unique set of authorizations and restrictions. Understanding these provisions is a key to effective use. In some cases, the city may have several options. For example, public improvements can be financed with special assessments, special service districts, housing improvement areas, tax abatement and tax increment financing. To evaluate the use of potential statutory powers, the city should find the answers to the following questions.

Who can use the powers? Most municipal powers are granted directly to the city. In these cases, the city council can act without the involvement of any other body. Some development powers reside solely with another entity, such as the housing and redevelopment authority and the economic development authority.

How do the powers function? Every municipal development power carries certain requirements and implications for its use. For example, tax increment financing involves a complex set of statutory requirements. Property owners must petition to start the process for establishing a special service district. Tax abatement discussions should involve the County. These are just some of the important issues that shape decisions on finding and using the right tools to implement the plan.

Does the power provide funding capacity?

Many statutes provide access to revenues and debt that can be used to finance implementation initiatives. Several questions can help guide the evaluation of the funding capacity in a given statute:

- *What revenues are authorized?*
- *How can the revenues be used?*
- *Can the city issue the bonds as "general obligations," achieving the lowest interest rates?*
- *Do the bonds count against the city's debt limit?*
- *What approvals are needed to authorize use of these powers?*

Some key sources of statutory authority come from the following:

- *Constructing public improvements and levying special assessments - Chapter 429.*
- *Constructing, operating, and maintaining water, sanitary sewer and storm water utility systems - Section 444.075.*
- *Creating and using special service districts - Sections 428A.01 though 428A.101.*
- *Creating and using housing improvement areas - Sections 428A.11 though 428A.21.*
- *Establishing and using tax increment financing districts - Sections 469.174 through 469.1791.*
- *Making and using tax abatement levies - Sections 469.1812 through 469.1815.*
- *Powers granted to cities through housing and redevelopment authorities - Sections 469.001 through 469.047.*
- *Powers granted to cities through economic development authorities - Sections 469.090 through 469.1081.*
- *Lease financing for real and personal property - Section 465.71.*

These statutes are available on the Internet at www.revisor.leg.state.mn.us/stats.

The following discussion highlights key finance tools, but the specific statutory requirements for using them are not fully described. In addition, the laws governing these programs change over time. Finance plans for actual projects should be made using appropriate technical and legal advice.

Special Assessments

Public improvements are often financed using the power to levy special assessments (Minnesota Statutes Chapter 429). A special assessment is a means for benefiting properties to pay for all or part of the costs associated with improvements, and to spread the impact over a period of years. This tool can be applied to both the construction of new improvements and the rehabilitation of existing improvements. Special assessments can be used to finance all of the public improvements resulting from the Plan. Eligible improvements include sanitary sewer, water, storm sewer, streets, sidewalks, street lighting, park, streetscape, and parking. Special assessments provide a means to borrow money to finance public improvements. Chapter 429 conveys the power to issue general obligation improvement bonds to finance the design and construction of public improvements. Important factors in the use of improvement bonds include:

» *A minimum of 20% of the cost of the improvement must be assessed against benefited properties.*

» *Beyond the 20% threshold, any other legally available source of municipal revenue may be used to pay debt service on improvement bonds.*

» *Improvements bonds are not subject to any statutory debt limit.*

» *Improvement bonds may be issued without voter approval.*

Careful consideration must be given to setting the amount of the assessment. From a legal perspective, the amount of an assessment cannot exceed the benefit to property as measured by increased market value. There are also practical considerations. In growth areas, cities must decide how to allocate costs between current and future development. Assessment policies must consider how to make this allocation and the financial resources needed to carry future costs until development occurs. For reconstruction, the challenge becomes determining how much benefiting property owners should pay for enhancing an existing improvement. Within this limitation, several factors will shape the amount of the assessment.

» *The amount of the assessment must be 20% or more of the improvement cost to allow the issuance of bonds.*

» *Local improvement policies and/or decisions made on previous projects often create parameters for assessments. Likewise, assessment decisions should be made with consideration of the potential implications for future similar projects.*

» *The assessment must strike a balance between equity and feasibility. Properties that benefit from improvements should pay a fair share of the costs. The assessment must be affordable for both the property owner and the city. Reducing the assessment to the property requires the city to allocate other revenues to the project.*

Utility Revenues

The City operates four municipal utilities: water, sanitary sewer, storm water, and electric. The revenues from the operation of these utilities are available to pay for capital improvements in support of Plan implementation. The primary sources of funding come from:

» *Excess operating revenues can be used to pay for capital improvements on a cash basis or in support of debt.*

» *Utility fund reserves can be used to pay for capital improvements.*

» *The City collects area charges from the platting of land. These funds are used to pay for trunk improvements within the development and to the general city system.*

» *State Law (Minnesota Statutes, Section 444.075) gives the authority to pledge these revenues to general obligation bonds for utility system improvements.*

Storm Sewer Improvement District

A storm sewer improvement district (Minnesota Statutes, Sections 444.14 through 444.21) is a special taxing district. The district is established by ordinance. The City has the ability to levy a tax on all taxable property within the district. Revenues from the tax levy can be used to acquire, construct, reconstruct, extend, maintain, and otherwise improve storm sewer systems and related facilities within the district. The City may also issue general obligations bonds, secured by the district tax levy, to pay for improvements.

Street State Aid

The City receives state aid for the construction and maintenance of the local streets. This aid can only be used for streets designated for inclusion in the local state aid street system. These revenues can also be pledged to pay debt service on bonds issued for the construction and maintenance of state aid streets (M.S. 162.18).

Tax Increment Financing

Tax increment financing (TIF) is the primary development finance tool available to Minnesota cities (Minnesota Statutes, Sections 469.174 through 469.179). TIF is simple in concept, but complex in its application. Through tax increment financing, the property taxes created by new development (or redevelopment) are captured and used to finance activities needed to encourage the development. The challenge in using TIF lies with the complex and ever-changing statutory limitations. These complexities make it impractical to provide a thorough explanation of tax increment financing as part of this plan. Instead, this section highlights the use of TIF as it relates to the implementation of the Plan.

Under current State Law, TIF would have limited application for implementation of the Plan:

» *An **Economic Development** TIF districts can be used for industrial development. These districts can be established when the city finds it is necessary to (1) discourage commerce, industry, or manufacturing from moving their operations to another state or municipality; (2) increase employment; or (3) preserve and enhance the tax base of the state. The TIF Act defines specific types of industrial uses that are eligible for the establishment of this form of district. The primary uses are manufacturing, warehousing, research and development, and telemarketing.*

» *A **Housing** TIF District can be established for a project, or a portion of a project, intended for occupancy, in part, by persons or families of low and moderate income.*

The use of TIF would likely be focused on incentives for a specific project, reducing the cost of development in Chaska. Limitations on the use of TIF prevent it from providing assistance in funding improvements needed to serve broad sections of this development area.

Tax Abatement

Tax abatement acts like a simpler and less powerful version of tax increment financing. With TIF, the city controls the entire property tax revenue from new development. Under the abatement statute (Minnesota Statutes, Sections 469.1812 through 469.1815), the city, county and school district have independent authority to grant an abatement.

Abatement in Minnesota works more like a rebate than an abatement. The city (and other units abating taxes) adds a tax levy equal to the amount of taxes to be abated. The revenue from the abatement levy can be returned to the property owner or retained and used to finance development activities. Tax abatement can be use to finance the key development actions related to implementation of the Plan: land acquisition, site preparation and public improvements.

Unlike TIF, tax abatement is not tied to specific forms of development. It can be used in association with all forms of private development set forth in the Plan. The statute grants the authority to issue general obligation bonds supported by the collection of abated taxes. The proceeds of the bonds may be used to pay for (1) public improvements that benefit the property, (2) land acquisition, (3) reimbursement to the property owner for improvements to the property, and (4) the costs of issuing the bonds. These bonds can be issued without an election and are not subject to the debt limit.

Special Service District

A special service district is a tool for financing the construction and maintenance of public improvements within a defined area of commercial and industrial. Minnesota Statutes, Sections 428A.01 through 428A.10 govern the creation and use of special service districts. A special service district provides a means to levy taxes (service charge) and provide improvements and service to a commercial area.

The district can provide an alternative means of financing the construction of any of the public improvements discussed previously with special assessments. The service district approach avoids the benefits test imposed by special assessments; the test for the district is that the amount of service charges imposed must be reasonably related to the special services provided. The costs of improvements could be spread across a district or phase area rather than through assessments to individual properties.

Another important use of the special service district is the maintenance of public improvements. If some of the improvements described in the Plan require a level of maintenance above the typical public improvement, a special service district can become a source of revenue. Without a special service district, these costs are typically borne through the General Fund of the City. The process to create a special service district and to levy taxes must be initiated by petition of property owners and is subject to owner veto. The use of a special service district requires a collaboration of property owners and the city.

The service charge applies solely to non-residential property. State Law limits the application of a service charge to only property that is classified for property taxation and used for commercial, industrial, or public utility purposes, or is vacant land zoned or designated on a land use plan for commercial or industrial use. Other types of property may be part of the service district, but may not be subject to the service charge.

Affordable Housing Strategy

The City of Chaska is committed to encouraging and supporting the development of new affordable housing within the community's growth areas, as well as new infill housing in redevelopment areas. As a Twin Cities metropolitan community and participant in the Metropolitan Livable Communities Act (LCA) Program since 1996, the City is committed to accommodating its share of the projected future regional affordable housing needs. However, while implementation of public infrastructure projects can be relatively specific and controlled by the City, affordable housing will primarily be developed by the private sector. Future housing development will be very responsive to market demand and supply. With this in mind, implementation of the City's affordable housing must be fairly general in nature. The City's intent is to provide proactive guidance for incorporating affordable housing as part of future residential areas of the community, as well as establish the parameters for the City's review of future residential development proposals.

For regional affordable housing planning purposes, the Metropolitan Council defines affordable housing opportunities as undeveloped land that is guided for medium density residential or high density residential in a City's comprehensive plan. Within the southwest Chaska growth area, future housing development will occur in the areas guided for Low Density Residential and Mixed Residential land uses. Mixed Residential allows low, medium and high density residential uses. Although Low Density Residential is intended to be predominately single-family detached houses, it also allows single-family attached housing and mid-rise multi-family housing. There is potential for providing affordable housing within both of these residential land use designations.

The City's current 2030 Comprehensive Plan identifies the southwest growth area as a Traditional Neighborhood Development (TND) area. The City's current affordable housing policies include at least 30% of the total housing units be provided as affordable units within a Traditional Neighborhood Development area overall. Within the southwest growth area, affordable housing options should be evaluated as part of each future residential and mixed residential development to determine the feasibility, desirability and appropriateness on specific sites, e.g. location and size of site. The recent market analysis for the southwest growth area projected that future housing development will most likely be 40% medium/high density housing types (20% townhouses, 20% multi-family housing), which are housing types that could contribute to future affordable housing needs. The City should identify alternative ways for future residential developments to provide appropriate types and quantities of affordable housing units.

Annexation Strategy

In order for the community to optimize the new development potential that will be afforded by the new Hwy 212 corridor, particularly the future CR 140/Hwy 212 interchange, this plan advocates for the Chaska Greenbelt concept to be shifted away from the freeway corridor. With the recent completion of the new Jonathan Carver Parkway (CR 11) just west of the City of Chaska, the City views this major roadway as the ultimate western edge of the community. CR 11 is already the community edge south of CR 140, but the roadway's new alignment from CR 140 north to Engler Blvd (CR 10) creates a wedge of land between the City's current boundary and the roadway. The Chaska Greenbelt concept identified in this plan shows much of this land as the future greenbelt and rural/natural community edge. Now that this new roadway has been constructed, the City should move forward on discussions with Dahlgren Township on the potential process for annexation of this wedge of land into the City of Chaska.

Marketing Strategy

Introduction

The key to any effective marketing strategy involves developing and reinforcing a "brand" or image for a particular project or area through careful execution of initial development projects. For the SW Chaska growth area, this translates into attracting and guiding the right kind and form of initial projects (involving residential, business park, or commercial uses) that will set the tone for this part of Chaska over the next few decades. It is critical that the first builders (and buyers) in southwest Chaska build upon the vision for this part of the community, so that initial and ongoing development phases support marketing of future phases of the area to external parties. If the initial building projects are in conflict with the vision of the project articulated in this document and marketing efforts led by the City, the growth area will not benefit from any appreciable momentum and the southwest Chaska growth area will not achieve its full potential. Therefore, the need to find "early adopters" who buy into the vision, guiding principles and key elements of the SW growth & development plan is an essential ingredient of the overall development strategy. The primary differentiators of this plan for SW Chaska, outlined below, will help attract the best companies, residential projects and buyers and, therefore, help this part of Chaska stand out in the Twin Cities market.

Differentiators

Strong Vision

Developers and business owners are always seeking to reduce risk and uncertainty. The more defined the vision and plan are, and the degree to which the community and the city agencies responsible for review and approval of development plans communicate openly about their backing of the plan, the more comfortable they will be about committing to develop their particular project within the SW Chaska area. The commitment of the City to this plan at all levels, from the City Manager and staff to elected leaders and individual city employees, is vitally important in marketing the vision for SW Chaska. City staff should commit to working closely with prospective development applicants and to expediting reviews and approvals for projects proposed within the SW Chaska area, without compromising the vision for the overall project area. Prospective tenants and companies considering a particular community for a new project consider the personalized treatment and commitment of city staff as key differentiators in selecting a particular city. The commitment of a city and the backing of a community for a particular vision can overcome many other obstacles and help to secure a "win" in terms of landing a company or a new housing or retail development.

Co-Branding

An opportunity exists for the potential business parks, retail developments, and residential areas in the SW Chaska area to leverage an overall brand for this part of the community, and to leverage as well the overall favorable brand and impression of the City of Chaska in the southwestern suburban region of the Twin Cities. Chaska has a reputation as one of the best small towns in Minnesota, with a solid base of good schools, quality parks & trails, historic downtown, community amenities, and a solid workforce. Individual developments in the SW Chaska area should look to leverage the overall brand and identity of the Chaska area in marketing efforts. Individual developments may wish to integrate aspects of the brand images or logos associated with Chaska into their particular marketing efforts, for example. In the case of potential business park uses within the SW Chaska area, co-branding presents an opportunity for the city to ensure that future developments convey the image and market positioning of future developments along and near US 212. For example, a cognizant co-branding strategy can ensure that future developments in the SW Chaska area tie with the emphasis of companies in the area on higher technology and "clean" industries as opposed to simply warehousing or more heavy industrial uses.

Growth & Development Plan Focus on Amenities

The master plan for the Southwest Chaska area includes a plan for good infrastructure, including utilities as well as local and collector streets. The planning for infrastructure improvements makes this more than raw land with potential for development. In addition, the plan defines a suite of amenities, including open space, trails, retail and residential areas within the business park. These amenities make this area more attractive to businesses that know what knowledge workers, and frankly all employees, want in their work environment today. Being able to deliver on these elements of the plan early in the phasing of the SW Chaska area will be vital to the long-term success of the project.

Focus on Sustainability

The City of Chaska, working with private sector developers, has the opportunity to brand the SW Chaska area as a district borne out of ideas of "sustainability" or "green" principles. While a wide range of enterprises, both in the real estate arena and elsewhere, have emphasized "green" attributes in an effort to drive business activity, a smaller subset have successfully, truly leveraged an emphasis on "green" principles to drive real estate activity. The City should work with prospective developers to integrate messages tied to the "green" nature of the plan for SW Chaska into their particular marketing efforts. For example, marketing messages for SW Chaska should emphasize the network of open spaces that encircle the area, the preservation of the remnant Big Woods, and the preservation of riparian and environmentally sensitive zones in the southwestern quadrant of the city. Marketing tied to sustainability should also highlight any efforts the city puts forth to integrate green infrastructure elements into the planning for public improvements (such as rain gardens, bioswales, porous pavements, solar power, wind turbines, and other technologies).

Strong, integrated design guidelines

Design guidelines are the tool by which the owners and the city can uphold the vision, guiding principles and key elements that underpin the plan for SW Chaska. They provide clear statements to potential buyers and developers that form the basis for the overall development strategy in SW Chaska and communicate what is allowed and encouraged in terms of design strategies (for community entrances, the construction of various building types, landscaping, and a variety of other elements). Well-conceived design guidelines also provide a level of assurance to buyers that future development in the Southwest Chaska area will be held to certain defined standards that will protect the investments they make in their properties. The guidelines should be used as a marketing tool to reduce the sense of uncertainty that a developer or business owners might feel regarding the future expectations of the City regarding the SW Chaska area and to demonstrate the level of commitment of the City and community stakeholders to the overall vision articulated in the SW Chaska plan.

Aggressive Use of State Programs

State incentive programs, such as the State Bioscience Zones, are very important factors in getting businesses to develop or expand in one location instead of another. Other communities understand this and use these initiatives as marketing tools in promoting particular developments or particular districts. Chaska should explore creative ways to combine local, state, and federal incentives as well as private sources of capital, in order to more effectively market the various development sectors in SW Chaska and stand out in the local and regional marketplace. The emphasis in the SW Chaska plan on sustainability and quality of life may help the City to more effectively market incentives to particular companies considering the area for investment.

Strategies

Promote the 'Vision'

Develop marketing materials, brochures, website information and other resources in order to promote the master plan and business opportunities in the southwest Chaska growth area.

- *Market business park opportunities in SW Chaska in trade publications and journals related to business and industry, commercial development and planning.*
- *Attend and actively promote the growth & development plan and business park opportunities at industry conferences and professional organization events.*
- *Seek speaking engagements at industry conferences and seminars, regional and statewide planning and economic development events, and campus forums to promote the growth & development plan and business opportunities in Chaska.*
- *Meet with existing Chaska businesses to promote and discuss the growth & development plan and business development opportunities in the City of Chaska. Discuss ways to retain existing businesses through expansion within the business park.*
- *Actively seek out businesses the City would like to attract to Chaska to promote the growth & development plan and business development opportunities in Chaska.*
- *Meet with brokers and site selectors to promote the growth & development plan and discuss business development opportunities in Chaska.*
- *Connect to the network of economic development organizations locally, for the state, the region, and nationally.*
- *Connect to the groups of "site selectors" who consult with firms looking to relocate or expand to new markets. Pursue publication opportunities (newspapers, business journals, trade industry magazines, websites, blogs, social media sites, etc.)*

Create Business Incentives

- *Fund, design and develop the trunk system of public improvements (roads, utilities, stormwater management facilities, open space, parks and trails) within the SW Chaska area. Gone are the days where the developer can be expected to fund and build these necessary services. The City may have to lead the development of these necessary public improvements to attract developers and businesses to the SW Chaska area.*
- *Establish and enforce standards for quality and sustainability. Many of the businesses that Chaska will be interested in attracting to business park areas within SW Chaska will be concerned about the level of service, quality of development, other tenants in the business park, and the level of commitment toward sustainable design practices within the business park area.*
- *Create financial incentive packages (public finance, tax incentives, etc.) that can be used to market office / business park areas within SW Chaska and assist in the financing of development.*

Seek Partnership Opportunities

- *The City and/or landowners could partner with a master developer to plan, promote and develop various sectors within the SW Chaska area. A master developer can bring experience, funding and other resources to the development of business park, retail, and residential areas.*
- *The City and/or landowners could partner with the local development community and financial institutions to organize a cooperative development partnership, particularly for business park uses. This is a model that has been evolving in Europe with great success.*
- *The City and/or landowners could seek partnership opportunities with existing Chaska businesses to promote the various potential land uses within SW Chaska and catalyze development interest in SW Chaska. Expansion of existing businesses in Chaska could represent the seed for initial development in the SW Chaska area.*
- *Seek partnership with utilities, the economic development community, brokers and potentially big institutions.*

Audiences

The audiences for the marketing effort are as follows:

- *City Government: All of the agencies that interact with potential buyers and developers in the SW Chaska area must be familiar with the vision and goals of the plan so that there is no "cognitive dissonance" or confusion created by mixed messages.*
- *Community Leaders: Similarly, the leaders in the community that shape public opinion need to be supportive of the vision and goals of the SW Chaska plan so that they will not deter good companies from locating here.*
- *Lead Generators: The economic development groups in the city, county, region and state need to be made aware of the SW Chaska plan and encouraged to direct interested businesses to this part of Chaska. Site selectors can be targeted for a similar message, since they can share the information among colleagues and give personal testimony as to the quality of the community.*

Next Steps

The following is a list of recommendations identified to move implementation of the SW Chaska plan forward. These are presented in no particular order but each will be critical steps in the effort to help make the vision of SW Chaska a reality over the next few decades.

Codify significant Growth & Development Plan recommendations

Upon approval of the SW Chaska plan, the City should incorporate specific plan recommendations and/or design standards into the City's 2030 Comprehensive Plan. This will ensure compliance with the intent of significant recommendations within the Plan

.

Resolve land ownership issues

Current land ownership conditions – multiple owners with various expectations – adds a layer of complexity to the implementation of the SW Chaska plan. The City may need to play a role in resolving any land ownership issues that would prohibit implementation of the plan.

Develop and implement a marketing plan

The City should budget for and conduct a marketing plan for development of the SW Chaska area. The marketing plan should provide specific strategies to promote the plan and attract development interest to the SW Chaska area.

Seek funding sources

The implementation plan identifies numerous public improvements necessary to service future development and outlines several public financing options. In order to reduce the public improvement costs to the City and attract potential developers to the SW Chaska area, the City should begin seeking potential funding sources and strategies upon approval of the SW Chaska Plan.

THIS PAGE LEFT INTENTIONALLY BLANK

Southwest Chaska

MASTER PLAN

Development Framework

JANUARY 2013