



BECKS ROAD LAND USE STUDY

**Draft Plan Recommended by the Planning Commission
at their August 13, 2026 Special Meeting**



Hold for Adoption Resolution

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An aerial photograph of a lush, green forested area. A winding road or path cuts through the trees, and a small, light-colored building is visible in the lower-left quadrant. The overall scene is serene and natural.

01

INTRODUCTION

INTRODUCTION

The City of Duluth, Minnesota, is proactively planning for the future of the Becks Road area, located approximately 15 miles southwest of downtown Duluth and northwest of the Gary-New Duluth neighborhood. The western Duluth neighborhoods continue to attract families and businesses, with the parcels along the Becks Road emerging as potential development sites.

Effective planning for future development requires careful consideration of several factors:

- Also known as County Road 3, Becks Road is a prominent route that connects Gary-New Duluth to I-35.
- The area contains unique topography, including steep slopes, watercourses, and wetlands.
- The extent of necessary utility and infrastructure upgrades remains uncertain.

Currently, Duluth's future land use map – a fundamental component of the City's Comprehensive Plan that dictates desired uses for each parcel and helps guide development decisions – lacks the detailed guidance that community stakeholders seek. To better understand the optimal future uses of the parcels adjacent to Becks Road, the City has developed this targeted land use study.

This study explores opportunities for future land uses, connectivity, transportation corridors, and necessary upgrades to support future growth.



PURPOSE OF PLANNING

Planning for future land use is an opportunity to envision what the study area can become and chart a clear, intentional path toward that future. The project team recognizes that the area faces site-specific challenges and that conversations about change can be difficult, especially when residents deeply value their community's identity, sense of place, and existing character. At the same time, there is a shared desire to see the area move forward in positive and meaningful ways.

This planning process was designed to create space for listening, learn from lived experiences, and collaborate on solutions that honor what is important today while preparing thoughtfully for tomorrow. The purpose of the plan is to shape a clear, community-driven vision that strengthens the Becks Road corridor, enhances quality of life, and supports the long-term well-being of those who live, work, and invest here.

Community engagement was crucial to developing this plan and will continue to be essential to its implementation and long-term success. Residents, business owners, and stakeholders offered valuable insights that helped shape the plan's direction, ground recommendations in local priorities, and build a shared vision for the future. As implementation moves forward, continued community involvement and local champions will be key to advancing this vision and supporting a future that is resilient, connected, and reflective of shared aspirations.



PLANNING HAS AN IMPACT ON QUALITY OF LIFE

ALLOWS US TO ANTICIPATE AND SHAPE CHANGE

HELPS MAKE GREAT PLACES TO LIVE AND WORK

PROVIDES A BASIS FOR COMMUNITY DEVELOPMENT

LAND USE OBJECTIVES

The land use objectives for this planning effort are designed to establish a clear and forward-thinking framework that guides how the study area can evolve over time. Central to these objectives is a proactive approach to development, ensuring that future decisions are informed, strategic, and aligned with the community's long-term aspirations. Rather than reacting to individual development proposals as they arise, this plan seeks to anticipate needs, identify opportunities for targeted growth, and position the study area for sustainable, well-coordinated development.

The plan primarily aims to anticipate potential growth areas through the careful consideration of existing conditions, infrastructure needs, development feasibility, and opportunities to strengthen the community's overall character and economic vitality. To ensure a holistic approach to future development, the study incorporates a diverse range of analyses, including:

- Reviewing existing plans and current local/regional policies (Chapter 2);
- Conducting community engagement to gather local concerns and priorities (Chapter 3);
- Analyzing infrastructure systems, environmental conditions, and community amenities, including utilities, transportation, topography, watersheds, natural features, recreation, and park facilities (Chapter 4);
- Creating concept-level maps of potential growth areas and the overall corridor (Chapter 6);
- Recommending policies and best practices for individual development sides and the overall corridor (Chapters 5 and 7).

Together, these findings support a cohesive vision for the Becks Road corridor that is grounded in community values, practical strategies, and a clear understanding of opportunities and constraints.



TAKE PROACTIVE APPROACHES TO URBAN DEVELOPMENT

CREATE CONCEPT LEVEL MAPS AND LAYOUTS

IDENTIFY FUTURE GROWTH PATTERNS

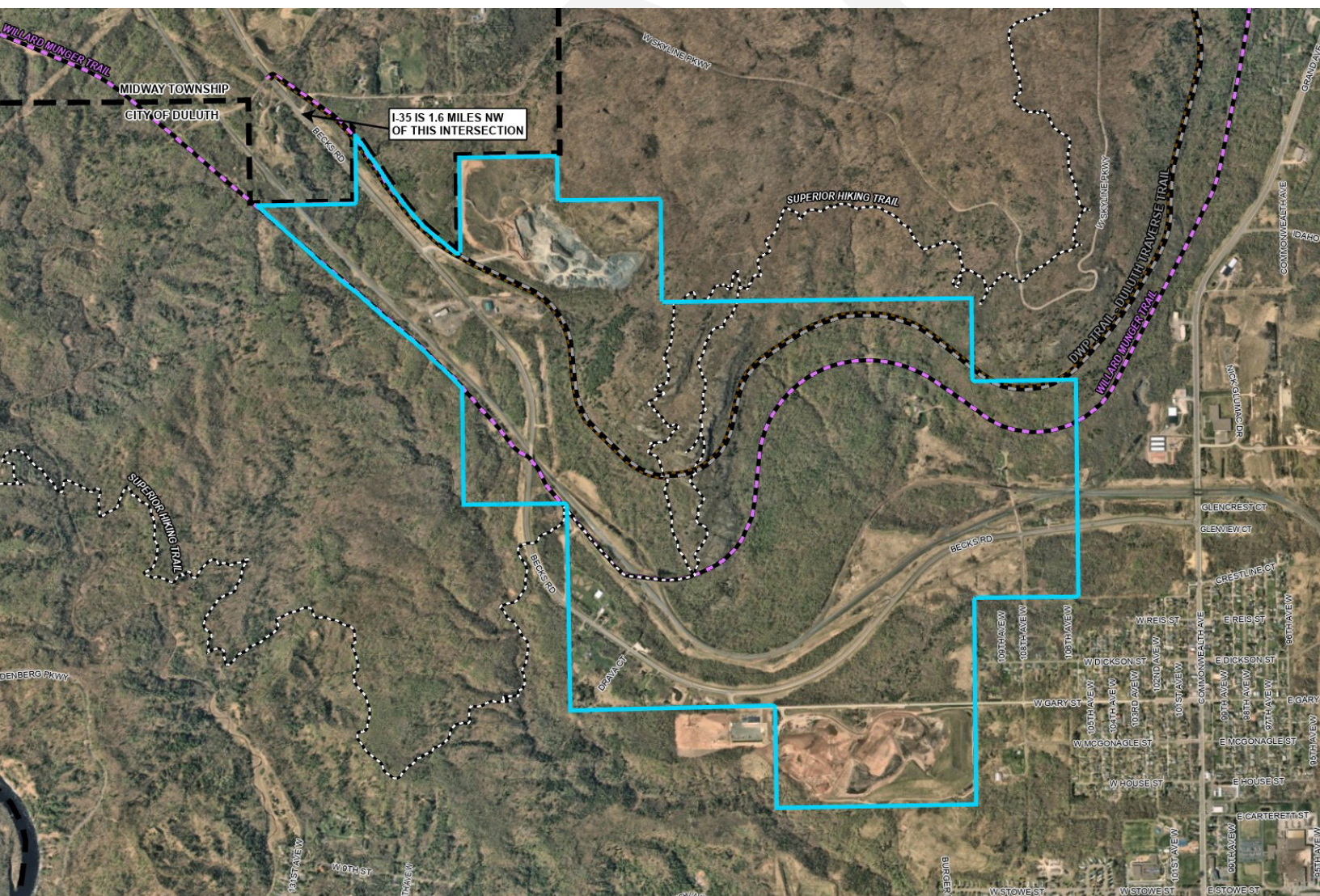
ESTABLISH A SENSE OF PLACE

STUDY AREA

This land use study focuses on the section of Becks Road extending from 1.6 miles southeast of I-35 to 0.3 miles west of Highway 23 (Commonwealth Avenue), located in southwestern Duluth. The study area includes a mix of land uses and ownerships, with parcels held by the City of Duluth, private entities, and the State of Minnesota. Key features within the area include Sargent Creek and US Steel Creek, which contribute to the area's ecological significance and present considerations for environmental preservation.

The corridor is characterized by a blend of industrial operations, open space, and undeveloped land, with potential for future development and land use transitions. The area includes industrial uses, such as mining and demolition landfill services, and is adjacent to transportation infrastructure including rail lines, both paved and unpaved trails, and major roadways. This study evaluates how these uses interact with community resources, recreational assets, and environmental constraints.

The land use study aims to assess existing conditions, identify opportunities for new development, and offer recommendations that preserve the scenic character of this gateway corridor, improve access to high-valued open space resources, and maintain connectivity between I-35 and destinations in far western Duluth. This includes evaluating zoning, transportation access, ecological impacts, and alignment with the City's Comprehensive Plan and future land use goals.



SITE CONDITIONS

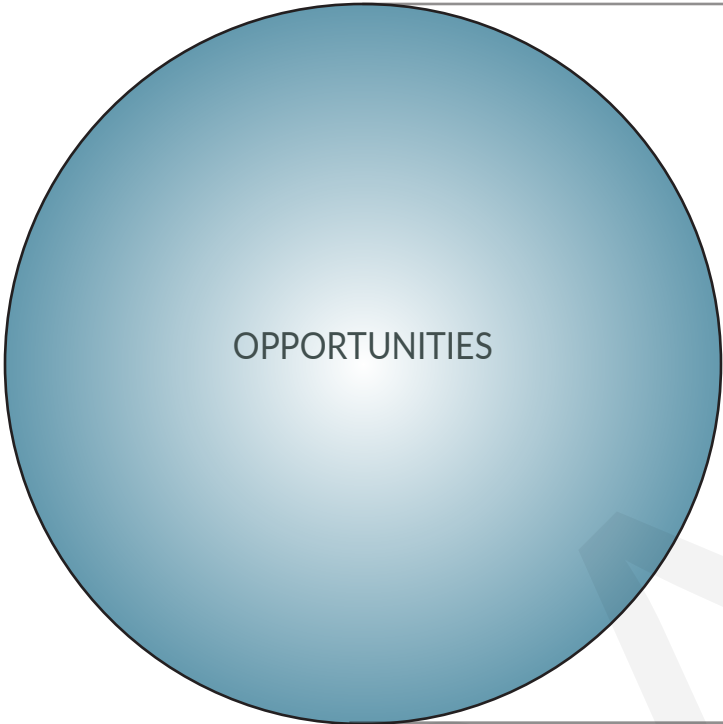
The Becks Road corridor presents a range of physical, environmental, and regulatory constraints that must be considered in the land use planning process. For example, Sargent Creek is a designated trout stream that is subject to stringent environmental protections. As detailed throughout this document, this stream and other natural features within the corridor limit development potential in certain zones and require careful evaluation of ecological impacts, floodplain boundaries, and stormwater management.

Existing industrial and extractive uses, including demolition landfill services and quarry operations, pose additional constraints. These uses may conflict with residential or recreational development goals and require thoughtful transitions between land use types. The presence of rail infrastructure also introduces transportation-related limitations, such as access control, noise, and safety considerations.

Ownership patterns within the study area are complex, with parcels held by the City of Duluth, Minnesota Power, Wisconsin Central railroad, private entities, and the State of Minnesota (through the Department of Natural Resources and tax-forfeited land). This mix may complicate land assembly, zoning changes, and coordination for infrastructure improvements. Additionally, portions of the area may be subject to legacy contamination or require environmental review due to past industrial activity.



OPPORTUNITIES AND CONSTRAINTS



OPPORTUNITIES

Strategic access to I-35 and proximity to Duluth/Superior and Iron Range markets

Natural features (rivers, creeks, wetlands) ideal for recreation and aesthetics

Trailhead and connectivity expansion potential, including links to regional trails

Iconic views and woods/recreation feel that enhance community character

Spaces for thoughtful development, including light industrial and mixed-use

Campground or cabin opportunities to support tourism and outdoor recreation

Challenging topography and **fragmented ownership** complicate development

Limited infrastructure: local roads, utilities (water, sewer, natural gas), and internet

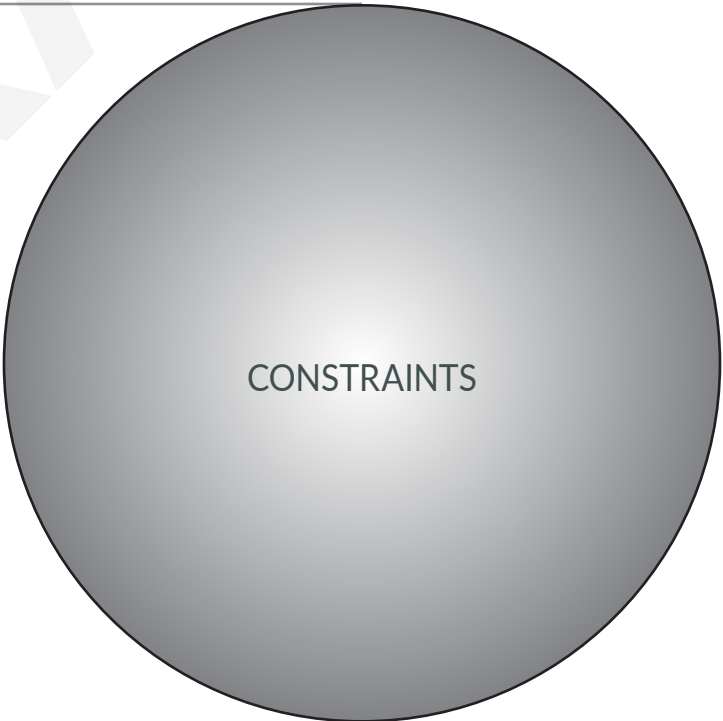
Environmental protections for trout streams, floodplains, wetlands, and other sensitive natural areas

Noise and access issues from railroads and highways

Granite/rock substrate limits construction and site development

Crime and trespassing concerns, especially near industrial and trail areas

Complex zoning and potential pollution from past industrial uses



CONSTRAINTS

THE VISION:

The Becks Road corridor occupies a unique and critical function as the gateway to the far western neighborhoods of Duluth and region-serving recreational trail opportunities.

Future investment will respect the area's scenic beauty and open space resources while allowing for context-sensitive and sustainable development that preserves the arterial function of Becks Road.

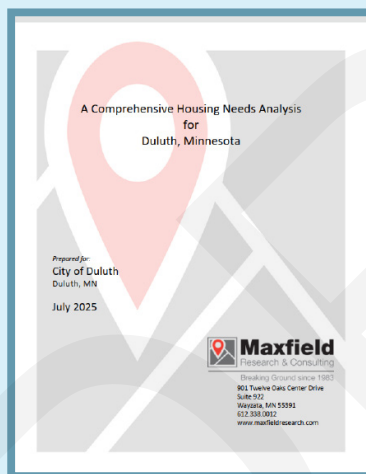
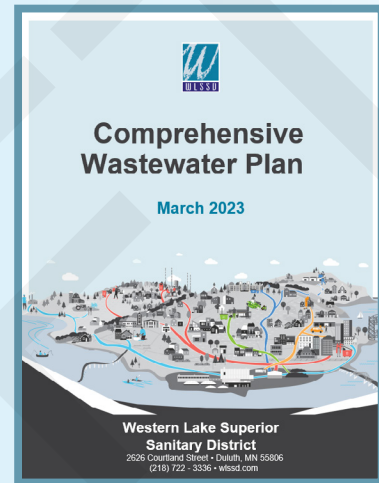
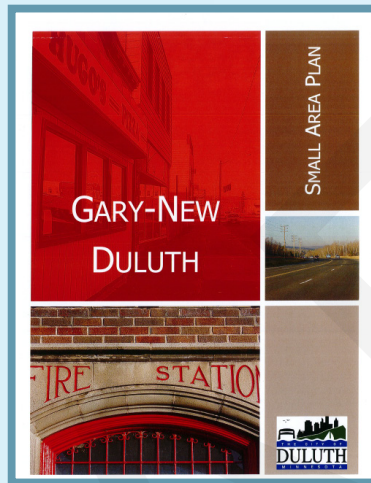
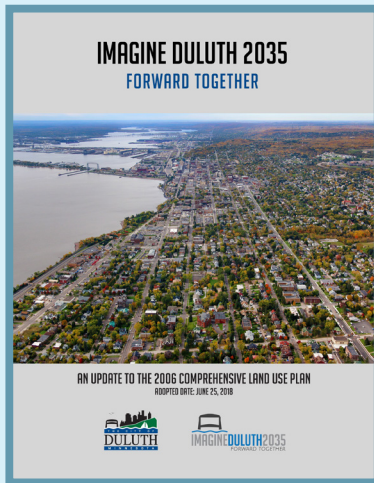
An aerial photograph of a landscape with green fields, roads, and some buildings, overlaid with a semi-transparent blue gradient. The number '02' is prominently displayed in the center-left.

02

EXISTING PLAN REVIEW

EXISTING PLAN REVIEW

The following plans were reviewed and analyzed to better understand current objectives relevant to the Becks Road corridor and the City of Duluth as a whole. This review helped identify adopted policies, planned improvements, development priorities, and community goals that may influence future land use decisions within the study area.



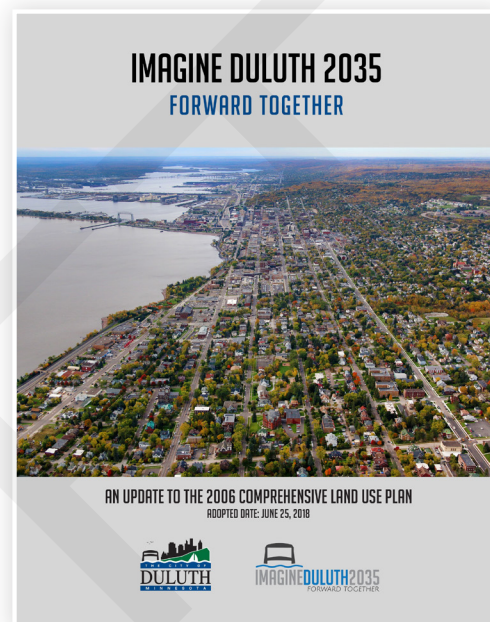
IMAGINE DULUTH 2035

CURRENT PLANS REVIEW:

Imagine Duluth 2035 serves as an update to the community's 2006 Comprehensive Land Use Plan, which outlines overarching goals for Duluth's growth and development over a 10-20 year timeline.

KEY POINTS:

- **Economic Development:** Focus on job creation, workforce development, and leveraging industry clusters like aerospace, education, and healthcare. Emphasis on redeveloping brownfields and supporting local businesses.
- **Energy & Conservation:** Goals to reduce greenhouse gas emissions, increase energy efficiency, and invest in renewable energy sources. Strategies include community involvement, incentives for green buildings, and improving utility efficiency.
- **Housing:** Promote safe, affordable, and diverse housing options. Increase density in core areas, improve housing quality, and ensure inclusivity.
- **Open Space:** Enhance parks and open spaces, improve access, and promote urban food growth. Focus on resilience to natural disasters.
- **Transportation:** Develop a multimodal transportation system that improves safety, connectivity, and reduces infrastructure costs. Emphasize public transit, biking, and walking.



SOURCE:

City of Duluth (Planning & Development)

ADOPTION:

June 2018



GARY-NEW DULUTH SMALL AREA PLAN

The Gary-New Duluth Plan is a Small Area Plan that looks at redevelopment opportunities for the area.

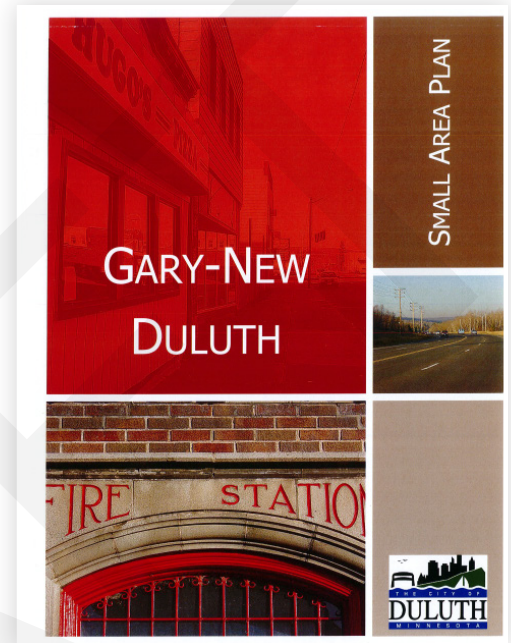
KEY POINTS:

Development and Zoning:

- The plan emphasizes guiding new commercial and residential development while preserving the neighborhood's character.
- Zoning changes were recommended to better align with current land use and future development goals.

Transportation and Environment:

- There are numerous recommendations to improve road safety, enhance pedestrian and bicycle infrastructure, and develop a comprehensive trail system.
- The plan also focuses on preserving and enhancing natural features like creeks and open spaces, promoting sustainable development practices.



SOURCE:

City of Duluth (Planning & Development)

ADOPTION:

May 2014



WLSSD COMPREHENSIVE WASTEWATER PLAN

The Comprehensive Wastewater Plan guides future water quality planning, capital budgeting, and facility management for the Western Lake Superior Sanitary District.

KEY POINTS:

Wastewater Treatment and Facility Upgrades:

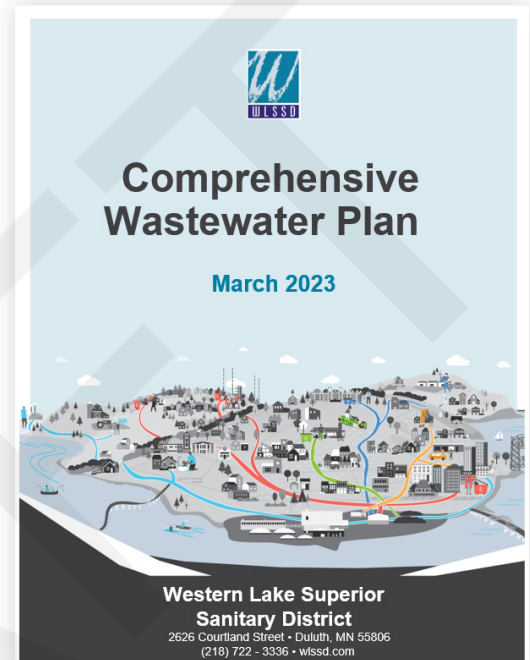
- The plan outlines comprehensive upgrades to the wastewater treatment facilities, including improvements to preliminary screening, grit removal, secondary treatment, and tertiary mixed media filtration. It emphasizes optimizing current treatment processes and facilities to meet future demands and regulatory requirements.

Energy Management and Sustainability Goals:

- The plan includes a detailed Energy Management Master Plan (EMMP) aimed at reducing overall electricity and energy usage, increasing the percentage of renewable energy used, and maintaining or decreasing total energy costs. It highlights the importance of asset management systems to proactively plan for maintenance and replacement, ensuring long-term sustainability and operational efficiency.

Urban Service Boundary:

- This plan revises the Urban Service Boundary (USB), which designates appropriate areas for public utility expansion, such as sanitary sewer. As most of the Becks Road corridor is currently located outside of the USB, this boundary will need to be amended to extend the sewer to intended growth areas as identified by this land use study. See Chapter 4 for more information.



SOURCE:

Western Lake Superior Sanitary District

ADOPTION:

March 2023



DWP TRAIL SYSTEM TECHNICAL STANDARDS & TRAIL USE PLAN

The DWP Trail System Technical Standards & Trail Use Plan emphasizes completing and expanding the trail system.

KEY POINTS:

Trail Restoration and Accessibility:

- Significant restoration efforts have been made to improve the trail's condition and accessibility, including regrading the trail bed and repairing bridges.

Multi-Use Designation:

- The trail is designated for multiple uses, including walking, biking, horseback riding, and snowmobiling, with specific guidelines to minimize conflicts and ensure safety.

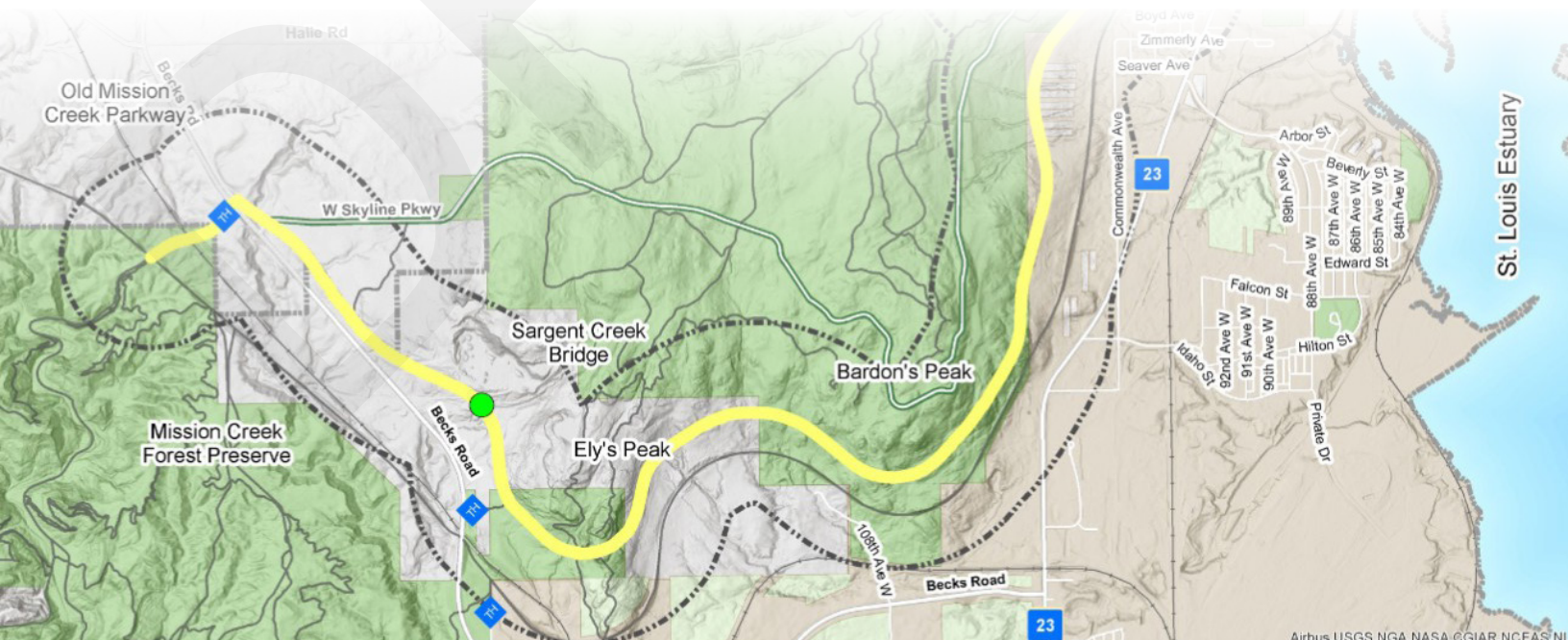


SOURCE:

City of Duluth (Parks & Recreation)

ADOPTION:

March 2019



ST. LOUIS RIVER CORRIDOR TRAILS PLAN

The St. Louis River Corridor Trails Plan serves as an update to the 2011 Trail Plan.

KEY POINTS:

Trail System Expansion and Connectivity:

- These expansions aim to improve connectivity and provide safe access to natural areas, enhancing the overall trail network.

Multi-Use and Accessibility:

- The plan focuses on creating a multi-use trail system that accommodates various user groups, including hikers, bikers, equestrians, and snowmobilers.



SOURCE:

City of Duluth (Parks & Recreation)

ADOPTION:

January 2017



CITY OF DULUTH HOUSING INDICATOR REPORT

The City of Duluth Housing Indicator Report of 2020 reviews housing trends and themes for the City of Duluth. As of drafting in 2026, a new report is in progress and will incorporate the latest housing information.

KEY POINTS:

Housing Market Trends:

- The rental vacancy rate increased to 5.2% in 2020, up from 2.6% in 2019.
- The average cost of rent citywide was \$1,125, a \$42 increase from 2019.
- There was a net gain of 150 housing units in 2020.

Economic Indicators:

- Duluth's median annual income decreased to \$52,463 in 2020, down from \$55,819 in 2019.
- The unemployment rate rose to 6.4% in 2020, compared to 3.1% in 2019.



SOURCE:

City of Duluth (Planning & Development)

ADOPTION:

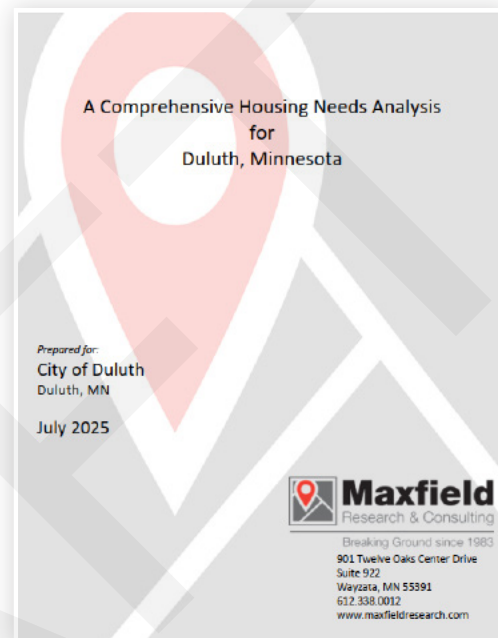
2020



2025 DULUTH COMPREHENSIVE HOUSING NEEDS ANALYSIS

The 2025 Duluth Comprehensive Housing Needs Analysis highlights critical housing shortages and outlines strategies to meet growing demand through 2035.

- Projected Demand: Duluth needs 8,713 new housing units by 2035 (73% general occupancy, 27% senior housing).
- Top Priorities: Moderately priced workforce housing, affordable/subsidized rentals, and senior housing options (townhomes, independent living).
- Market Conditions: Extremely low rental vacancy (1.1%–1.8%) and for-sale inventory (1.6-month supply) indicate pent-up demand.
- Affordability Gap: 31% of households are cost-burdened; entry-level homes and workforce rentals are scarce.
- Recommendations: Develop mixed-income rentals, entry-level homes (<\$300K), and senior housing to meet demographic shifts and job growth.



SOURCE:

City of Duluth (Planning & Development)

ADOPTION:

July 2025



DULUTH TRAVERSE MINI MASTERPLAN

The Duluth Traverse Mini Masterplan provides a framework for completing and managing the Duluth Traverse as a City-wide, mountain bike-focused trail system. Currently, 82% of the original 104-mile vision has been constructed, and the plan focuses on filling gaps and ensuring long-term operational sustainability.

- The Duluth Traverse trail system runs through the study area; the trail system overview map (shown below) shows a major connective segment between Mission Creek Forest Preserve and Spirit Mountain Recreation Area that follows along much of the DWP Trail.
- Proposes trailhead improvements within the Becks Road corridor, including establishing the 123rd Ave trailhead as a central access point for Mission Creek Forest Preserve and adjacent trails. Improvements could include parking, signage, restroom(s), and other amenities for cyclists.
- Emphasizes completing trail connections, improving trailheads and wayfinding, and linking neighborhoods to the broader trail network.

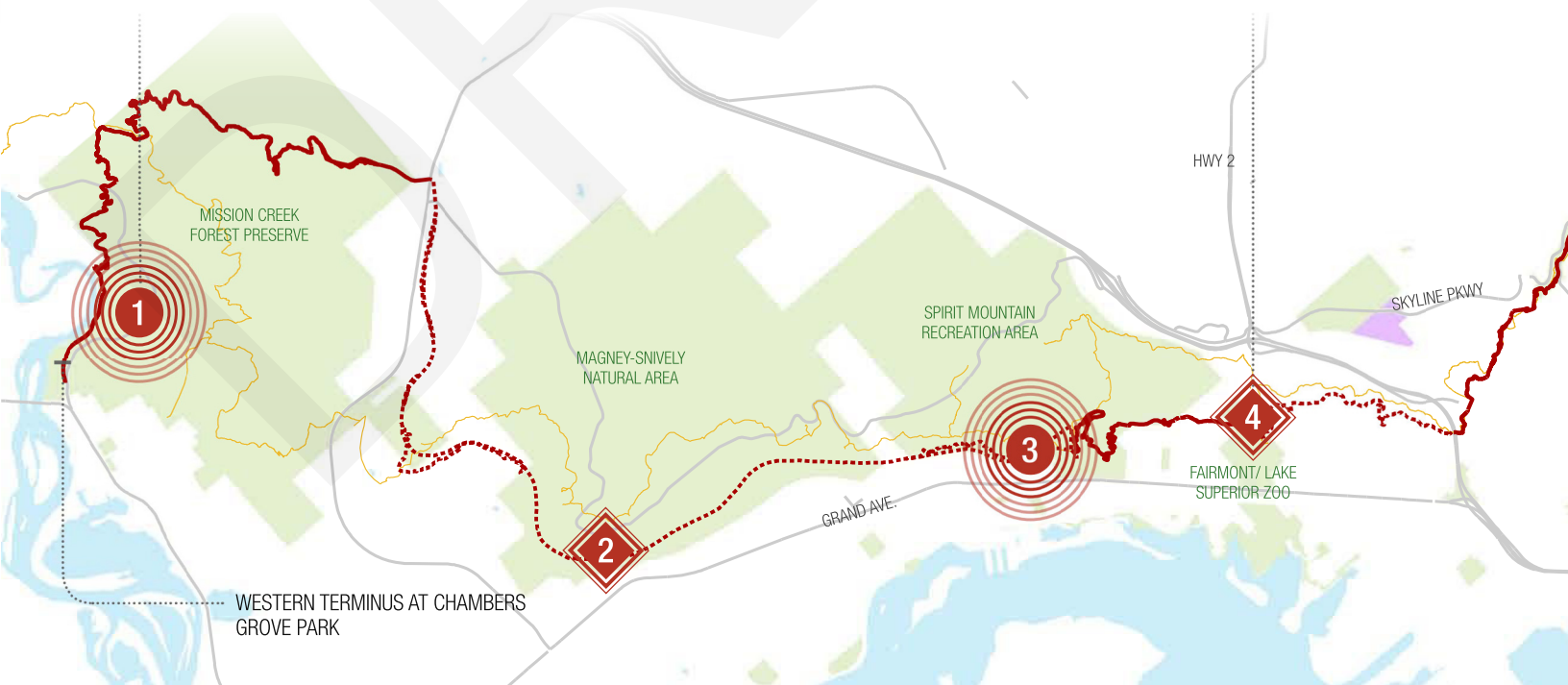


SOURCE:

City of Duluth (Parks & Recreation)

ADOPTION:

April 2017



An aerial photograph of a lush, green forested area. A road or path winds through the landscape, and a bridge is visible in the upper right quadrant. The overall scene is serene and natural.

03

COMMUNITY ENGAGEMENT

TECHNICAL COMMITTEE MEETINGS

Throughout the planning process, the project team consulted a technical committee that provided interdisciplinary expertise and local knowledge. The committee included City staff from multiple departments, as well as representatives from St. Louis County, who contributed guidance related to existing conditions, infrastructure, data analysis, and plan content. The group met periodically to review progress, discuss key findings, and help ensure the study was grounded in accurate information and aligned with local priorities.

The initial technical committee meeting for the Becks Road Land Use Study laid the groundwork for a collaborative planning process focused on shaping the future of the corridor. The meeting, summarized below, introduced the project team, reviewed the study's purpose, and engaged members in foundational discussions around land use, transportation, and community priorities.

PURPOSE AND CONTEXT

The Becks Road corridor is expected to see increased development pressure, prompting the need for a proactive land use strategy. The study aims to identify appropriate future uses for the area, considering environmental constraints, infrastructure capacity, and community needs. The meeting emphasized the importance of planning as a tool to guide growth, enhance quality of life, and create meaningful destinations.

REVIEW OF EXISTING PLANS

Participants examined previous planning efforts related to economic development, housing, energy, open space, and transportation. These plans provided context for current challenges and opportunities, including housing affordability, infrastructure gaps, and the need for multimodal connectivity.

CORRIDOR DESIGN PRINCIPLES

The group discussed strategies for creating a shared vision and enhancing design throughout the corridor. Emphasis was placed on community engagement, vibrant public spaces, and fostering social connection through inclusive design.

KEY PLANNING THEMES

Transportation planning focused on walkability, bike access, and road safety. Land use discussions addressed stormwater management, zoning, and utility infrastructure. Recreational planning themes included preserving and enhancing access to the corridor's recreational amenities via the two trailheads in the area.

SWOT ANALYSIS

A SWOT analysis, conducted early in the planning process with the technical committee and key stakeholders, helped identify strengths, weaknesses, opportunities, and threats within the Becks Road corridor. These responses were sorted into three categories (development, mobility, and beautification), and are summarized in the following pages.



STRENGTHS - Characteristics that give the study area an advantage over others.

WEAKNESSES - Characteristics that place the study area at a disadvantage relative to others.

OPPORTUNITIES - Elements the community could leverage to advance the study area.

THREATS - Elements in the environment that could cause trouble for the study area in the future.

SWOT ANALYSIS FEEDBACK

Summary of comments relating to DEVELOPMENT

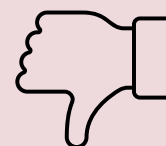
Strengths / Opportunities

- Spaces for thoughtful development
- Great access
- Plenty of undeveloped land
- Campground or cabins opportunity
- National and State Trail connections
- Quarry potential for expansion
- Woods/Recreation feel
- Network opportunities
- Additional recreation uses
- Connection points
- View of the river
- Iconic setting
- Opportunities to connect outside of the study area



Weaknesses / Threats

- Challenges with topography
- Fragmented ownership
- Trunk sewer would need additional connections
- Potential challenges with Quarry
- Railroad and gravel road to work with
- Access management challenges
- Impacts to natural beauty / peaks / trout streams / views
- Determining the right density
- Wastewater if not properly planned for



SWOT ANALYSIS FEEDBACK

Summary of comments relating to MOBILITY

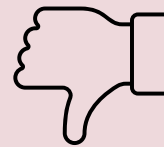
Strengths / Opportunities

- Incredible local trails to connect to and expand
- Trailhead opportunities
- Planning with development as opposed to after
- Future trails and recreation considerations
- 123rd Ave West
- Important transportation corridor
- Opportunity to effectively coordinate the future of ATV usage
- Grade separation at railroad track
- 10' shoulder on bridge
- Opportunities for linear or parallel trails



Weaknesses / Threats

- Freight users threat if too much density
- Access management with Becks Road
- Incidental connection points
- Isolation
- Parking challenges
- Where connections should occur
- Need to determine ATV use preferences
- Impacts of increased development
- Need to buffer highway noise



SWOT ANALYSIS FEEDBACK

Summary of comments relating to BEAUTIFICATION

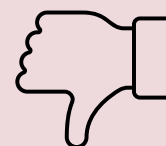
Strengths / Opportunities

- Good visibility
- Opportunities to preserve viewsheds
- Cultural recreational opportunities
- Gateway potential
- Strong identity desired
- Needs to be unique to the study area
- Corridor characteristics
- Wayfinding opportunities for area and trails
- Attract more people in an aesthetically pleasing way
- Opportunity to tie into West Skyline Parkway



Weaknesses / Threats

- Could lose the nature feel and beautiful views if not planned accordingly
- Need to prevent vandalism
- Coordination with adjacent areas needed
- Potential to lose forest feel
- Be mindful of indigenous sites
- Considerations with Spirit Mountain
- Some houses in old parts - need to determine how to handle moving forward



STAKEHOLDER INTERVIEWS

In addition to holding public input meetings, the project team conducted one-on-one interviews with key stakeholders to better understand the area's diverse needs, identify current operational issues, and clarify expansion plans or future development intentions. The following stakeholders were consulted for this land use study:

ULLAND BROTHERS QUARRY

Long-standing rock quarry in the northwest part of the study area.

APOLLO INVESTMENTS LLC

Apollo Investments LLC owns a 41-acre site southwest of the quarry that serves as the Duluth base for Mavo Systems, an environmental and specialty contracting company that specializes in services include asbestos and lead abatement, interior demolition, HVAC cleaning, mold remediation, and concrete sawing.

VONCO LANDFILL

Solid waste landfill, located on the southern edge of the study area, that collects non-hazardous construction, demolition, and industrial debris.

PROPERTY OWNER

Individual property owner that owns approximately 160 acres of land east of Ely Peak.

RYBAK COMPANIES (DID NOT PARTICIPATE)

19.7-acre site, located just south of the quarry, that serves as the Duluth base of operations for Rybak, a railroad support firm experienced in utilities, maintenance-of-way, derailment services, transfer services, specialized transportation, augering, and rotary dumps.

STAKEHOLDER INTERVIEWS

Summary of the Quarry Stakeholder Interview with Ulland Brothers - August 27, 2025:

CURRENT OPERATIONS

- Quarry produces bituminous aggregate and Class 5 material.
- Operations include blasting, crushing (noisy but monitored), and minimal water use (mostly for dust suppression).
- Active site is an 80-acre parcel, permitted via a 1978 Conditional Use Permit (CUP) from Midway Township.
- Quarry has existed in this location since the early 20th century.
- This site was considered by Midway Township to be nonconforming and this status has continued since annexation by Duluth.
- Upon annexation into Duluth, the site became nonconforming, but this hasn't caused issues.
- No mining outside the permitted area, though fill is being added to the northern parcel.

FUTURE PLANS

- Intend to develop a comprehensive mining plan.
- Two undeveloped 40-acre parcels south of the quarry site are under a license agreement with the City for trails and bouldering that could be ended by either party with 60 days notice.
- Would like the City to consider a land swap involving the 80 acres southeast of their quarry and the City-owned 40-acre parcel northeast of their land.
- Northeast corner of the current site is targeted for expansion (not deeper, just outward).
- Plan to place primary crushing machinery on a "shelf" to reduce noise and dust.
- A concrete plant is a possibility but not currently part of operations.
- Quarry expected to be a key source of high-quality rock for Duluth.

SITE CHALLENGES

- A 200-foot buffer on the southwest corner is restrictive; they'd prefer 50 feet.
- Open to land swaps to optimize parcel layout.
- No groundwater issues.
- Trespassing and copper theft are major concerns, especially from the DWP trail.
- Interested in fencing the property but need boundary clarity first.

DESIRED OUTCOMES

- Update or replace the outdated Conditional Use Permit (CUP) and properly zone the quarry.
- Enable expansion through land swaps and buffer adjustments.
- Improve collaboration with the City to reduce trespassing and align recreational and industrial uses.

Please see Chapters 6 and 7 for further discussion and recommendations regarding the quarry.

STAKEHOLDER INTERVIEWS

Summary of the Stakeholder Interview with Apollo Investments LLC - September 17, 2025:

BUSINESS LOCATION RATIONALE:

Chosen for strategic access to I-35 and proximity to Duluth/Superior and Iron Range markets.

CURRENT SUCCESSES

Infrastructure improvements along I-35.

ADVANTAGES & DISADVANTAGES OF STUDY AREA

Disadvantages:

- Theft and vandalism.
- Potential environmental pollution from legacy industries.
Staff note: The Minnesota Pollution Control Agency (MPCA) does not currently have record of contamination within the study area, though there is a Minnesota Superfund site immediately east of the Becks Road Corridor – the U.S. Steel Site – that is earmarked for long-term remediation.
- Poor internet connectivity.

Advantages:

- Location aligns well with business market needs.
- Preservation Priorities
- Natural features such as rivers, creeks, wetlands, and surrounding nature.

DESIRED CHANGES

1. Road improvements.
2. Extension of city utilities: water, sewer, and natural gas.

LAND OWNERSHIP & REDEVELOPMENT

- Buildings on the property are under active lease.
- Granite/rock substrate presents development limitations.

ADDITIONAL INSIGHTS

- Duluth described as historic, industrial/blue collar, with strong natural resources and tourism potential.

HYPOTHETICAL INVESTMENTS

- How should the area be improved with \$1M: Infrastructure – city water, sewer, natural gas, and roads.
- How should the area be improved with \$5,000: Not considered impactful.

OPPORTUNITIES & LIABILITIES

- Liability: Granite/rock surface and substrate limit development potential.

STAKEHOLDER INTERVIEWS

Summary of the Landfill Stakeholder Interview with VONCO - September 17, 2025 and June 11, 2026:

STAKEHOLDER BACKGROUND

- Role: Director of Compliance for a landfill operation.
- Experience: Involved for 10 years; site history dates back to the 1950s.
- Current Facility: Fully lined with clay and plastic.

REASONS FOR LOCATION

- Historical presence and existing permits.
- Proximity to Duluth and redevelopment areas.
- Good relationships with nearby neighbors.
- Area lacks infrastructure, therefore not utilizing developable land.

OPERATIONS & FUTURE PLANS

- Landfill is nearing maximum height on the east side, with operations expected to shift west in about five years; at current disposal rates, approximately 25 years of capacity remain.
- Operator will own and manage the site in perpetuity, as required by law.
- Closure may include a 40-mil poly cover with approximately two feet of soil, a minimum 2% slope, and periodic benches for stormwater and erosion control.
- Deep-rooted vegetation is not allowed over the cover, and vents are generally needed about every 200 feet.
- Passive recreation may be possible on top of the closed landfill, such as hiking, cross-country skiing, or single-track biking, if erosion is controlled; more active uses may be possible if built above the cover without impacting the liner.
- Solar generation may be feasible if cover impacts are avoided and adequate power capacity is available; wind generation may be more limited due to anchoring constraints.

ADVANTAGES & DISADVANTAGES OF STUDY AREA

- High security due to frequent theft and trespassing.
- Crime and lack of police presence are major concerns.

DESIRED CHANGES

1. Improve roads.
2. Reduce crime.
3. Enhance trail systems and trailhead access.

POTENTIAL CONTRIBUTIONS

- Community support through donations and services.
- Environmental stewardship (e.g., leech collection system, odor control).

LAND OWNERSHIP & REDEVELOPMENT

- Owns some lots (not connected to facility); interest in acquiring tax-forfeit parcels.
- Redevelopment impeded by unclear ownership and infrastructure.

ADDITIONAL INSIGHTS

- Reference to Duluth's 2030 plan and need for business engagement.
- Duluth described as scenic and recreational but underdeveloped.

HYPOTHETICAL INVESTMENTS

- How should the area be improved with \$1M: Road improvements.
- How should the area be improved with \$5,000: Activities for children.

STAKEHOLDER INTERVIEWS

Summary of the Stakeholder Interview questions tailored to a resident east of Ely Peak who owns approximately 160 acres in the study area - submitted through a virtual questionnaire in October 2025:

WHAT DO YOU VALUE MOST ABOUT THE BECKS ROAD AREA AND THE LAND YOU OWN?

- Location and long-term potential (could support a productive future use as the surrounding area evolves).
- Current flexibility of the land.

WHAT SHOULD BE PRESERVED FOR FUTURE GENERATIONS?

- Important to preserve flexibility and opportunity, whether for economic activity, housing, or other productive purposes.

WHAT SHOULD BE CHANGED IN THIS AREA?

- Area should transition from underutilized land toward more intentional and productive use, in a way that aligns with the city's long-term planning goals and infrastructure capacity (i.e. thoughtful and proactive rather than reactive).

WHAT ROLE DOES THIS AREA PLAY IN YOUR LIFE OR COMMUNITY?

- The land represents a long-term asset and an opportunity to contribute to the area's future in a meaningful way.
- Potential to support development that adds value rather than remaining idle.

COMMUNITY OPEN HOUSE

The project's first community input meeting was held on the evening of December 2, 2025, at the Gary-New Duluth Community Center. Ahead of this meeting, City staff contacted study area landowners via letter; volunteers with Gary-New Duluth REC also helped promote the event via social media and posting flyers. Email addresses collected during the event were used to maintain contact with landowners throughout the planning process.

The open house (5:00-5:30 p.m.) included numerous interactive boards introducing the study area and its existing conditions, as well as prompts for attendees to leave feedback regarding potential future development. The project team also gave a short presentation at 5:30 p.m. followed by a Q&A. There were approximately 26 event attendees.

At this event, the project team discussed that the planning effort is designed to:

- Guide future land use along the Becks Road corridor
- Address growth and environmental constraints
- Ensure compatibility with existing neighborhoods
- Review existing and identify future uses
- Engage the community for priorities and concerns
- Integrate utilities, transportation, and environmental data



COMMUNITY OPEN HOUSE

Feedback from the December 2nd community open house, collected verbally and via comment cards, is summarized below:

CLARIFICATIONS ON PROJECT SCOPE & PURPOSE

During the Q&A, the project team addressed the following concerns regarding the project scope, purpose, and deliverables:

- The Becks Road Land Use Study seeks to review existing land uses and propose future land uses aimed at preventing incompatible development.
- The project team is seeking community input to help identify residents' concerns and priorities for the area.
- Future zoning and other regulatory tools will implement the future land uses recommended in this study.
- The "priority areas" illustrated in the event boards were preliminarily identified by the project team based on potential development suitability (e.g. topography, adjacency to nearby roadways, compatible adjacent land uses, etc.) and to serve as a jumping-off point for discussion, not a definitive inventory of future development sites. This study will holistically investigate the needs and challenges of the whole study area.

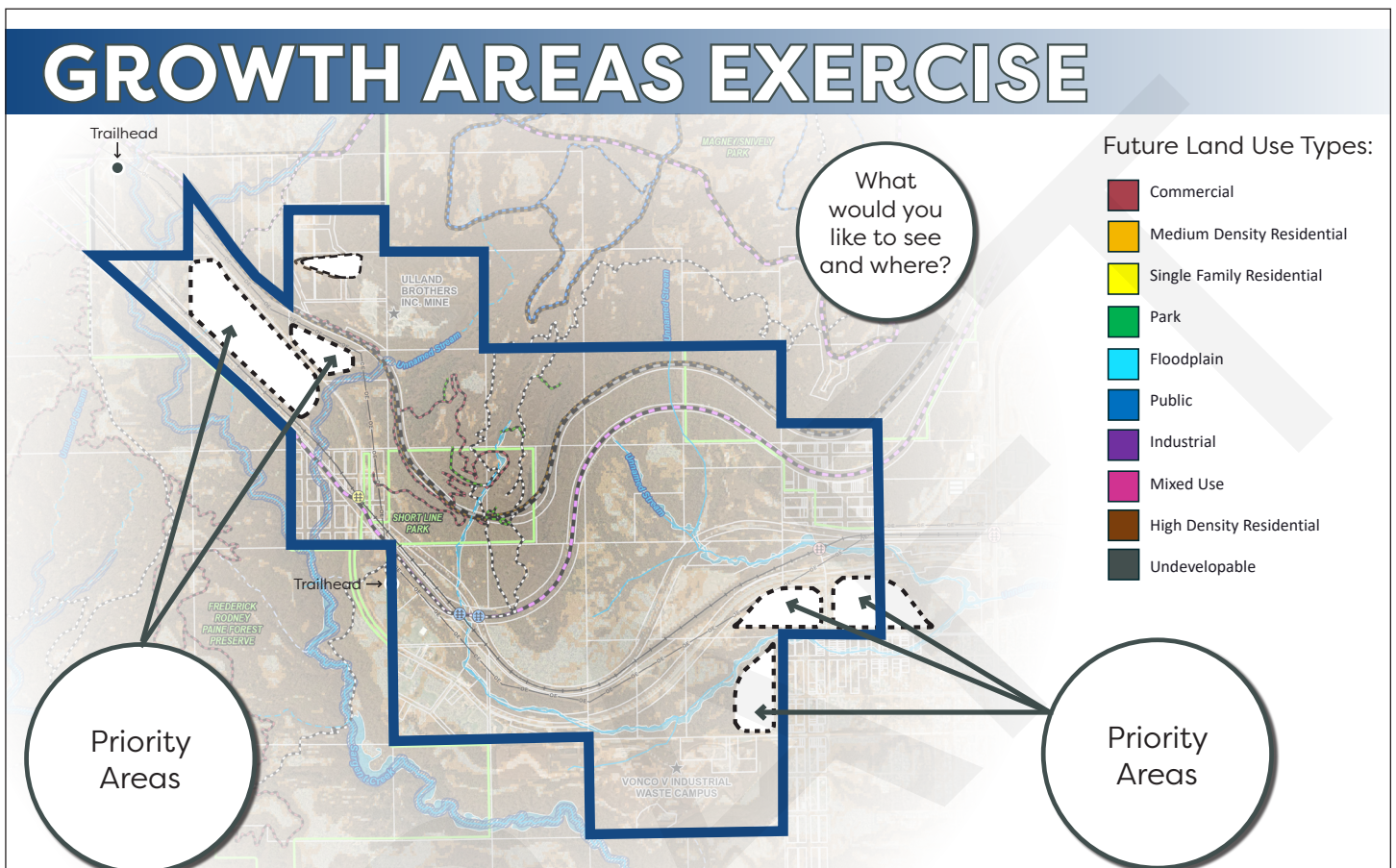
SUGGESTIONS FOR THE STUDY AREA

- Existing trails and aesthetics of the system should be protected and consideration given to expansion of trails in the area.
- Consider extending a walking/biking trail connection from the Gary-New Duluth neighborhood to existing and proposed trailheads.
- Consider lighting and preserve the "dark sky" aspect of the area.
- The gas pipeline or the WLSSD sanitary sewer near Becks Road occasionally has an exhaust smell. Potentially filter & reuse for energy.
- Ensure that future development does not pose an issue for residents, including increased heavy traffic, light pollution, odors, and noise.
- Consider allowing something "fun" or useful to Gary-New Duluth residents, such as a grocery store.
- Concerns with impacts to the Munger and DWP trails from the adjacent quarry.
- Questions about Vonco landfill – its ultimate height and footprint. Noise from beeping backup alarms is intrusive. Don't want to see another landfill in the study area.
- Consider lower-density residential wherever able/applicable, especially near existing residential areas.
- If proposing new homes, consider lot sizes.

FUTURE COMMUNITY INVOLVEMENT

- Plan to host the next engagement opportunity at the same location.
- Share flyers through additional avenues, social media pages, etc.
- Show streets and corresponding names on maps for better orientation.
- Illustrate the existing zoning of the area on the maps.
- Include additional area stakeholders in the process, such as the Superior Hiking Trail Association.

COMMUNITY OPEN HOUSE



As part of the December 2nd community open house, community members were invited to review potential future land use types – such as residential, commercial, mixed-use, and park areas – and share their input on where these uses should be located. While this Growth Areas Exercise aimed to spark discussion about long-term development opportunities, participants raised several important questions and concerns.

Community members expressed hesitation about new growth and change, emphasizing the need to preserve the character of existing neighborhoods and protect natural features like wetlands and steep slopes. Many participants questioned the suitability of certain proposed locations for development, citing environmental constraints and infrastructure limitations. There was a strong desire for greater transparency and clarity in the planning process, with several attendees noting that zoning classifications and street layouts should be shown on the maps to provide better context for decision-making. Without this information, residents felt it was difficult to fully understand how proposed growth areas might impact traffic patterns, access, and compatibility with surrounding land uses.

Overall, the feedback highlighted a cautious approach toward expansion. Residents want growth to be thoughtful, well-planned, and sensitive to community values. Concerns about infrastructure capacity, environmental protection, and neighborhood stability underscore the importance of continued engagement and clear communication as the planning process moves forward. Incorporating detailed maps, zoning information, and transportation networks into future exercises will help build trust and ensure that community voices shape the vision for the Becks Road corridor.

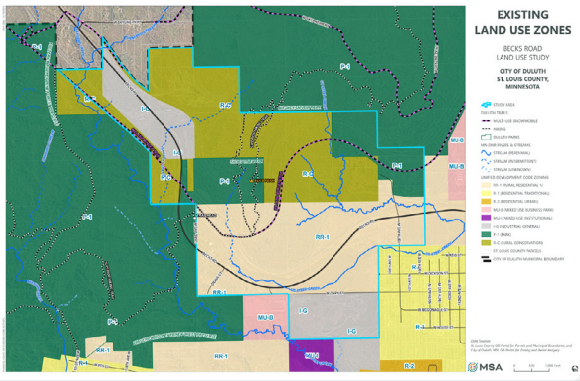
COMMUNITY OPEN HOUSE



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LAND USE STUDY FOR BECKS ROAD PROJECT INFORMATION:



EXISTING LAND USE ZONES
BECKS ROAD
LAND USE STUDY
CITY OF DULUTH
ST. LOUIS COUNTY,
MINNESOTA

NOTE: Future Land Use is a City Council approved policy statement expressing the desired arrangement of land uses. Zoning is the primary land use regulatory tool.

(Definitions on the back)



Following the December 2nd community input meeting, the project team developed informational handouts that provide additional clarification on the area's existing land uses and 2018 future land use plan. These handouts included maps, as shown to the left, as well as the definitions of the various classifications on the back. These materials were sent to all meeting attendees via email with the following text:

"Thank you for attending this first community meeting concerning the Becks Road Land Use Study. We hope the meeting informed you about the land use study and that you were able to share your thoughts about the future of the study area."

During the question-and-answer period several people asked questions about the current land use zones (zoning) and planned future land uses in the study area. Attached, you will find maps of those topics with explanations about each. Below is an explanation of the differences between the two maps.

Existing land use zones (or zoning) govern what people can do with their property today. These zones identify allowed uses, such as single-family detached dwelling, retail store, or warehouse, as well as development standards, such as building setbacks from property lines or building heights.

The future land use map shows the desired future arrangement of land uses for the study area. The City Council approved this map in 2018 as part of the City's Comprehensive Land Use Plan. The areas delineated on this map show generally where residential neighborhoods, industrial areas, and areas of very low intensity uses are planned to be.

This Becks Road Land Use Study will consider changes to the arrangement of these future uses and make recommendations to the City Planning Commission and City Council, who have authority over these subjects.

Once the City Council adopts any proposed changes to the future land use map, the zoning map can then be changed to align with the future land uses. The City Council would need to approve any changes to the land use zones (zoning) after the City Planning Commission holds a public hearing."

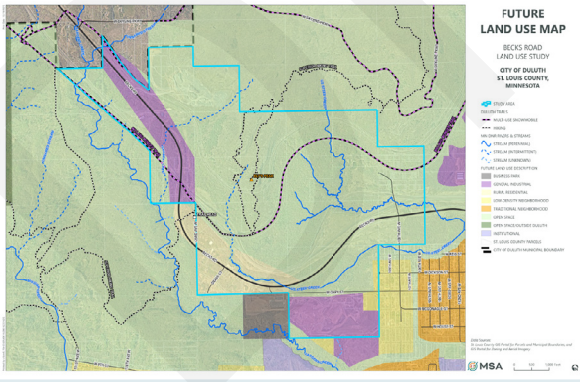
These handouts and background information provided additional clarification, context, transparency and a means for reaching out with any further questions.



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LAND USE STUDY FOR BECKS ROAD PROJECT INFORMATION:



(2018) FUTURE LAND USES
BECKS ROAD
LAND USE STUDY
CITY OF DULUTH
ST. LOUIS COUNTY,
MINNESOTA

NOTE: The future land use map above shows the desired arrangement of land uses that the City Council approved in 2018. This study will consider changes to desired future land uses and make recommendations to the City Planning Commission and City Council, who have authority over this subject.

(Definitions on the back)



COMMUNITY OPEN HOUSE

The project's second community input meeting – the Draft Plan Open House – was held on the evening of August 3, 2026, at the Gary-New Duluth Community Center. The event drew approximately 30 attendees, in addition to project staff. Notice of this meeting was sent to all attendees of the December open house and those people who contacted staff between meetings. Volunteers with Gary-New Duluth REC helped reaching out via social media and posting flyers.

The project team opened the meeting with a presentation summarizing the study timeline and objectives, key findings from community engagement and technical analysis, and the draft recommendations for the Becks Road corridor, including proposed growth subareas and future land use map changes. Following the presentation, there was a brief Q&A where the project team further addressed property ownership of identified growth areas, the future of the area's industrial sites and recreational license agreements, and the distinction between future land use and zoning.

The remainder of the event operated as an open house, allowing participants to review display boards illustrating the six proposed subareas, draft policy guidance, and proposed future land use map amendments. Printed and digital copies of the draft plan were also available for more detailed review.

11 attendees submitted input through a designated feedback form covering four overarching policy themes, rating recommendations from “love it” to “can live with it” to “hate it.” The results of this form are summarized below:

- Respondents generally “can live with” proposed development recommendations and transportation/utility recommendations.
- The strongest support centered on environmental preservation and protection of trails and recreational assets, including improved connections between Gary-New Duluth, the Munger Trail, DWP Trail, and existing trailheads.
- Participants also emphasized preserving the corridor's natural character and avoiding unnecessary infrastructure expansion.
- Some expressed concern about expanding business park uses, preferring conservation or residential uses in the proposed southeast growth areas.
- Overall, feedback supported the study's direction while reinforcing the need to balance future development with environmental protection, recreation access, infrastructure limitations, and the corridor's rural character.

During the introductory presentation, attendees were invited to attend the August 13th public hearing. Notice of the public hearing was also mailed to all landowners in the study area and those within 350 feet.



ENGAGEMENT SUMMARY

Understanding the needs of key stakeholders, community members, and city leaders is essential to shaping a land use strategy that reflects shared values and supports long-term goals. Based on the community engagement activities outlined in this chapter, the project team identified the following needs and desires for future development within the Becks Road corridor.



INFRASTRUCTURE AND TRANSPORTATION

Preserving transportation access, especially between I-35 and MN Highway 23 (Commonwealth Ave), is a critical need. Key stakeholders seek safer access to Becks Road and multimodal options that allow residents to access businesses and recreational areas along the corridor.



ENVIRONMENTAL PRESERVATION

Key stakeholders have expressed strong interest in protecting the area's natural resources, including US Steel Creek, Sargent Creek, and surrounding open spaces. These areas are valued for their ecological significance, recreational potential, and contribution to community identity. Preserving trout streams and minimizing environmental impacts are key priorities.



RECREATIONAL ACCESS AND CONNECTIVITY

There is a desire to improve access to recreational amenities adjacent to the Becks Road corridor. Enhancing pedestrian and bicycle infrastructure, including safe crossings and trail connections, would support active transportation and improve quality of life. Connectivity between neighborhoods and regional destinations is a recurring theme.



COMPATIBLE DEVELOPMENT

Key stakeholders are interested in land use transitions that support compatible development – such as the quarry, light industrial, commercial, or mixed-use projects – that provide local jobs and services without disrupting residential areas or natural landscapes. Thoughtful zoning, screening, and buffering strategies are needed to manage potential conflicts, especially for development along Becks Road, which serves as an important scenic gateway to Duluth's far western neighborhoods.

An aerial photograph of a landscape, possibly a golf course or park, with a blue overlay. A large white number '04' is prominently displayed in the center-left. The background shows a mix of green fields, a winding path, and some buildings in the distance.

04

DISCIPLINARY ANALYSIS

DISCIPLINARY ANALYSIS

This chapter outlines the multidisciplinary analyses conducted as part of the land use study to establish a strong understanding of existing conditions, development constraints, and opportunities for future growth within the Becks Road corridor. The findings from the following categories provide the foundation for identifying feasible growth areas (as identified in Chapter 6) and inform recommendations that are realistic, coordinated, and responsive to local conditions.

Population Trend and Growth

This analysis evaluates historic and projected population, household, and housing trends relevant to the study area and surrounding context. It summarizes recent growth patterns, demographic characteristics, and anticipated development pressure to inform assumptions about future land use demand and service needs.

Land Use and Economic Conditions

This section reviews existing land use patterns, adopted future land use designations, and zoning classifications within the study area. It also considers the broader economic context, including employment trends and market conditions, to assess the compatibility and feasibility of potential development scenarios.

Potable Water System Capacity

The water system analysis examines the availability and capacity of municipal water infrastructure serving or adjacent to the study area. Key considerations include proximity to existing mains, elevation and pressure limitations, fire protection requirements, and the relative feasibility of extending service to support future development.

Sanitary Sewer System Capacity

This category evaluates existing sanitary sewer infrastructure, service boundaries, and conveyance capacity relevant to the study area. The analysis identifies areas potentially served by gravity systems or lift stations and outlines high-level considerations for sewer service extensions or boundary amendments.

Stormwater System

The stormwater analysis reviews watershed conditions, drainage patterns, and known environmental features affecting runoff management. It identifies applicable watersheds, notes sensitive resources such as designated trout streams, and summarizes general stormwater management considerations associated with future development.

Transportation System Capacity

This section assesses the roadway network serving the study area, including functional classification, ownership, and general capacity. It provides context on existing traffic volumes, regional connectivity, and access considerations that may influence development intensity and transportation improvements.

Development Policy Statements (Chapter 7)

Based on the following analyses, Chapter 7 recommends policy statements intended to guide future planning, infrastructure coordination, and development decisions. The statements reflect observed constraints and opportunities and are structured to align with adopted plans and long-term community goals.

POPULATION TREND AND GROWTH ANALYSIS

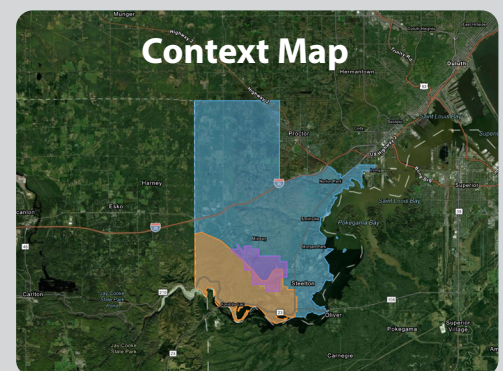
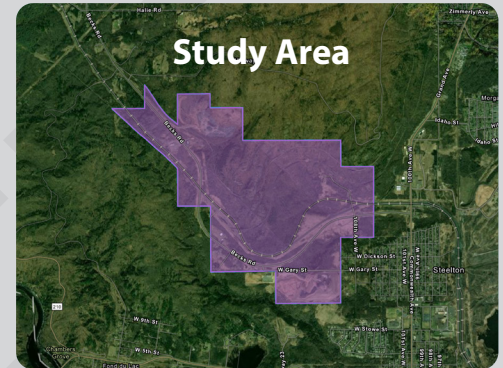
The population trend and growth analysis for the Becks Road study area examines demographic conditions at multiple geographic scales to provide context for understanding the area's development potential. This includes an assessment of the population and housing characteristics within the study area itself, the census block group in which it is located, and the Western Duluth subarea as defined in the adjacent map.

The study area contains a very small population base, with the Becks Road Block Group estimated to have approximately 1,347 residents and 615 total housing units, representing a low-density, predominantly rural pattern with limited established services and infrastructure. This small denominator means that demographic indicators – such as growth rate, household size, or population change – are highly sensitive to minor fluctuations and must be interpreted carefully.

When placed in context, the data shows that growth is likely to occur only where infrastructure improvements can service developable land and where specific, targeted projects introduce new housing opportunities. The absence of discernible internal demographic trends – attributable to the small population and the rural development pattern – further indicates that the area's near-term growth trajectory will be shaped more by infrastructure investment, land use planning, and market feasibility than by existing population pressures.

Despite these modest trends, the analysis identifies an important opportunity: the Becks Road corridor is geographically positioned along the urban edge of Duluth, meaning it could capture a limited amount of spillover residential demand if utilities, access, and site readiness improve over time. This is consistent with broader regional patterns in which rural-edge areas with improved infrastructure can support incremental, lower-density housing formats.

Overall, population trends suggest that the Becks Road study area should not be planned for rapid or large-scale residential expansion. Instead, the area will benefit from a phased, infrastructure-aligned growth strategy that leverages feasible development pockets, supports incremental housing opportunities, and monitors demographic change as targeted investments occur. Growth feasibility in this corridor is therefore tied less to population-driven demand and more to service availability, topographic constraints, and the strategic sequencing of public and private improvements.



LAND USE AND ECONOMIC ANALYSIS

A review of the City of Duluth's zoning map and 2018 Future Land Use Map reveals that the Becks Road corridor is shaped primarily by environmental constraints, limited infrastructure, and semi-rural context. The study area is dominated by open space and parkland, reflecting the steep topography, extensive natural features, and drainage systems that limit large-scale urban development. Secondary land uses include general industrial areas and large-lot rural residential parcels, each of which aligns with the available road access and the historical pattern of utility service in the area. Collectively, these factors indicate that much of the land within the study area carries significant physical or infrastructural barriers that must be considered before any intensification can occur.

The **2018 Future Land Use map** (see following page) illustrates this pattern as most land is designated Open Space, followed by small pockets of General Industrial and Rural Residential abutting Becks Road. This limits the ability to rezone parcels to more "intensive" districts, such as industrial or residential districts, because Duluth's Comprehensive Plan (Imagine Duluth 2035) substantially restricts development within the Open Space designation. While this land use study recommends slight changes to the Future Land Use Map (illustrated on pages 70-71) to enable the development of identified growth areas (pages 61-68), most of the study area should remain Open Space to protect the sensitive natural facets of the corridor.

In contrast, Duluth's **zoning map** (see following page) shows a relatively even split between parcels that are zoned Rural Residential, Rural Conservation, Park, and General Industrial. However, this zoning pattern does not fully reflect existing land uses, ownership, or physical development constraints. For example, the Ulland Brothers quarry is currently zoned Rural Conservation rather than General Industrial, despite its active industrial use. Future rezoning may be necessary to address existing nonconforming uses, better align applicable ordinance regulations with the area's existing conditions, and ensure consistency with the Future Land Use map.

Economically, data indicates that the corridor is most likely to support incremental, infrastructure-aligned growth rather than major commercial or high-density residential expansion. Modest single-family and townhome development represents the most realistic near-term housing product, given market conditions and service limitations. In contrast, large-scale multi-family housing and commercial uses would require utility improvements beyond what is currently planned or economically justifiable.

Meanwhile, light industrial expansion, particularly near the northwest portion of the study area and adjacent to the landfill, remains one of the corridor's strongest long-term economic opportunities due to land use compatibility. The existing Ulland Brothers quarry also represents an important component of the corridor's economic considerations. Aggregate resources are inherently location-dependent and can only be extracted where suitable deposits occur and remain accessible. Maintaining access to a local aggregate source can reduce hauling distances, fuel consumption, roadway wear, and associated emissions while supporting construction activity within the Duluth region.

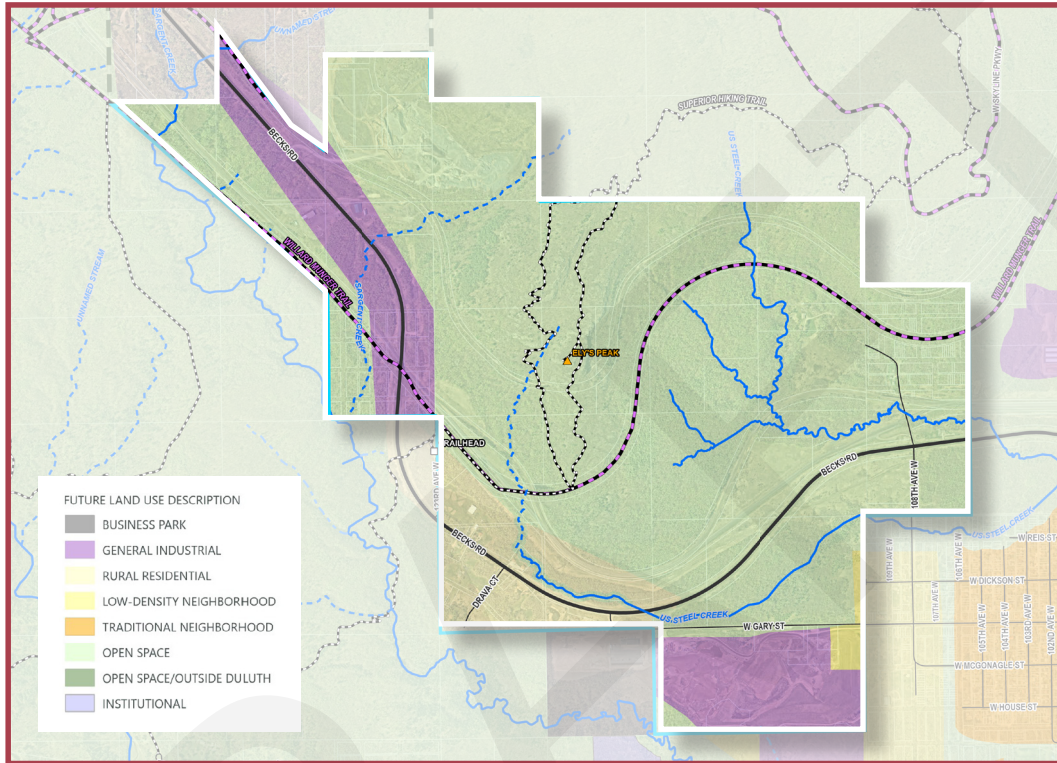
Future Land Use Map vs Zoning

Future land use mapping and zoning are closely related tools to guide community growth and development, but they serve distinct purposes. The Future Land Use Map is a crucial component of a community's Comprehensive Plan, illustrating desired patterns of development that will support the City's overall vision into the future.

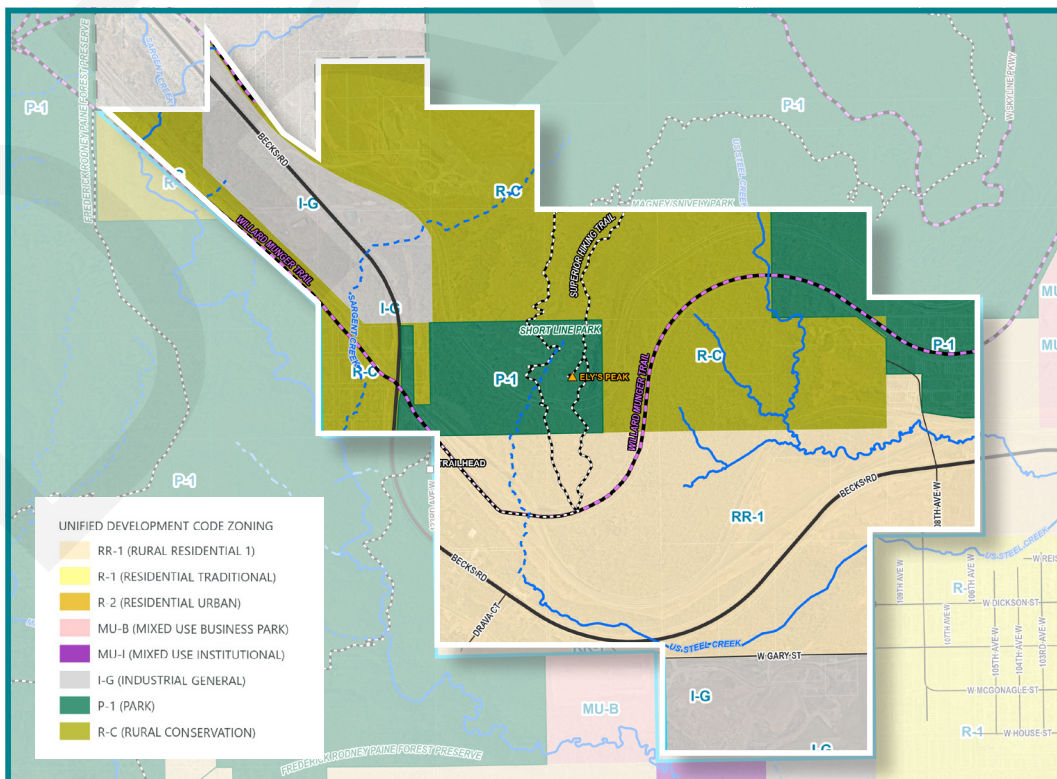
Zoning, by contrast, is a regulatory tool used to *implement* the Comprehensive Plan's vision, including the Future Land Use Map. It establishes specific rules for how land can be used today, such as permitted uses, building heights, setbacks, lot sizes, and density. For example, the zoning map is used to determine what can be built on a property now, but any proposed rezones must align with the desired future uses detailed in the Future Land Use Map.

LAND USE AND ECONOMIC ANALYSIS

Study Area - Duluth's adopted 2018 Future Land Use Map



Study Area - Duluth's adopted Zoning Map

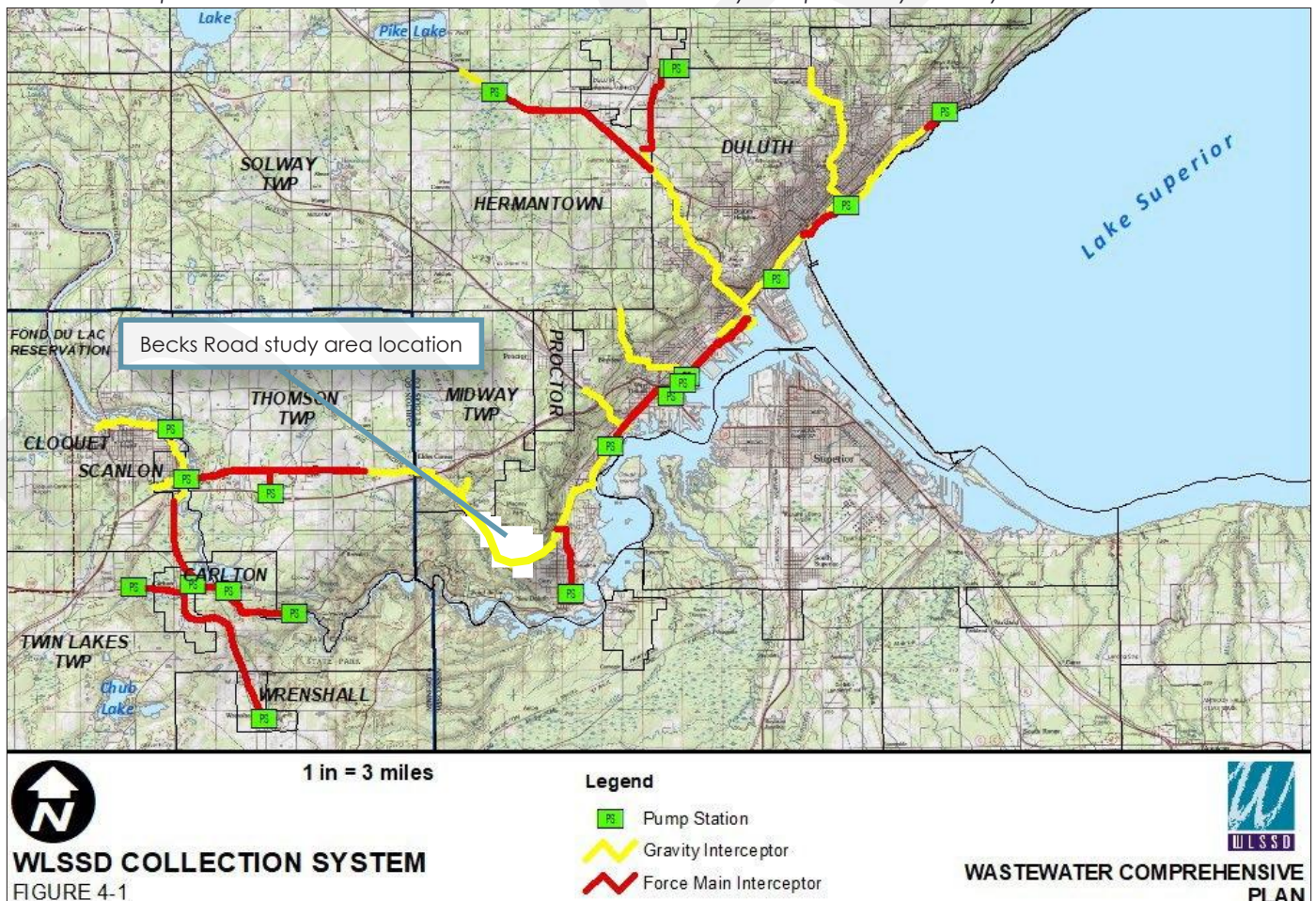


SANITARY SEWER SYSTEM CAPACITY ANALYSIS

The sanitary sewer system capacity within the Becks Road study area is a defining factor in determining how and where future development can occur. The City of Duluth (including the Becks Road corridor), along with seven other cities and nine townships, are served by the Western Lake Superior Sanitary District (WLSSD). The WLSSD's most recent Wastewater Comprehensive Plan* (adopted March 2023) revises the Urban Services Boundary, which designates areas for current and future public utilities such as sanitary sewer. The plan also indicates that most of the study area's development potential is tied directly to the WLSSD's Scanlon Interceptor, a major regional conveyance system located near the Becks Road corridor. This interceptor is identified in the map below.

Because the Scanlon Interceptor does not currently serve development within the study area, extending sanitary sewer service would require formal coordination and agreements between the City of Duluth and WLSSD. Additional local infrastructure would also be needed to collect and convey wastewater from future development areas to the regional interceptor system. WLSSD's Urban Services Boundary (USB) is identified in orange on the following page's map; extending sanitary sewer service to areas north and west of this line would require an amendment to the USB, whereas areas south and east of the line may not require WLSSD action. Any USB amendment would need to be reflected in corresponding updates to both the WLSSD and City of Duluth Comprehensive Plans; additionally, since private connections to the Scanlon Interceptor are not permitted, the City of Duluth would need to lead and coordinate any future service extension.

**NOTE: The Comprehensive Wastewater Plan referenced is not a study completed by the City of Duluth*

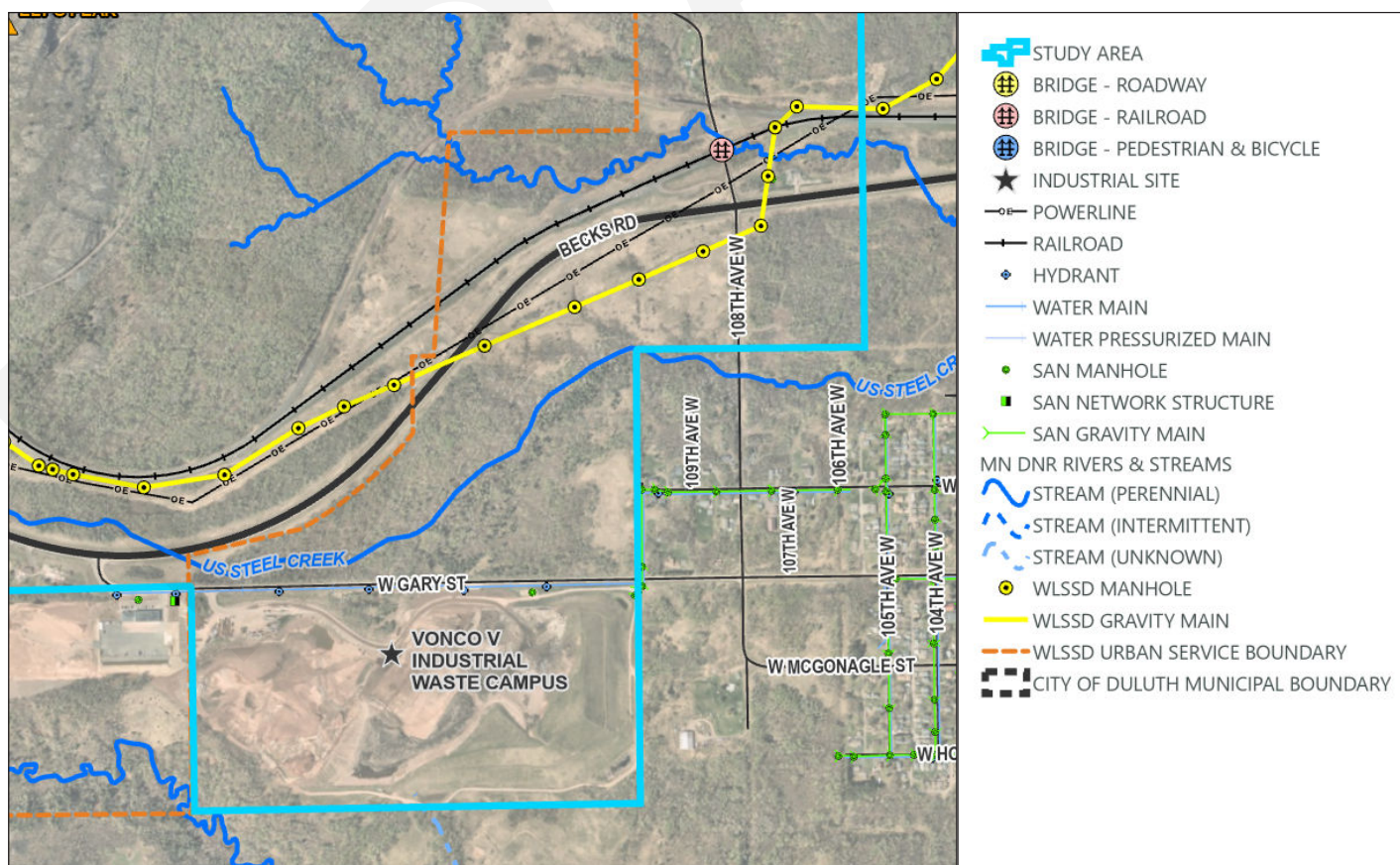


SANITARY SEWER SYSTEM CAPACITY ANALYSIS

Existing system conditions also play an important role in shaping development feasibility. A 2023 sanitary infrastructure review for the broader area documented surcharging in parts of the system, driven largely by challenging topography and long-standing pipe alignments that limit gravity flow. While some system improvements are already planned as part of general maintenance and pump-station upgrades, accommodating additional development will require a more detailed evaluation of downstream capacity and inflow and infiltration (I/I) conditions. These constraints mean that higher-intensity development must be sequenced with system improvements to ensure reliable service.

There are also constraints associated with existing infrastructure. A force main serving the Vonco landfill runs along Gary St before turning north and connecting to a City manhole just before the Scanlon Interceptor. However, due to its design and purpose, this facility cannot be used as a shared connection point for new development. A parallel force main could be constructed if needed, but this option should be weighed carefully against the costs and the type of land uses being considered. For near-term planning, the more feasible approach is to define growth areas based on whether they can be served through gravity flow, lift-station-supported service, or should be deferred until system improvements occur. This is explored further in Chapter 6. A planning-level example shows that a 100 gpm lift station could support approximately 240 homes, assuming typical residential peak flow estimates.

Overall, the sanitary system analysis emphasizes that growth within the Becks Road corridor must follow an infrastructure-first strategy. Areas near the interceptor with favorable slopes offer the most viable near-term opportunities, while more remote or topographically challenging areas will depend on lift stations, downstream system upgrades, and coordinated planning with WLSSD.



POTABLE WATER SYSTEM CAPACITY ANALYSIS

The potable water system evaluation for the Becks Road study area highlights how access to municipal water infrastructure will strongly influence where and how development can occur. In this area, municipal water can generally be provided with looped connections, which are essential for maintaining adequate pressure, fire flow, and system redundancy. These conditions make the southeastern areas the most realistic locations for initial residential or mixed-use development.

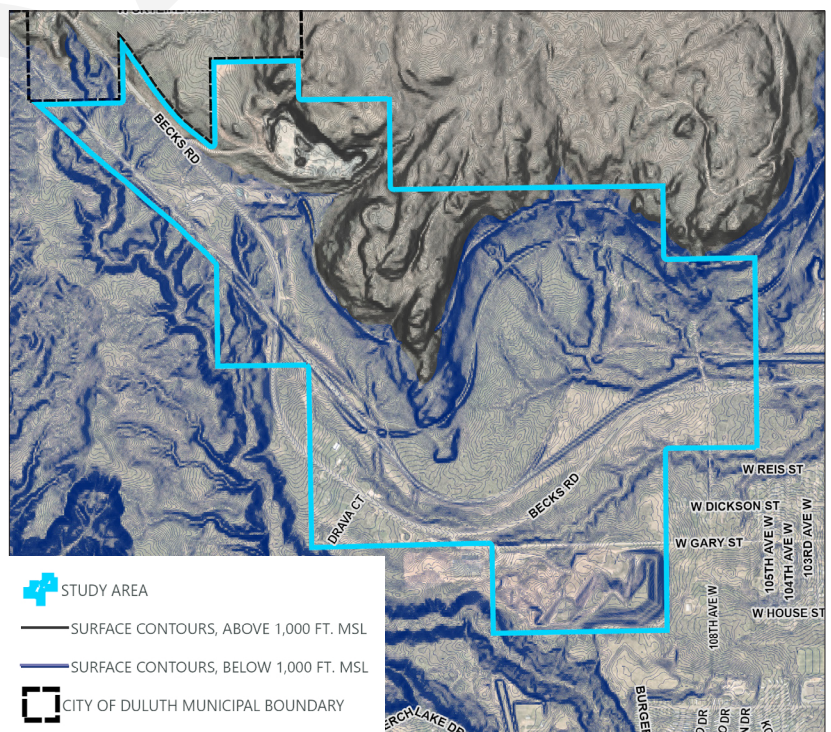
Farther north, the study area becomes increasingly difficult to serve. Water mains are more distant, the terrain is rougher, and system pressures would not be sufficient without investing in a booster station. This added infrastructure elevates both capital and long-term operational costs, meaning that northern expansion should only be considered if future development needs justify the investment. A potentially abandoned Skyline Parkway main could provide another point of connection, but its location, condition, and hydraulic viability are currently unknown. Until field-verified, this pipe should not be assumed as part of the serviced network.

Elevation plays an important role in determining where municipal service may be physically feasible; however, elevation *alone* does not determine whether an area can realistically be served. In a simplified analysis, areas below roughly 1,000 feet above sea level are generally more feasible to serve with gravity-fed or pressure-adequate infrastructure, while areas above this range may face pressure limitations requiring mechanical assistance. As shown in the map below, much of the study area lies below 1,000 feet above sea level (marked in blue), which is generally consistent with the location of WLSSD's Scanlon Interceptor, the gravity-fed wastewater interceptor that runs through the study area (see page 41).

However, the blue areas should not be interpreted as automatically serviceable with municipal water, including potable water and fire protection. Actual serviceability depends on watermain size, location, capacity, pressure, and the cost and practicality of infrastructure extensions. Based on current utility constraints, the vast majority of the study area is not realistically serviceable by municipal water without significant improvements.

Higher-intensity residential, mixed-use, and industrial development will require full municipal service to meet hydrant and fire-flow requirements. Conversely, low-intensity commercial or industrial uses in more remote areas may be feasible with well service, provided that adequate on-site fire protection systems are incorporated and approved. This flexibility allows certain types of land uses to move forward without full municipal extension, provided they remain low demand and low hazard.

This analysis underscores the importance of a phased approach to growth, beginning in the southern, lower-elevation areas where municipal water can be provided most reliably.

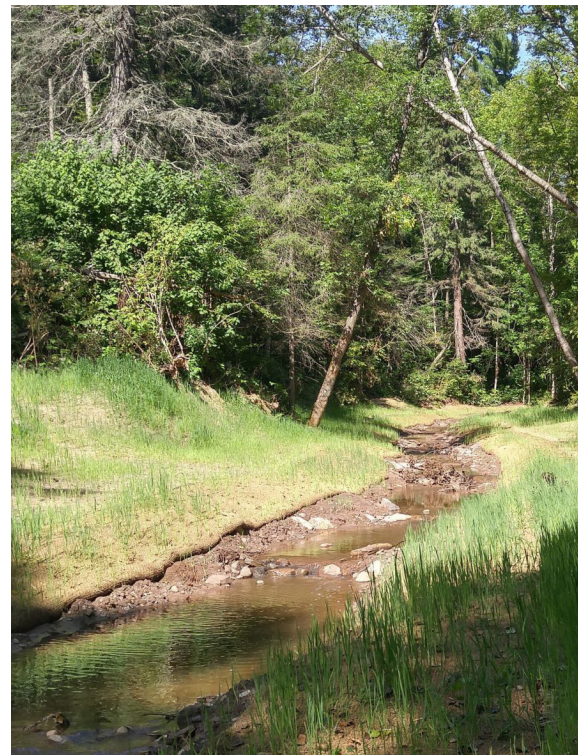
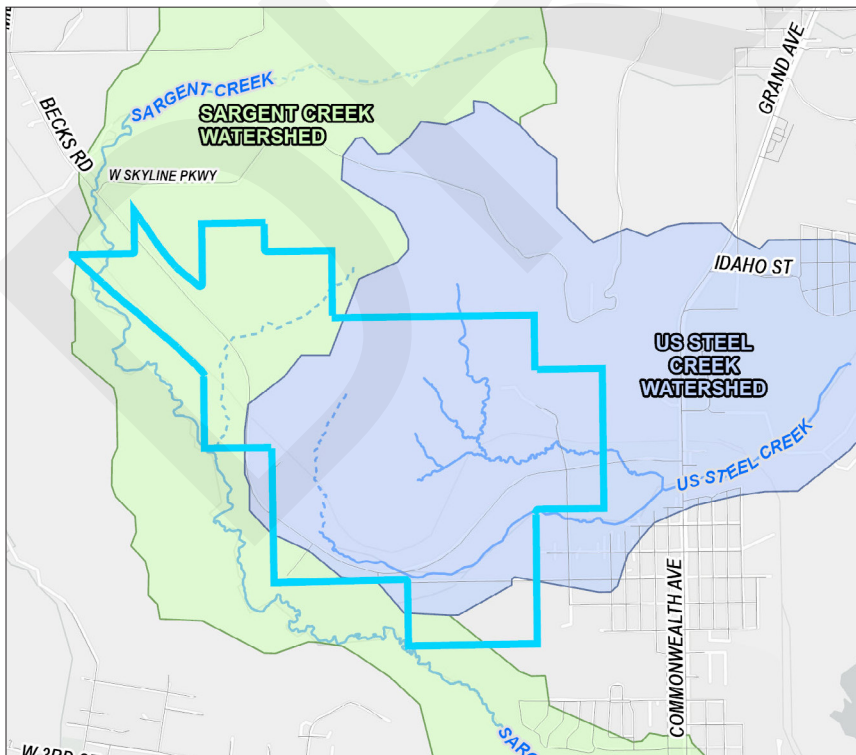


STORMWATER SYSTEM ANALYSIS

The stormwater evaluation for the Becks Road study area identifies the significant influence of topography, natural drainage patterns, and watershed boundaries on future development potential. Unlike urbanized areas with piped storm sewer networks, most stormwater movement within the study area occurs through roadside ditches, culverts, and natural drainageways, which serve as the primary conveyance mechanisms for runoff. The City of Duluth maintains strict stormwater ordinances that require new development to manage runoff on-site, typically through detention, infiltration (where soils allow), or filtration practices, and to limit discharge rates to levels that downstream systems can safely accommodate. These requirements reflect both the physical complexity of the area and the sensitivity of its water resources.

A critical component of the stormwater analysis is the presence of two major watersheds within the study area: Sargent Creek and US Steel Creek. Sargent Creek is of particular importance because it is both a DNR-designated public water and a trout stream, meaning that it requires heightened protection from sedimentation, thermal impacts, and hydrologic changes that could degrade water quality or aquatic habitat. Development within or near this watershed must incorporate enhanced stormwater best management practices (BMPs) to prevent increases in peak flow, temperature, or pollutant loads. US Steel Creek also plays an essential role in downstream drainage and must be protected from excessive runoff or altered flow patterns. These watershed characteristics reinforce the need for site-specific stormwater design and careful coordination with natural features.

Because stormwater infrastructure is limited, even small increases in impervious surfaces can materially affect drainage conditions along Becks Road and adjacent slopes. Future development will likely require culvert upgrades, ditch stabilization, and erosion-control measures to maintain effective conveyance and reduce the risk of localized flooding or downstream impacts. Any new road or site grading should be approached with an understanding of how water moves through the landscape, ensuring that development does not disrupt existing drainageways or increase flows into sensitive receiving waters.



TRANSPORTATION CAPACITY ANALYSIS

The transportation capacity analysis for the Becks Road study area demonstrates that the corridor is well-positioned to accommodate future growth from a traffic operations standpoint. Becks Road functions as the primary north-south arterial serving the study area, connecting MN Highway 23 (Commonwealth Ave) to Interstate 35, with major access points at Gary Street and 108th Ave W. According to the most recent MnDOT traffic counts, the corridor carries an Average Annual Daily Traffic (AADT) of approximately 3,300 vehicles, which represents only 10–15% of the typical capacity of a standard two-lane rural road, commonly rated for 20,000–32,000 vehicles per day. This indicates substantial unused roadway capacity, very low congestion risk, and ample room to absorb projected development activity without triggering major roadway expansion needs.

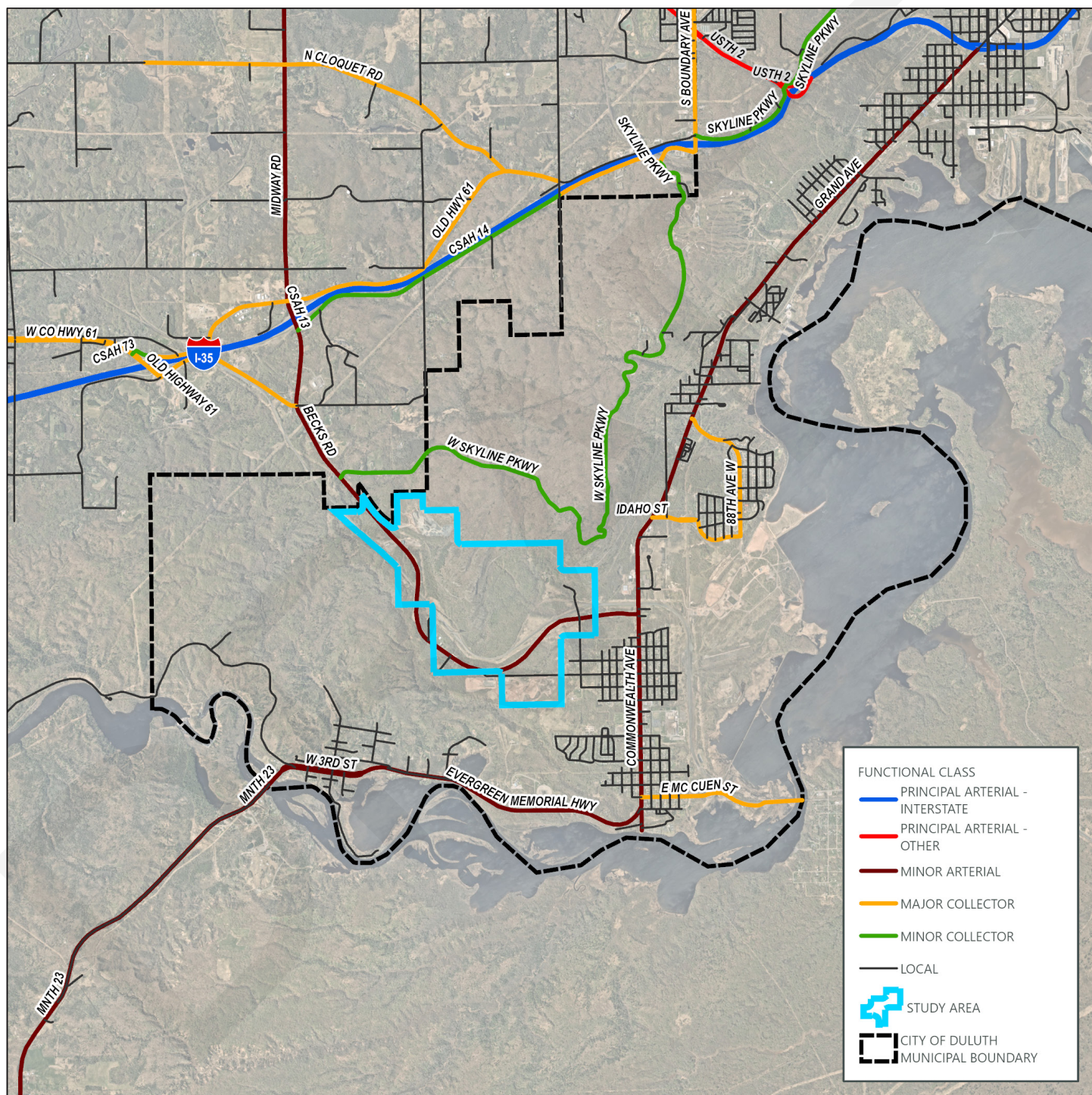
The map on the following page indicates that Becks Road is a Minor Arterial, which the Minnesota Department of Transportation (MnDOT) defines as “provid[ing] direct, relatively high speed service for longer trips and large traffic volumes. Mobility is emphasized, and access is limited.” As a result, new accesses (such as driveways and new roads) should be avoided along this corridor whenever possible to maintain a steady traffic flow on Becks Road.

Additionally, the study area faces physical constraints that limit opportunities for new road connections. Steep terrain and the presence of an active rail line reduce network redundancy and restrict where new intersections or linkages can be introduced. As a result, the performance of Becks Road will depend more on access management and intersection improvements than on additional roadway construction. Targeted enhancements – such as refined turn-lane treatments, improved sight distances, and coordinated driveway access – will help maintain safety and operational efficiency if development intensifies. These types of improvements are appropriate for the scale of anticipated growth and do not require major right-of-way impacts.

The analysis also highlights the importance of multimodal considerations, particularly given the corridor's proximity to significant trail assets and recreational destinations. While Becks Road currently functions primarily as a vehicular route, future improvements may include shoulder widening, shared-use path connections, or enhanced trail crossings to support safer walking and biking access. These multimodal enhancements can be introduced incrementally and will complement the area's growing outdoor recreation identity.

Overall, the transportation analysis shows that Becks Road provides a strong foundation for phased development, with capacity far exceeding current usage and only modest upgrades needed to support anticipated growth. By focusing on access management, localized intersection improvements, and thoughtful multimodal design, the area can accommodate new development efficiently while maintaining safe and reliable corridor operations.

TRANSPORTATION CAPACITY ANALYSIS



PARKS, RECREATION, AND TRAILS ANALYSIS

The Becks Road study area is defined in large part by its rich system of parks, natural areas, and regional trail corridors, which together create a unique recreation landscape and a significant community asset. The area is served by four major trail systems:

- Willard Munger State Trail – Approx. 70 miles of paved trails that connect Hinckley and Duluth.
- Duluth, Winnipeg, and Pacific (DWP) Trail – 6-mile gravel path that connects the study area to Duluth's Irving neighborhood. It follows an abandoned rail bed and features a historic hand-blasted rock tunnel.
- Superior Hiking Trail – 300-mile path that runs along Minnesota's North Shore, passing through Duluth and the study area.
- Duluth Traverse – 103-mile hiking and mountain biking trail system that is one of only four Gold Level Ride Centers in the world recognized by the International Mountain Bicycling Association.

These trails are supported by three primary trailheads: the Spirit Mountain Trailhead, the Mission Creek Parkway Trailhead, and the Munger Trail Trailhead, each offering gateways into the surrounding natural environment and linking users to long-distance and local recreational routes. The variety and quality of these resources support activities such as hiking, bicycling, rock climbing, and nature observation, enhancing the desirability of the area for residents and visitors.

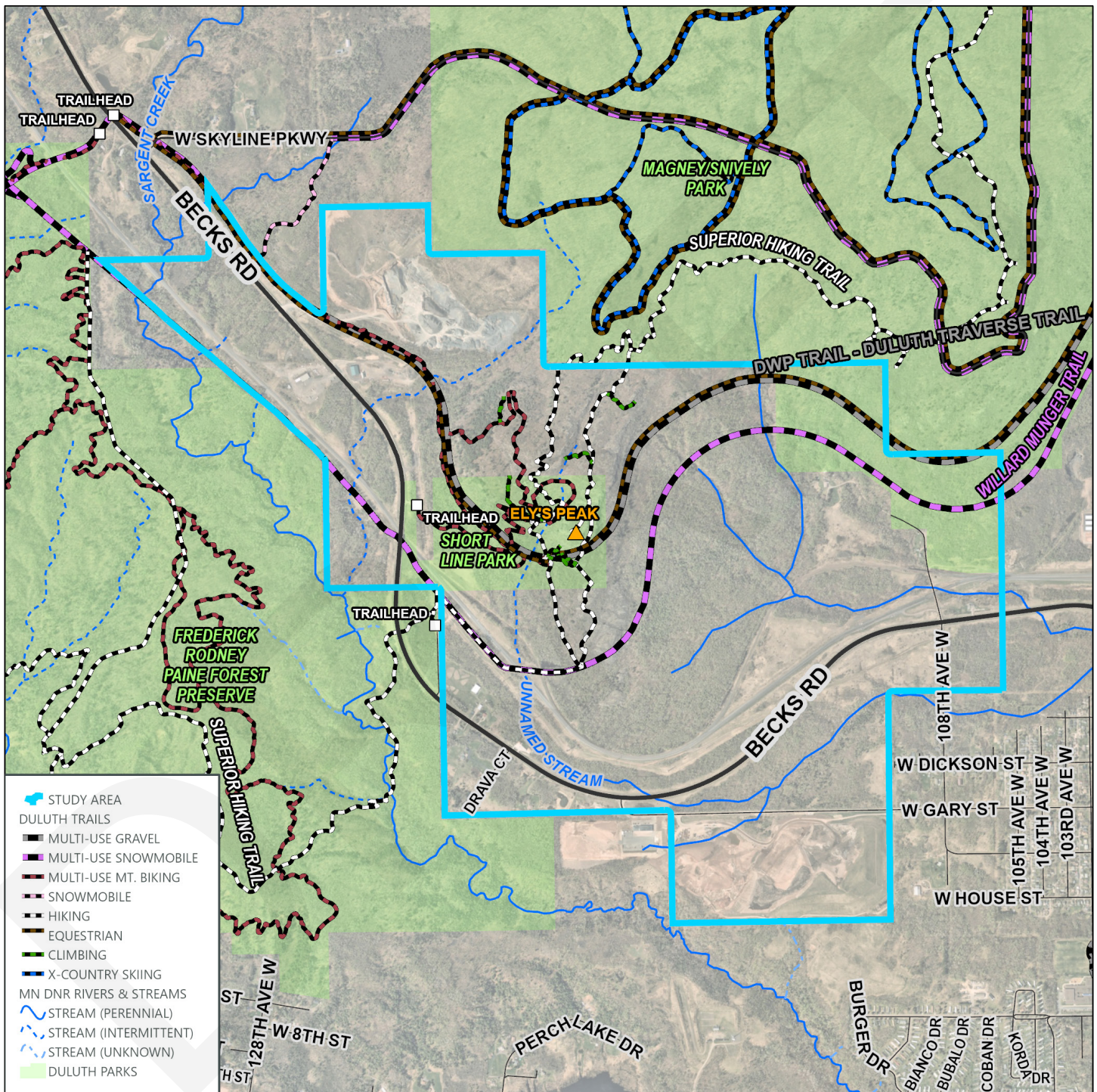
Recent survey and field assessment work conducted by City staff, particularly around Magney-Snively Park and Short Line Park (located around the center of the study area), identified natural lands of substantial ecological and cultural significance. The landscape includes critical and endangered habitat, distinctive geological formations, and unique wetland placement. Ely's Peak also holds cultural significance for the Ojibwe people.

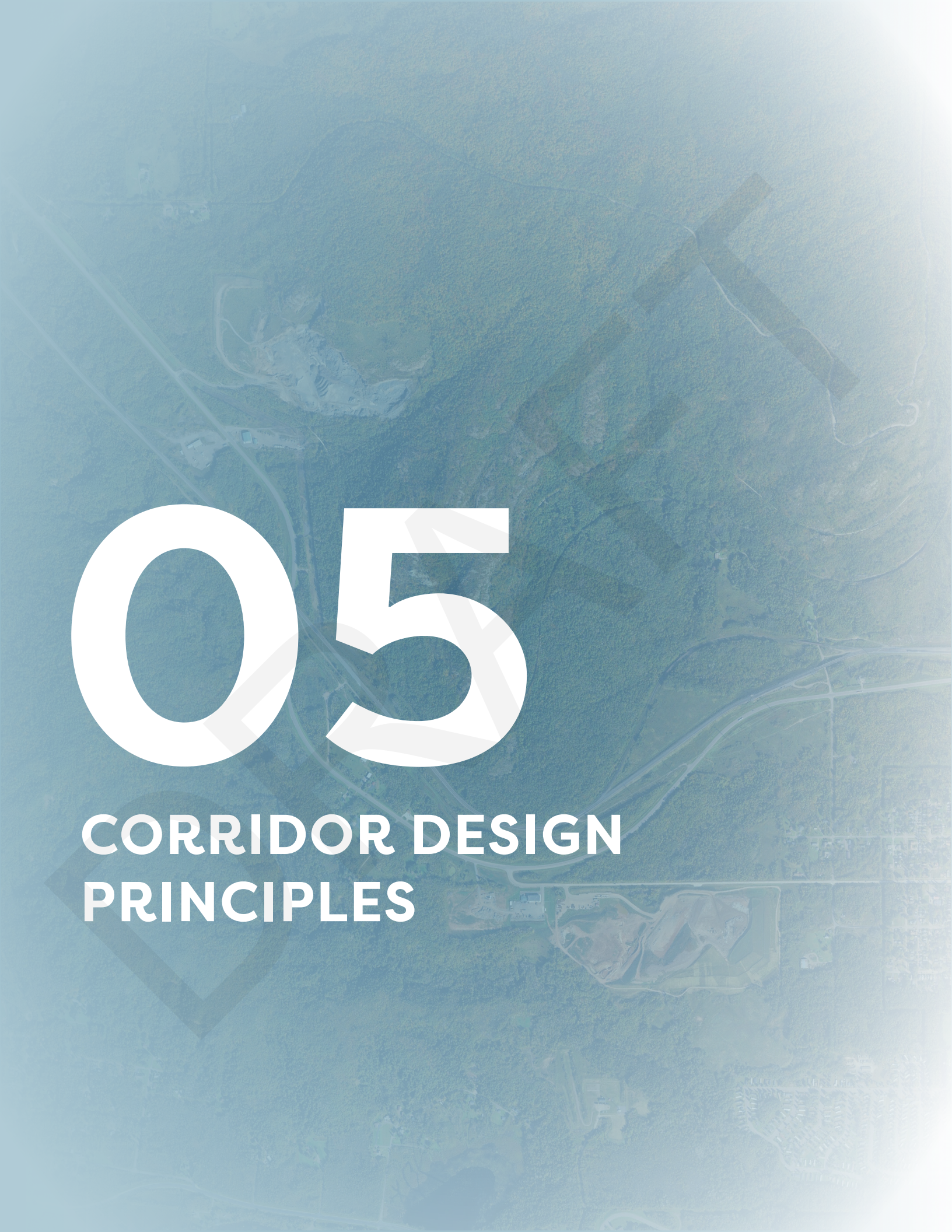
These overlapping recreational, ecological, geological, and cultural resources should be evaluated as a connected natural landscape rather than as isolated parks, trails, wetlands, or undeveloped parcels. Development, infrastructure improvements, and quarry-related activity should account for habitat continuity, stormwater impacts, and protection of wetlands, forest cover, steep slopes, and scenic views. Thoughtful design should also ensure safe and accessible connections to trailheads, protect natural buffers along trail corridors, and incorporate wayfinding and multimodal accommodations where roads intersect with high-use recreation routes. Enhancing pedestrian and bicycle safety along Becks Road will be particularly important in areas where recreational traffic is expected to increase.

Overall, the parks, trails, and natural resources of the Becks Road corridor are among the study area's strongest assets. Future development should improve safe access and connections to recreational amenities while preserving the natural and cultural features that define the area's character and long-term community value.



PARKS, RECREATION, AND TRAILS ANALYSIS



An aerial photograph of a road corridor cutting through a dense, green forested landscape. The road is a multi-lane highway with visible lane markings and a central median. The entire image is overlaid with a semi-transparent blue filter. The title '05' is prominently displayed in the center-left, and the subtitle 'CORRIDOR DESIGN PRINCIPLES' is positioned below it.

05

CORRIDOR DESIGN PRINCIPLES

CORRIDOR DESIGN PRINCIPLES

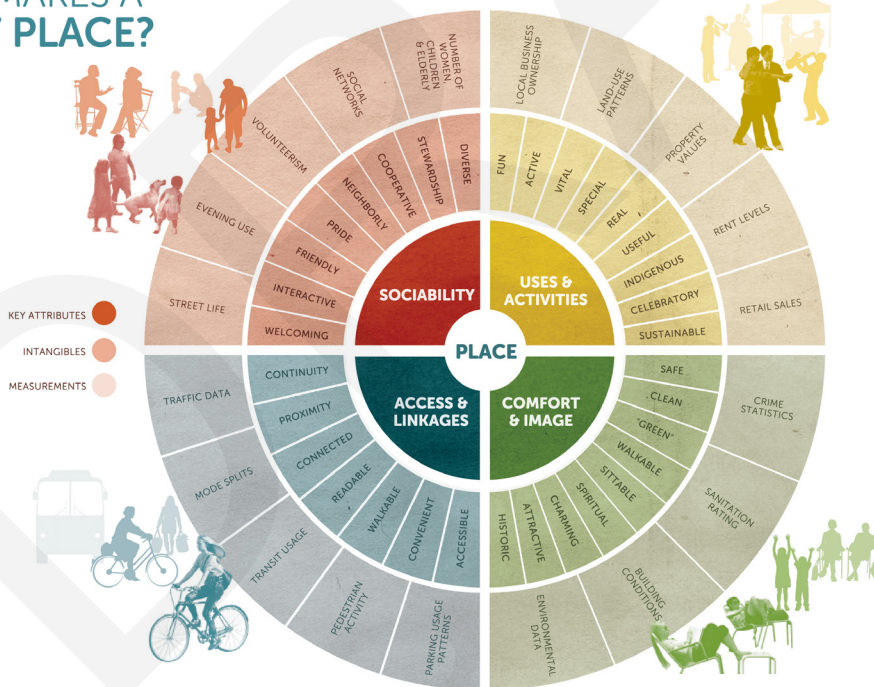
The Becks Road corridor is defined by its dramatic topography and natural features, trail connections, sweeping views, working industrial landscape, and proximity to the rural residential neighborhoods of Gary-New Duluth. The design principles in this chapter are not intended to urbanize the corridor or impose a generic development pattern, but rather to balance the area's natural, rugged, and recreation-oriented character with limited, thoughtful growth where appropriate.

Improvements throughout the Becks Road corridor should be designed to protect the corridor's scenic, wooded, and undeveloped feel, and minimize impacts to nearby residents, trail users, scenic viewpoints, waterways, and sensitive natural areas. Recommendations to reinforce these priorities are established throughout the subsequent pages, concentrating on the following elements:

CONNECTIVITY
PARKS
LIGHTING
LANDSCAPE ENHANCEMENTS

BEST MANAGEMENT PRACTICES
SIGNAGE
BUILDING DESIGN

WHAT MAKES A GREAT PLACE?



CORRIDOR DESIGN PRINCIPLES

CONNECTIVITY

INTENT: TO INCORPORATE MULTI-MODAL TRAILS FOR ACTIVE TRANSPORTATION.

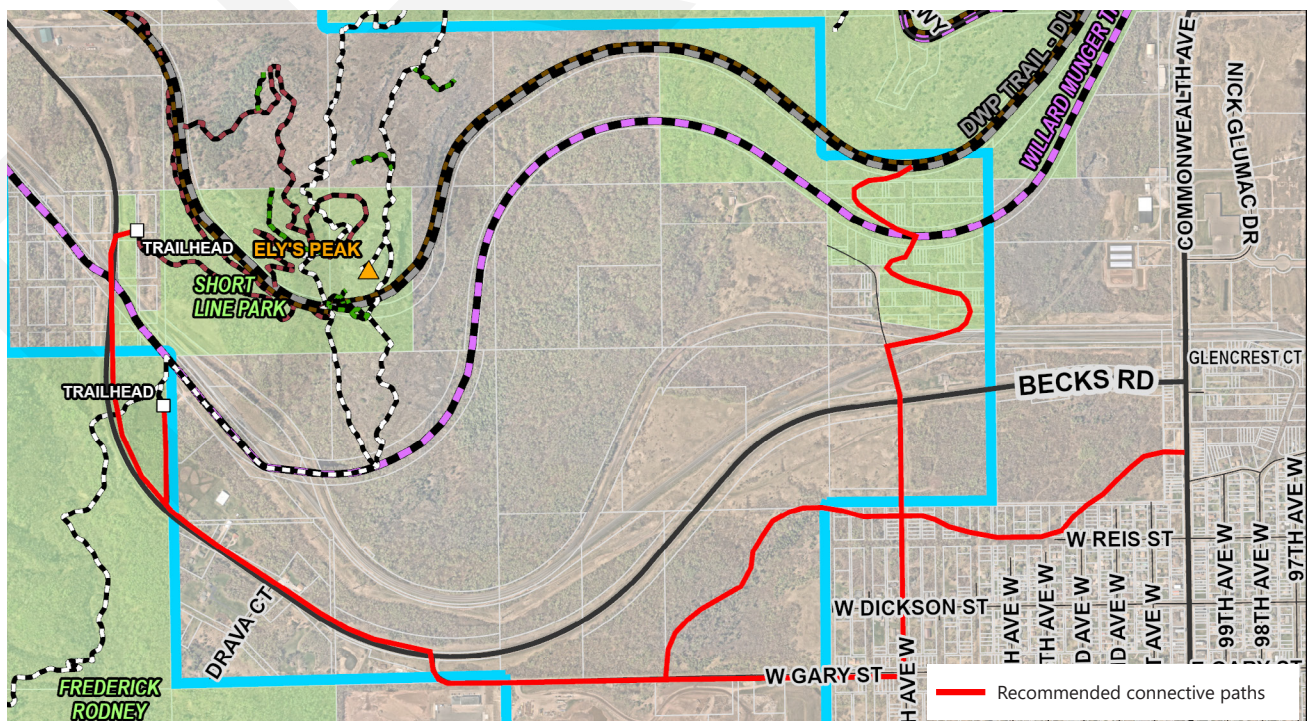
Becks Road serves as an important connection between Gary-New Duluth and I-35, but it also passes through a landscape shaped by dynamic natural features, rail infrastructure, industrial and residential development, and trails. Future improvements should therefore emphasize targeted connections between the corridor's assets, access management, and safe crossings rather than a fully urbanized pedestrian network.

As the Becks Road area develops, special consideration should be given to integrating these facilities with the existing multi-modal transportation network and strengthening connections among destinations in Gary-New Duluth, Midway Township, major roadways (e.g. Commonwealth Ave/ MN 23 and I-35, and the study area's many trails and recreational amenities. In all cases, proposed connections should be thoroughly evaluated to ensure that wayfinding, parking, crossings, and related infrastructure are adequate, coordinated, and designed to prioritize user safety. Planning should also evaluate opportunities for micro- and macro-mobility, including bicycles, e-bikes, ATVs/ OHVs, and other emerging transportation modes where appropriate and compatible.

All hard surface trails should be located and indicated as shared use paths with a ten-foot (10') width unless otherwise specified. A minimum 5-foot-wide public sidewalk is required to be installed within the public right-of-way adjacent to all new development. All multi-family residential, commercial, and office developments should include internal sidewalk circulation network around buildings and parking lots as well as connections to the adjoining public sidewalks as applicable.

PRIORITY RECOMMENDATIONS:

- Connect Major Trails to Gary-New Duluth: Create connective paths between the DWP and Munger Trails, existing trailheads, and the Gary-New Duluth neighborhood (see illustrative map below). Include bike racks, interpretive signage, and safe pedestrian crossings where appropriate.
- New Trail Along US Steel Creek: As land along US Steel Creek develops, collaborate with developers to add a trail (improved to at least a gravel surface) along the creek that connects to the Gary-New Duluth neighborhood and existing recreational amenities in the area.



CORRIDOR DESIGN PRINCIPLES

PARKS & RECREATION

INTENT: To promote places for healthy lifestyles through active and passive recreation.

Parks, trails, and natural areas are among the most beloved features of the Becks Road corridor. Community feedback emphasized the importance of protecting existing recreational assets, preserving aesthetics, and maintaining the area's scenic character.

Future park and recreation improvements should be modest, durable, fiscally and operationally feasible, and integrated into the landscape. The goal should not be to over-program the corridor, but to improve access, orientation, safety, and enjoyment in ways that support existing recreational infrastructure.

PRIORITY RECOMMENDATIONS:

- Enhance public access protections to recreation sites: Seek further protections of public access to assets currently available only through easement or other agreements, such as the 123rd Avenue W access road and trailhead and the hiking and rock climbing areas on Ulland Brothers' property.



CORRIDOR DESIGN PRINCIPLES

LIGHTING

INTENT: To promote effective and attractive exterior lighting that minimizes glare and light pollution.

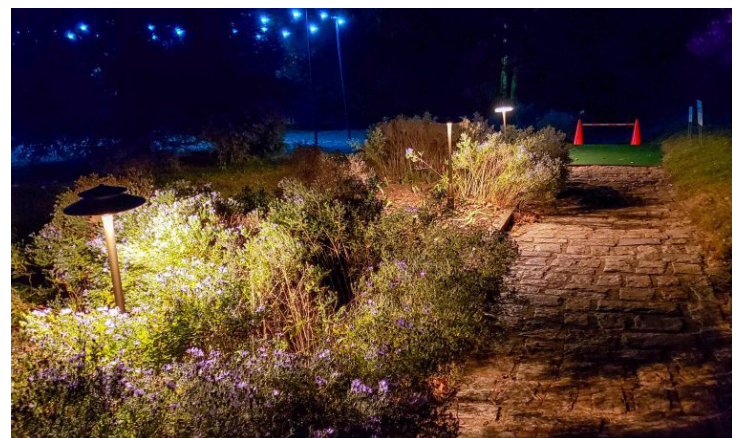
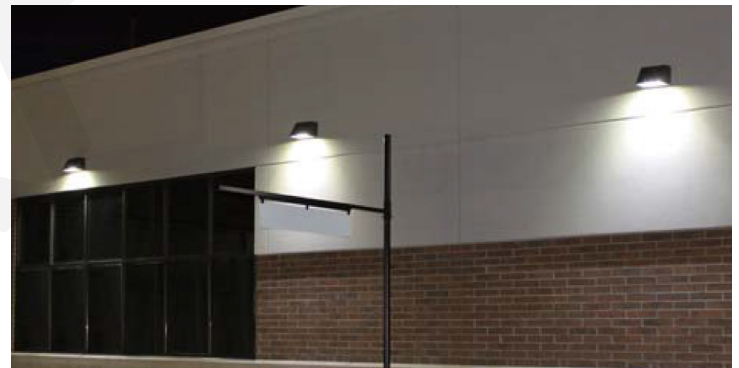
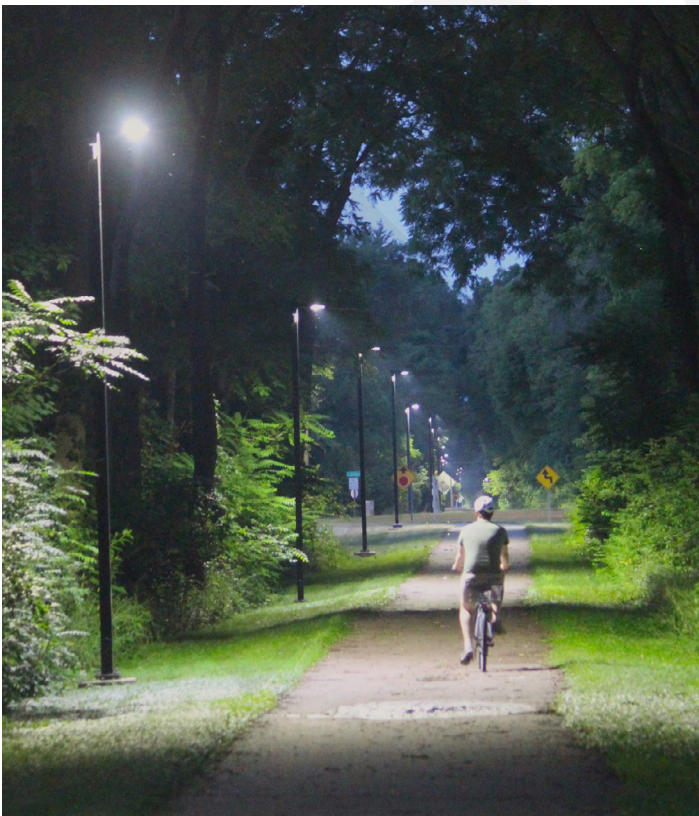
For a cohesive appearance, exterior lighting should be coordinated with the overall site, building, and landscape design. Lighting should use warm amber, low-wavelength fixtures wherever feasible to reduce impacts on wildlife movement and habitat associated with the nearby Magney-Snively Natural Area and Frederick Rodney Paine Forest Preserve.

When possible, exterior lights should be mounted to minimize glare and light pollution through “full cutoff” luminaries that light the buildings, parking, and walkway surfaces but do not shine onto the eyes of drivers or neighboring key stakeholders.

Also, whenever possible architectural, landscape, and sign lighting should be mounted above to limit light pollution and sky glow.

PRIORITY RECOMMENDATIONS:

- **Dark-Sky Compliance:** Install full-cutoff LED fixtures throughout the Becks Road corridor and the area's trails, parks, and trailheads to improve visibility while preserving the “dark sky” experience emphasized in public input. Use warm, low-wavelength lighting wherever feasible to minimize impacts on local wildlife.



CORRIDOR DESIGN PRINCIPLES

LANDSCAPE ENHANCEMENTS

INTENT: To enhance the look and appeal of the area while incorporating native plantings.

Landscaping and landscaped open spaces provide multiple benefits including energy conservation, preservation of open space and wildlife habitats, increased property values and an enhanced aesthetic quality throughout the study area. Combined, these benefits promote the health and general welfare of the greater community.

Landscape improvements can also be used for general screening and buffering treatments to provide visual and physical separation from utilitarian elements such as parking, mechanical equipment, outdoor storage, trash and recycling receptacles, and land use transitions. Since the Becks Road corridor is highly visible from adjacent Ely Peak trails and viewpoints, maintaining dense screening will be especially important to preserve these sweeping views as the area continues to develop.



PRIORITY RECOMMENDATIONS:

- **Native Plant Corridors:** Use native grasses and wildflowers along Becks Road to create a scenic, low-maintenance corridor that supports pollinators and reduces stormwater runoff.
- **Screening for Industrial Uses:** Enforce the maintenance of dense vegetative screening near all development sites to reduce visual/noise impacts and preserve sweeping views from nearby viewpoints.

CORRIDOR DESIGN PRINCIPLES

BEST MANAGEMENT PRACTICES

INTENT: TO INTEGRATE GREEN INFRASTRUCTURE, BIOPHILIC DESIGN, AND INTEGRATE INTERACTIONS WITH NATURE INTO THE COMMUNITY.

Future development along Becks Road should treat stormwater as a visible and integrated site design feature, with each development parcel managing runoff in a manner that fits the physical and financial conditions of the site while meeting applicable stormwater regulations (including Sec. 50-29 of Duluth's Unified Development Chapter).

Bio-filtration basins should be designed with native plants and pollinator-friendly vegetation, amended soil media, and subdrains where needed to limit extended ponding in tight, cohesive soils. Where subdrains are used, they should generally be raised above the bottom of the basin to allow for some minor infiltration and groundwater recharge.

Collectively, these techniques are intended to infiltrate and filter runoff close to the source, reducing both the rate and volume of stormwater reaching drainageways and creeks, while also helping reduce downstream erosion and pollutant loading.

PRIORITY RECOMMENDATIONS:

- Stormwater Management: Ensure compliance with sustainability requirements detailed in Duluth's UDC. Elements could include rain gardens, bioretention cells, and permeable pavers to reduce runoff and protect trout streams.
- Green Infrastructure: Use bioswales along Becks Road to filter stormwater before it reaches Sargent Creek and US Steel Creek.
- Native Landscaping: Replace turf with native plantings to reduce irrigation needs and improve habitat.
- Energy Efficiency: Encourage solar-powered lighting for trailheads and signage to reduce energy consumption.
- Pollution Prevention: Install sediment traps and erosion control measures during construction to protect sensitive waterways.



CORRIDOR DESIGN PRINCIPLES

SIGNAGE

INTENT: TO INCORPORATE ATTRACTIVE AND EFFECTIVE SIGNAGE THAT SUITS THE STUDY AREA.

PRIORITY RECOMMENDATIONS:

- Wayfinding System: Continue to implement planned parks facility signage. Consider adding wayfinding sign at park facilities that direct people to services in GND and other neighborhoods, including restaurants, bars, lodging, bike services, and other recreation areas.
- Interpretive Panels: Add public-facing signage that highlights the study area's historical, ecological, recreational, and industrial significance, including information about major landowners (such as Ulland Brothers and Vonco) and their operations, permitting oversight, and environmental safeguards. Installation should be pursued selectively and remain contingent on the City's capacity to fund, coordinate, and maintain the signage over time.
- Gateway Feature: Create a "Welcome to the City of Duluth" gateway at the I-35 access point, as well as develop design standards for similar future gateway monuments throughout the City. Funding could be pursued through capital improvement funds, tourism or economic development funds, grants, civic or business partnerships, or cost-sharing with related corridor, wayfinding, or streetscape improvements.



Recommendations for Business Signs

For consistency, site signage should be coordinated with buildings in color, material and design.

Preferred sign types should be free-standing monument signs and building-mounted signs with a concealed light source (if lighting is needed).

Building-mounted signs should be thoughtfully integrated into the building's architecture and applied consistently across the façade. Multi-tenant buildings should organize all signs in a manner appropriate to the architectural style of the building.

CORRIDOR DESIGN PRINCIPLES

BUILDING DESIGN

INTENT: To enable limited development while reinforcing the corridor's rural character, natural features, and overall sense of openness.

New buildings should be designed to fit into the landscape rather than dominate it. This is especially important for future industrial, employment, mixed-use, commercial, and moderate-density residential development. Site layouts should preserve wooded buffers, limit visibility of service areas, reduce conflicts with adjacent uses, and protect the scenic quality of Becks Road.

All buildings should have clearly-defined and welcoming entrances. The use of awnings, porticoes, covered porches and other techniques to provide shelter outside the doorway are encouraged.

The façades of buildings should be finished with aesthetically pleasing materials and architectural features, such as varied rooflines and building massing, changes in materiality, and window placement. Materials should be durable and complementary of the surrounding rugged landscape.

PRIORITY RECOMMENDATIONS

- Gateway Commercial Nodes:
Ensure incorporation of design standards for multi-family residential, commercial, industrial, and mixed-use development as outlined in Sec. 50-30 of Duluth's UDC.

Encourage development projects to incorporate additional elements to reinforce the natural character of the Becks Road corridor, such as rustic materials (e.g. stone, timber, etc.), natural colors, and simple/low-profile building forms.



An aerial photograph of a landscape with green fields, a winding road, and some industrial or construction areas. A semi-transparent blue overlay covers the entire image. A large, white, stylized number '06' is centered on the left side of the image.

06

GROWTH AREAS & FUTURE LAND USE

LAND USE PLANNING

The Becks Road study area represents a critical juncture in Duluth's growth trajectory, offering both challenges and opportunities for future investment. As development pressures increase and infrastructure needs evolve, identifying areas with the greatest potential for transformation is essential to guiding future land use decisions.

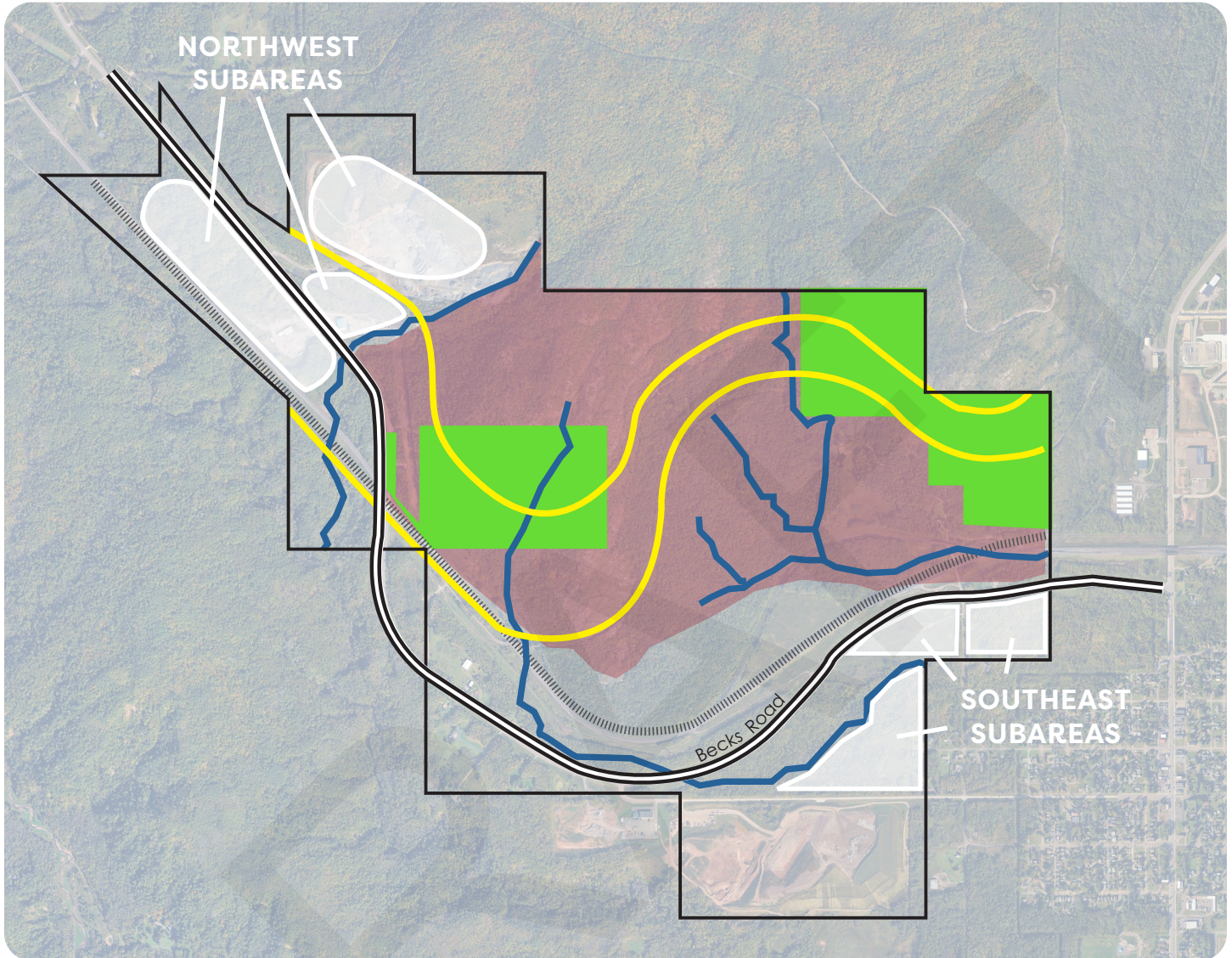
This chapter outlines the locations within the study area that are best suited for new development, redevelopment, or land use transitions. These areas were identified through a combination of stakeholder input, environmental analysis, infrastructure assessments, and alignment with the City's long-term planning goals. Key considerations included:

- Access to transportation corridors, including I-35 and rail infrastructure.
- Availability of undeveloped or underutilized land.
- Compatibility with surrounding land uses and zoning.
- Environmental constraints and preservation priorities.
- Opportunities for mixed-use, industrial, recreational, and sustainable development.
- Infrastructure feasibility, including whether public improvements are justified by the scale and benefit of proposed development and can be maintained without creating unnecessary long-term costs for the City of Duluth.
- Location-specific considerations, such as access to aggregate deposits for quarry operations and trail proximity to recreational points of interest (such as water bodies and Ely's Peak).

By documenting priority growth areas and future land use guidance, this study helps ensure that future development is strategic, context-sensitive, and responsive to the community-driven vision outlined in this document. The policy recommendations in Chapter 7 then build on this framework by outlining actions to support compatible growth, protect natural and recreational assets, strengthen nearby neighborhoods, and guide future zoning, infrastructure, and implementation decisions.



POTENTIAL GROWTH AREAS



Legend:

-  Study Area Boundary
-  Becks Road
-  Parks
-  Streams
-  DWP and Munger Trails
-  Steep Slopes
-  Railroad
-  Proposed Growth Areas

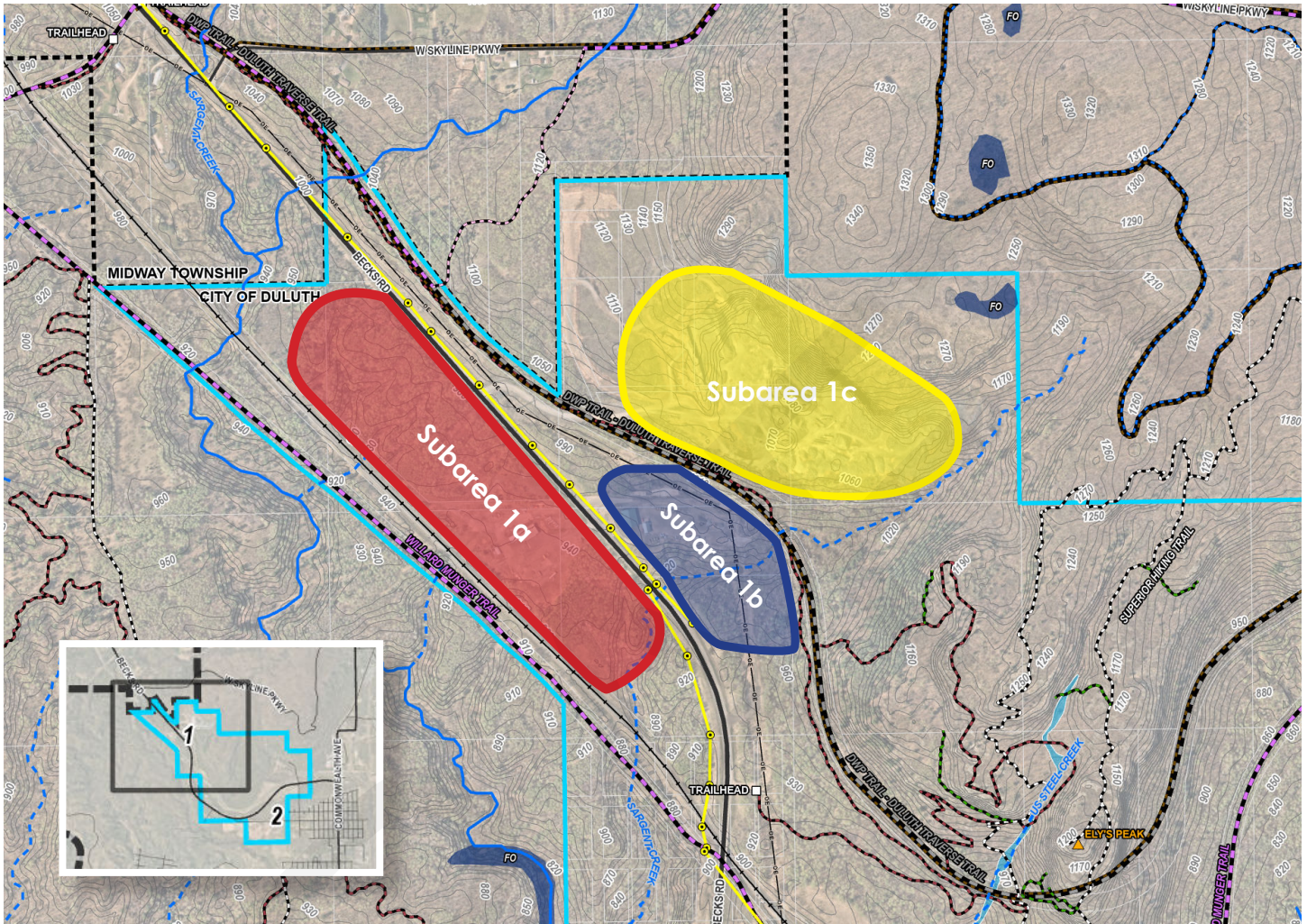
Before making concrete decisions, it was valuable to take a high-level look at all potential impediments to growth.

The map above quickly highlights which parts of the study area are suitable – or unsuitable – for future development.

While it is clear that much of the study area should remain undeveloped, this analysis was instrumental in defining the priority growth areas that are shown in white within the map. These growth areas are further defined in the following pages.

All colors depicted on the map are identified in the legend on the left.

NORTHWEST SUB AREAS

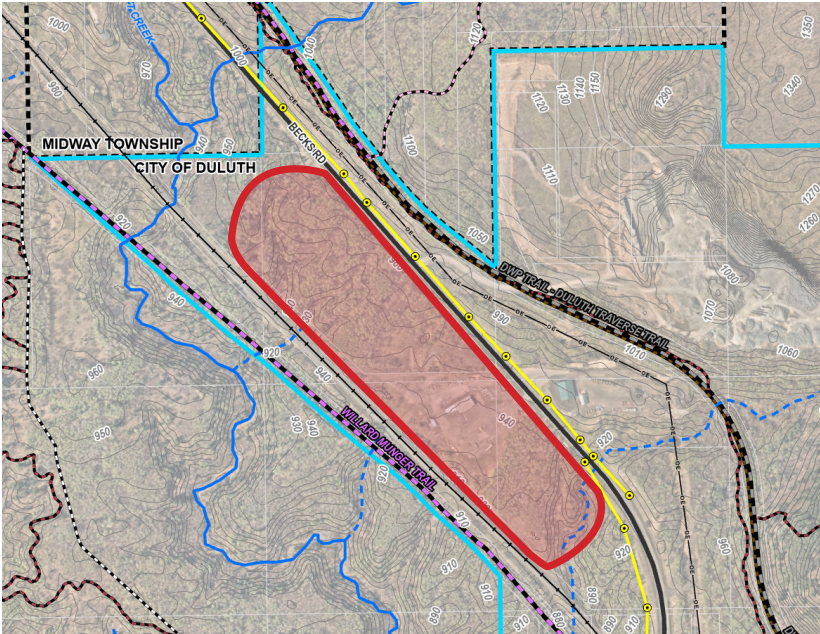


The northwest subareas, identified above, are generally well-suited for future employment-oriented development due to their proximity to Becks Road, regional freight routes, rail infrastructure, and separation from established residential neighborhoods. This may include industrial, production, logistics, storage, contractor, office, or limited commercial uses, rather than auto-oriented strip commercial development.

Future development in the northwest subareas should not create a conventional highway-industrial corridor characterized by visible outdoor storage, metal buildings, excessive lighting, or frequent driveway access points. Rather, development should be carefully sited, screened, and accessed in a way that preserves the natural character of Becks Road while allowing compatible economic activity in locations where impacts can be adequately managed.

Development potential varies significantly by subarea and should be guided by site-specific constraints, infrastructure availability, and environmental protection needs. Specific recommendations for each subarea are detailed in this section.

NORTHWEST SUB AREAS



Subarea 1a

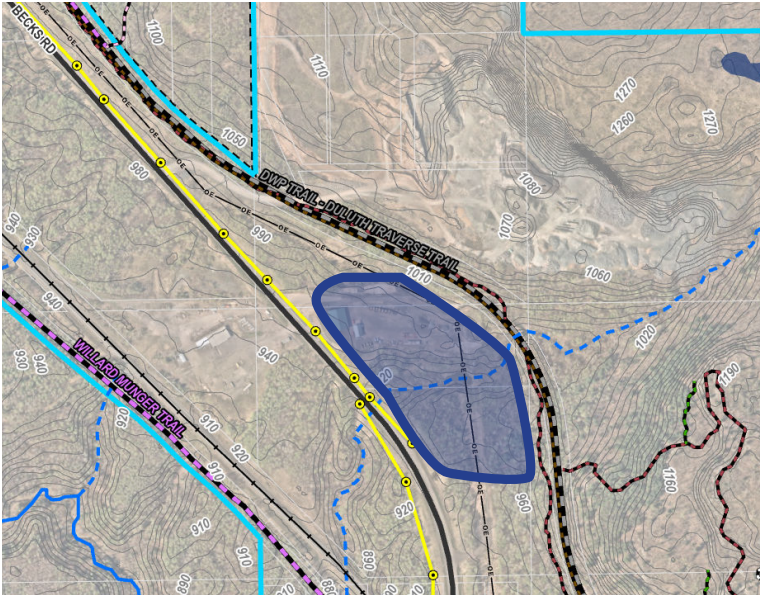
Subarea 1a is a large, contiguous area with strong development potential because of its size, parcel configuration, and direct roadway and rail access. This area can support flexible site planning, larger building footprints, outdoor service or storage areas, internal circulation, and phased development.

However, due to the area's location along a visually prominent stretch of Becks Road, special consideration should be given towards screening and other aesthetic measures to protect the corridor's character as a scenic entrance to the City of Duluth.

Recommended guidance for Subarea 1a includes:

- Support employment-oriented uses that benefit from road and rail access, but do not require high levels of public visibility.
- Maintain a substantial wooded buffer along Becks Road to screen buildings, equipment, outdoor storage, parking, and service areas. Locate the most visually intensive uses, including outdoor storage and loading areas, away from Becks Road and behind buildings, landforms, fencing, or vegetation.
- Limit the entire subarea to one driveway access point onto Becks Road. If applicable, require internal site circulation to serve multiple buildings, tenants, or phased projects from the shared access point.
- Evaluate a potential connection to the WLSSD Interceptor if a development proposal warrants the cost and coordination required. However, potable water and firefighting water are unlikely to be extended to this site and development should generally be limited to lower-water-demand uses. Additionally, the applicant will need to provide a Minnesota State Fire Code-approved on-site water supply for fire suppression, which may include storage tanks or other fire protection systems depending on the planned building occupancy and building construction type.
- Require stormwater management that preserves natural drainage patterns and prevents increased runoff, erosion, sedimentation, or thermal impacts to nearby water resources.

NORTHWEST SUB AREAS



Subarea 1b

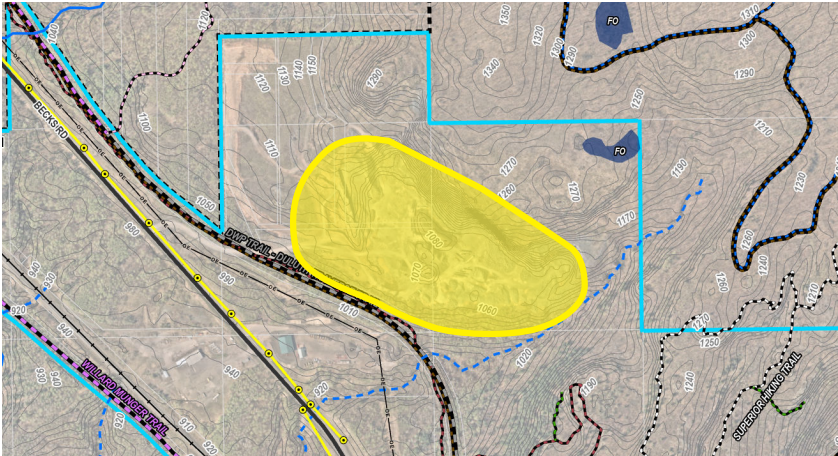
The portion of Subarea 1b north of the stream is a relatively narrow parcel extending approximately 900 feet back from Becks Road and may be suitable for limited low-intensity development, such as small-scale commercial, contractor yard, outdoor storage, parking, or similar uses, provided impacts can be managed. If development intensity warrants, this portion of the site may have potential to connect to the WLSSD Interceptor, subject to further utility analysis and coordination with WLSSD. Screening of outdoor storage and parking from view of Becks Road is recommended.

The part of Subarea 1b south of the stream has limited development potential due to steep slopes, proximity to a trout stream tributary (with accompanying protective buffers), and the presence of the DWP Trail and a high-tension power line crossing the property.

Recommended guidance for Subarea 1b includes:

- Treat the part of the site south of the stream as a limited-development area where only low-intensity uses should be considered, such as access drives and parking areas, stormwater facilities, open space, or other uses that do not conflict with the power line easement, stream buffer, or slope constraints.
- Require detailed site analysis before any development approval, including slope analysis, stream and wetland delineation, utility easement review, and confirmation of buildable area.
- Buildings or other permanent fixtures are prohibited within the power line easement unless expressly allowed by the electric utility owner and applicable safety standards. Even where allowed, structures, tall vegetation, stormwater facilities, parking, fencing, or storage may be restricted within the easement.
- Since potable water and firefighting water are unlikely to be extended to this site, development should generally be limited to lower-water-demand uses. The applicant will likely need to provide a Minnesota State Fire Code-approved on-site water supply for fire suppression, which may include storage tanks or other fire protection systems depending on the planned building occupancy and building construction type.
- Require vegetative buffering, fencing, or a combination of both to preserve the visual quality of Becks Road.
- Avoid uses that would require significant public water, sewer, or roadway investment unless a clear public benefit and feasible infrastructure strategy are identified.

NORTHWEST SUB AREAS



Subarea 1c

Subarea 1c encompasses the Ulland Brothers quarry, one of the most significant long-term industrial uses in the Becks Road corridor. Quarry activity on the site is believed to date back to the early twentieth century. In 1978, Midway Township issued the quarry a Conditional Use Permit that recognized it as a nonconforming use and allowed it to continue operations with conditions. Following its annexation into the City of Duluth in 2014, the quarry continued to be a nonconforming use, which continues to limit the scale of their operations and site improvements.

Ulland Brothers has expressed interest in updating its local approvals to support continued long-term operation and potential lateral expansion. Ulland can continue to operate the quarry according to the 1978 Conditional Use Permit issued by Midway Township. However, any physical or use expansion at the quarry requires permitting from the City of Duluth, following amendment of the zoning code, and would need to meet all environmental laws and regulations. The permit for the expansion would include the existing permitted area.

Recommended guidance for Subarea 1c includes:

- Recognize quarry operations as an existing and potentially continuing land use within the Becks Road corridor that supports the regional construction industry as a local source of aggregate materials.
- Require updated quarry permitting or zoning approvals supported by a comprehensive mining plan that defines extraction limits, phasing, haul routes, processing and stockpile areas, blasting, buffers, fencing, stormwater controls, and reclamation. City review should also address environmental impacts, land use compatibility, transportation access, relationships to trails and public spaces, and the site's long-term reuse.
- Encourage the installation of secure fencing, boundary clarification, and access controls to reduce trespassing, theft, and conflicts between quarry operations and recreational users. Require vegetative screening, berms, or other buffers along public-facing edges, trail-adjacent edges, and any edges near residential or recreational uses.
- Require enhanced stormwater, erosion control, and groundwater protection measures due to the site's topography, exposed rock, and proximity to sensitive water resources.
- The City of Duluth should consider updating the Unified Development Chapter's use-specific standards for quarries. Additional guidance is provided on pages 77-82.
- Recognize that any proposed quarry expansion into surrounding natural areas – particularly involving land with the Duluth Natural Areas Program designation – would require a formal public amendment process (with rigorous evaluation of ecological, recreational, and cultural impacts) prior to any land acquisition or modification.
- Recognize that the quarry's large site, surrounding open space, limited utility access, and proposed Rural Residential designation support continued rural land uses during and after quarry operations.

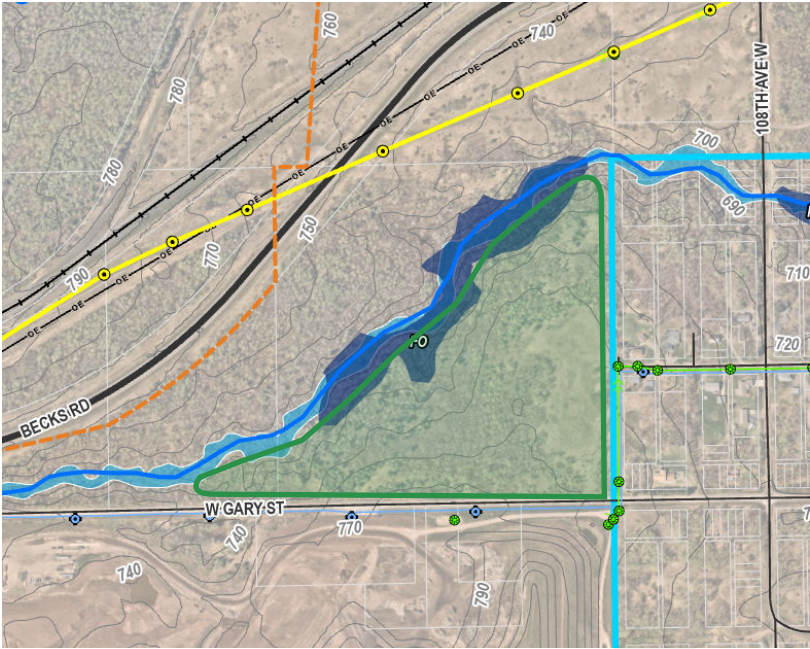
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Development potential varies significantly by subarea and should be guided by site-specific constraints, infrastructure availability, and environmental protection needs. Specific recommendations for each subarea are detailed on the following pages.

All three southeastern subareas are located along US Steel Creek. New moderate-density housing in this area could generate demand for a trail along the creek corridor and connections to existing recreational infrastructure in the area.

Page | 65

SOUTHEAST SUB AREAS



Subarea 2a

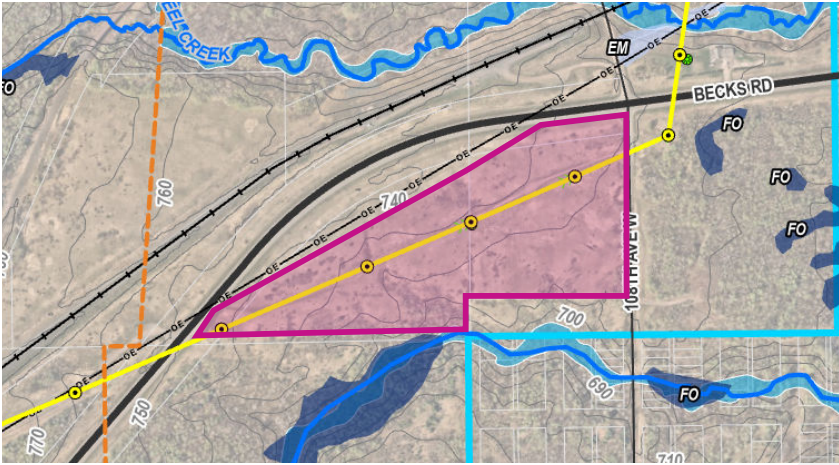
Subarea 2a contains approximately 18 developable acres and is owned by the Duluth Economic Development Authority (DEDA). The site is constrained by US Steel Creek to the northwest, but benefits from proximity to existing neighborhood streets (W Dickson St and W Gary St) and direct adjacency to existing sanitary sewer and water mains.

Given its size, contiguous ownership, and location on the edge of Gary-New Duluth, this parcel is well suited for moderate-density residential housing types such as twin homes or townhomes. These formats could provide more diverse and attainable housing options for a range of incomes and household types, such as entry-level homebuyers or seniors/smaller households looking to downsize.

Recommended guidance for Subarea 2a includes:

- Prioritize housing types that expand neighborhood choice while maintaining compatibility with the surrounding residential pattern (e.g. site design, landscaping, and building orientation).
- Evaluate feasibility to access the site from W Dickson St and/or W Gary St. Avoid development layouts that would place excessive traffic or infrastructure burden on existing residential streets without corresponding improvements.
- Coordinate development with existing sanitary sewer and water infrastructure.
- Protect US Steel Creek and steep slopes through appropriate buffers, stormwater management, and erosion control.
- In alignment with Comprehensive Plan direction to reduce unnecessary infrastructure and maintenance costs, consider eliminating the segment of W Gary Street between the Vonco landfill driveway and 110th Avenue W, as trucks bound for the landfill are already directed to access from Becks Road to the west. Alternatively, this segment could be converted to limited-access maintenance/trail use.

SOUTHEAST SUB AREAS



Subarea 2b

Subarea 2b contains approximately 12.5 developable acres and is owned by DEDA. Unlike Subarea 2c, which is more suitable for residential development due to its heavier tree cover and ability to retain a wooded buffer from Becks Road, Subarea 2b is suitable for commercial or light industrial development due to its visibility from the corridor. The site has been logged, and the high-tension power line along much of the Becks Road frontage limits the ability to establish meaningful buffer landscaping. The area also appears to have fewer wetland constraints than Subarea 2c and may be better suited to accommodate commercial-industrial buildings, parking, and internal circulation.

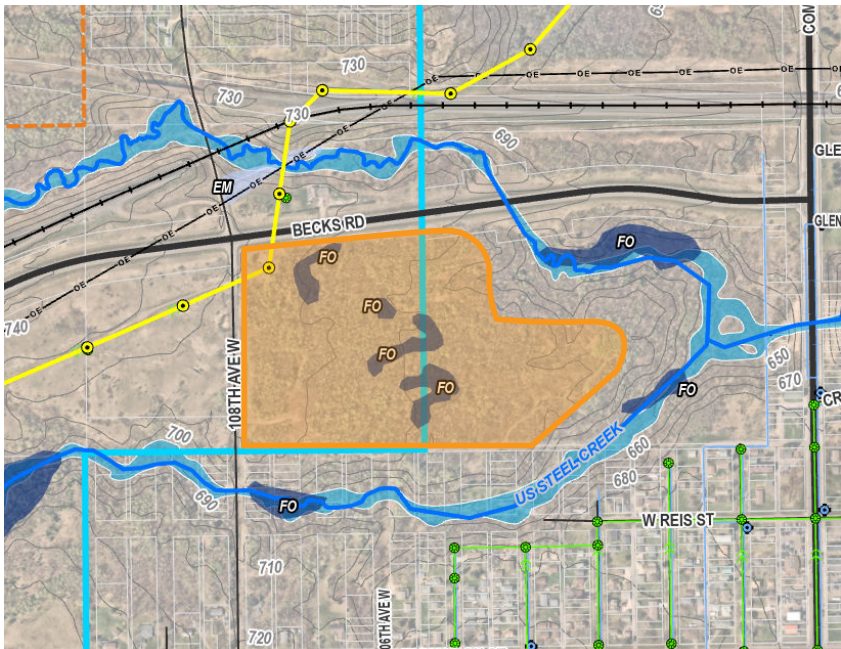
The WLSSD Interceptor (illustrated by the yellow line in the map above) runs through the center of this area; however, private parties cannot connect directly to the Interceptor and the City would need to provide the connection. A water line would need to be extended approximately 1,200 feet from the water main in W Dickson St to the south in order to reach the subarea, then extended another 1,000 feet to the west to reach the western side of the development parcel.

Due to the presence of a power line and a desire to limit access from Becks Road to the north (to preserve roadway capacity), future development should be accessed from 108th Avenue W to the east through shared access or cross easements rather than new driveways onto Becks Road. Because 108th Avenue W is currently narrow and minimally improved, roadway reconstruction would likely be needed to support development and would be coordinated with a water line installation in the street.

Recommended guidance for Subarea 2b includes:

- Support neighborhood-compatible commercial or light industrial development with office, showroom, production, warehouse, and related support spaces.
- Encourage buildings to include architectural detailing and primary façades oriented toward Becks Road where visible from the corridor. Ensure that site design and landscaping also improves the appearance of the development from Becks Road.
- Avoid direct driveway access to Becks Road; require access from 108th Avenue W through cross easements, shared drives, or coordinated internal circulation.
- Coordinate development with reconstruction of 108th Avenue W to provide adequate pavement width, drainage, emergency access, and utility placement.
- Preserve vegetation and natural buffers along Becks Road and US Steel Creek.
- Evaluate WLSSD Interceptor and power line easement requirements before determining building placement, grading, utility connections, or internal circulation.

SOUTHEAST SUB AREAS



Subarea 2c

Subarea 2c includes approximately 22 acres of developable land east of 108th Avenue W. While the area has development potential, future planning should carefully account for environmental conditions, including US Steel Creek, steep slopes, wetlands, and extensive tree cover. Similar to the other southeast subareas, this area has potential for moderate-density housing (such as twin homes and townhomes) for seniors, smaller households, and residents seeking lower-maintenance housing near the existing Gary-New Duluth neighborhood.

Like Subarea 2b, access should be directed to 108th Avenue W in order to reduce access conflicts along Becks Road and help maintain the corridor's scenic and functional character.

The ownership pattern in Subarea 2c is an important implementation consideration. A private landowner controls approximately 12 acres of land along 108th Avenue W, while the balance of the 22-acre area is tax-forfeited land that could potentially be conveyed to DEDA. DEDA could partner with the private landowner to identify a housing developer, or it could proceed independently if utility connections can be extended to the tax-forfeited land without crossing privately owned property.

Recommended guidance for Subarea 2c includes:

- Prioritize housing options that complement the existing neighborhood while expanding affordability and lifecycle housing choices.
- Avoid direct driveway access to Becks Road; require access from 108th Avenue W through cross easements, shared drives, or coordinated internal circulation.
- Coordinate development with potential reconstruction of 108th Avenue W and extension of water infrastructure.
- Explore partnership opportunities between DEDA, private landowners, and housing developers to determine the most feasible and coordinated approach to development.
- Preserve vegetation and natural buffers along Becks Road and US Steel Creek.
- Protect US Steel Creek and steep slopes through appropriate buffers, stormwater management, and erosion control.

FUTURE LAND USE MAP

A future land use map is a long-range planning tool that illustrates the community's preferred long-term pattern of development and reinvestment. Future land use maps – along with the descriptions and policies associated with each land use category – are typically incorporated into a community's Comprehensive Plan, which defines an overarching vision for community growth over a 10-20 year timeline.

Imagine Duluth 2035, the City of Duluth's latest Comprehensive Plan, was adopted in 2018 and provides broad guidance for the Becks Road corridor. This land use study builds on that guidance by evaluating the corridor's specific development opportunities, physical constraints, infrastructure limitations, and community priorities in greater detail. Based on this analysis, amendments to the City-wide future land use map may be needed to better align future land use designations with the vision established in this study. These proposed changes are shown on the following page.

The proposed future land use map includes the following land use categories, which are consistent with those used in the City's future land use map/Comprehensive Plan, as defined below:

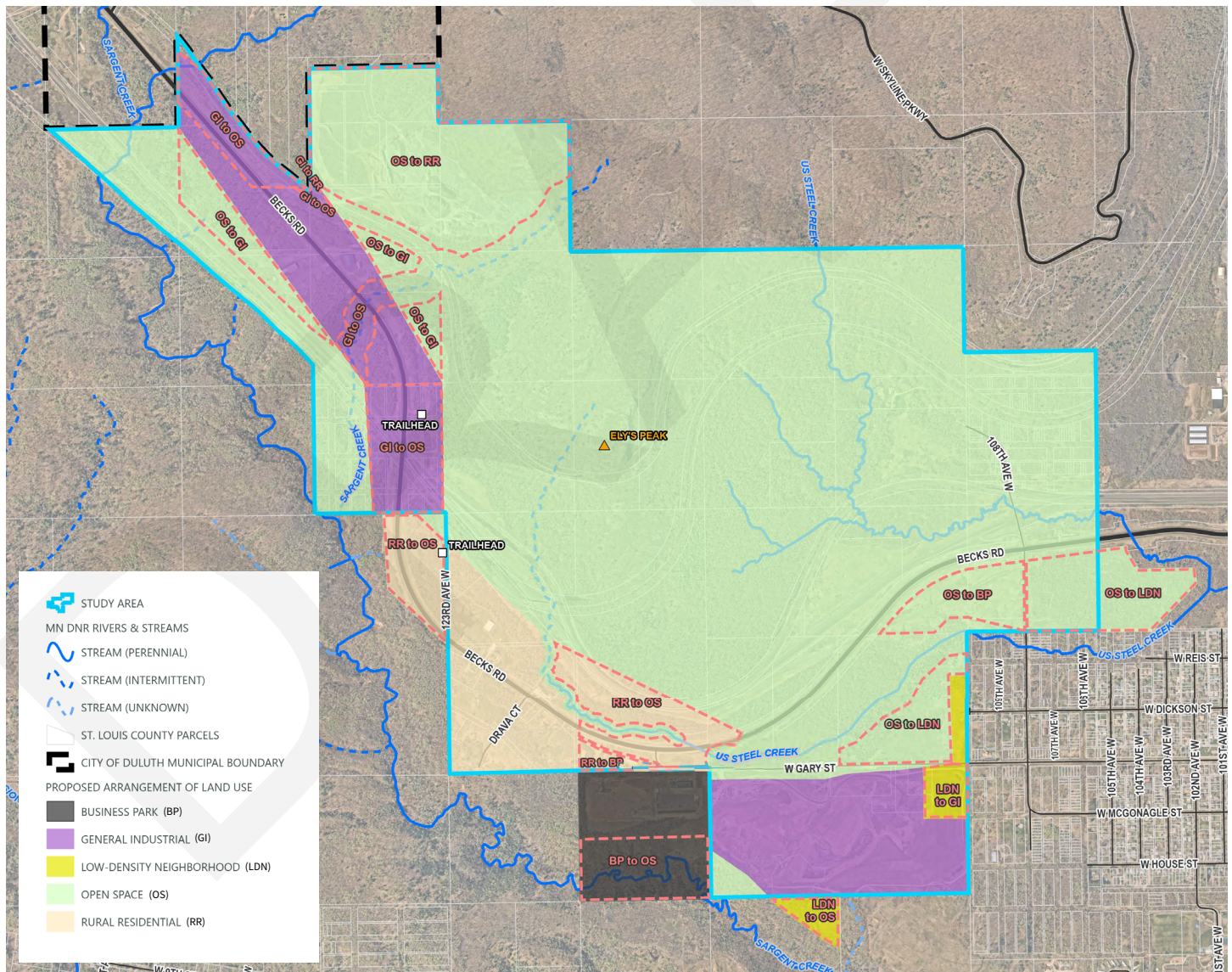
Land Use Category	Description	Density/Intensity/Design
Open Space (OS)	High natural resource or scenic value, with substantial restrictions and development limitations. Primarily public lands but limited private use is anticipated subject to use and design controls. Examples include: city parks and recreation areas, primary viewsheds, shorelands of the lake and streams, wetlands and floodplains, and high-value habitat.	• Low intensity uses such as trails and recreation • Viewshed protection and access • Water access, with some parking and support facilities
Rural Residential (RR)	Areas of single-family lots of at least five acres. Limits the extension of municipal utilities for new development. Includes existing rural density areas with lots as small as an acre now served by municipal utilities but not planned for further subdivision.	• 1 unit/5 or more acres (may vary depending on soils) (future study) • Conservation development encouraged or required • Undeveloped areas of large lots are used to complement open space patterns (viewsheds, buffers)
Low-Density Neighborhood (LDN)	Single-family housing with urban services. Typified by curvilinear streets, houses with longer dimension parallel to street, and attached garages. Includes a range of house sizes and lot sizes. Non-residential uses are mainly uses such as schools and churches. Parks and open space are located within or adjacent to housing.	• 3-4 units/acre (future study) • Conservation development an option, required with SLO • Limited number of secondary/granny flats
Business Park (BP)	Primarily office and light industrial areas developed in a unified manner, with standards for site design and circulation patterns, signage, landscaping, and building design.	• Variable densities • Performance standards
General Industrial (GI)	Areas for manufacturing, processing, and other activities that may have off-site impacts and are generally isolated or buffered from other uses. Sites should have direct access to major regional transportation facilities and other infrastructure.	• Larger parcels • Variable densities • Performance standards for environmental effects and nuisance mitigation

FUTURE LAND USE MAP

The following two maps illustrate proposed amendments to the City of Duluth's current Future Land Use map, adopted in 2018 as part of its most recent Comprehensive Plan, *Imagine Duluth 2035*. The first map, shown below, identifies the specific areas proposed for change, while the map on the following page shows how Duluth's Future Land Use map would appear once those changes are incorporated.

These changes are intended to refine the City-wide future land use guidance for the Becks Road corridor based on the area's specific physical conditions, infrastructure and environmental constraints, and land use compatibility considerations. As future land use decisions, Comprehensive Plan amendments, zoning updates, and development proposals are evaluated, the City should consider the proposed changes as a more detailed policy framework for the Becks Road area.

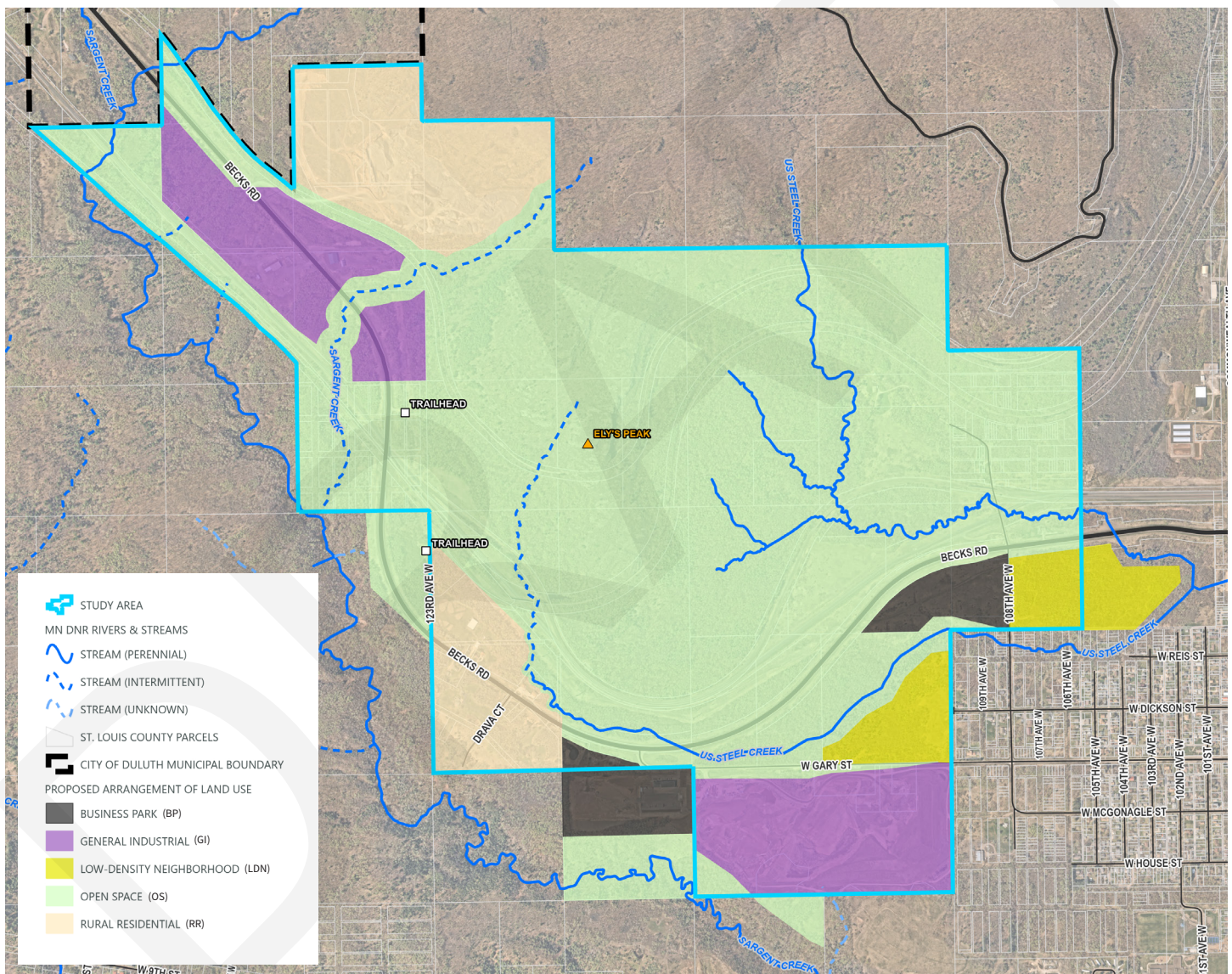
Recommended Updates to 2018 Future Land Use Map



FUTURE LAND USE MAP

In alignment with the growth subareas identified throughout this chapter, the recommended Future Land Use map amendment, shown below, is intended to guide development to the most appropriate locations within the study area. By limiting growth to targeted sections, this map reflects this document's objective to prioritize the preservation of sensitive natural areas, ensure compatibility with nearby neighborhoods and recreational assets, and reinforce the corridor's long-term vision.

Proposed Future Land Use Map with Updates Incorporated



An aerial photograph of a forested landscape, likely a park or natural area. A road or path winds through the trees, and a small building or structure is visible in the lower right. The image is overlaid with a semi-transparent blue filter.

07

POLICY STATEMENTS & CONCLUSION

ANALYSIS & POLICY STATEMENTS

The Becks Road Land Use Study establishes a framework for guiding future growth, preservation, and infrastructure investment within the Becks Road corridor. The policies in this chapter build on the findings of the existing plan review, community engagement process, technical analysis, corridor-focused design principles, and future land use guidance presented throughout this document.

The Becks Road corridor is not expected to accommodate widespread or intensive urban development, as its physical conditions (including steep slopes, streams, wetlands, shallow bedrock, limited utilities, and complex ownership patterns) make broad development infeasible and undesirable. At the same time, the area's access to I-35, proximity to Gary-New Duluth, existing industrial activity, recreational assets, and remaining undeveloped land create opportunities for targeted, carefully-managed investment.

The policy statements included herein are designed to be both visionary and actionable. They reflect the community's aspirations while remaining grounded in technical feasibility and regulatory frameworks. These statements will serve as a foundation for future planning efforts, zoning updates, and investment decisions, ensuring that growth along Becks Road is equitable, sustainable, and aligned with Duluth's long-term goals.

The following topics will guide the analysis and policy statements:



LAND USE AND DEVELOPMENT



INFRASTRUCTURE AND UTILITIES



TRANSPORTATION AND MOBILITY



ENVIRONMENTAL STEWARDSHIP



COMMUNITY ENGAGEMENT AND EQUITY



HOUSING AND ECONOMIC DEVELOPMENT

RECOMMENDED POLICY STATEMENTS

1. LAND USE AND DEVELOPMENT

The Becks Road corridor presents a unique opportunity to shape future growth in a way that reflects community values and environmental realities. These policies aim to guide land use decisions that balance development potential with preservation of natural assets, ensuring a cohesive and sustainable urban form.

1.1 - Encourage applicable development that integrates the land uses as designated in the future land use map's growth areas (found on pages 61-68).

1.2 - Direct development to identified growth areas rather than encouraging scattered corridor-wide development. Lands outside these areas should generally remain open space, recreation, and existing residential/industrial uses.

1.3 - Following adoption of this study, the City of Duluth should evaluate zoning changes needed to implement the recommended future land use map. This may include rezoning targeted growth areas, addressing nonconforming industrial or extractive uses, and applying conservation-oriented standards where development is adjacent to sensitive natural resources.

1.4 - Manage transitions between incompatible land uses through mechanisms such as setbacks, vegetative buffers and screening, lighting controls, access management, building orientation, and operational standards. Particular attention should be given to transitions near Gary-New Duluth, trail corridors, the quarry, and the landfill.

2. INFRASTRUCTURE AND UTILITIES

Infrastructure availability is a critical factor in determining the feasibility of future development. These policies address the alignment of land use planning with utility systems, promoting efficient service delivery and long-term resilience in water, sewer, and stormwater infrastructure.

2.1 - Utility capacity assessments may be required prior to rezoning or subdivision approvals.

2.2 - Phase utility extensions (water and sewer) in alignment with priority growth areas. Coordinate with the Western Lake Superior Sanitary District to ensure that all proposed extensions are feasible, appropriate, and align with long-term development goals.

2.3 - Promote sustainable infrastructure solutions (including energy-efficient systems and green stormwater management) to manage runoff, protect sensitive streams and wetlands, reduce erosion on steep slopes, and reinforce the natural character of the Becks Road corridor.

RECOMMENDED POLICY STATEMENTS

3. TRANSPORTATION AND MOBILITY

As development intensifies, transportation systems must evolve to support safe, efficient, and multimodal access. These policies focus on improving connectivity, managing traffic impacts, and enhancing mobility options for all users within the study area.

3.1 - New driveways and roadway connections onto Becks Road should be limited where feasible. Shared access, cross easements, internal circulation, and local street access should be prioritized to reduce conflict points and protect the natural character of the corridor.

3.2 - Evaluate opportunities to add context-sensitive walking and biking connections between Gary-New Duluth, any future residential areas, trailheads, and other nearby recreation assets.

3.3 - Collaborate with St. Louis County and other transportation agencies to incorporate appropriate pedestrian, bicycle, and shared-use facilities into future roadway, bridge, and intersection reconstruction projects within and near the study area.

3.4 - Evaluate opportunities to improve key entry points to Becks Road, including the intersection with Commonwealth Avenue/MN 23, to provide safer and more intuitive access for motorists, pedestrians, bicyclists, trail users, and other permitted modes of travel.

3.5 - Pursue grants and technical assistance programs that support bicycle and pedestrian planning, preliminary engineering, trail connections, wildlife crossings, and multi-modal infrastructure. The City of Duluth should coordinate with St. Louis County and other partners to identify funding opportunities and advance priority projects.

4. ENVIRONMENTAL STEWARDSHIP

The Becks Road area contains sensitive natural features that contribute to the ecological health and character of the region. These policies promote responsible land use practices that protect environmental resources and integrate sustainability into development decisions.

4.1 - Stormwater should be managed close to the source and integrated into site design to reduce runoff volume, downstream erosion, and pollutant loading while meeting applicable City requirements. Development should incorporate climate-appropriate stormwater best management practices (BMPs) to the greatest extent possible, such as bio-filtration basins with subdrains and amended soil media, permeable pavers, native plantings, and tree preservation.

4.2 - Enforce appropriate buffers from streams, wetlands, floodplains, and drainageways. Projects near trout streams (such as Sargent Creek) or sensitive water resources should include enhanced stormwater, erosion control, and sediment management measures.

4.3 - Prioritize the preservation of the area's open space and natural buffers as functional infrastructure to protect water quality, reduce erosion and stormwater impacts, maintain wildlife habitat, and reinforce the wooded, natural character of the corridor.

RECOMMENDED POLICY STATEMENTS

5. COMMUNITY ENGAGEMENT AND EQUITY

Inclusive planning is essential to building trust and ensuring equitable outcomes. These policies reinforce the importance of ongoing public engagement and the incorporation of diverse perspectives into land use decisions.

5.1 - Ensure that plan implementation honors the priorities and concerns expressed through public input, including lighting, trail connectivity, and industrial impacts to recreational and residential areas.

5.2 - Continue to maintain transparency through clear maps and educational materials.

6. HOUSING AND ECONOMIC DEVELOPMENT

A thriving community depends on a diverse housing stock and a robust local economy. These policies support inclusive housing strategies and economic development initiatives that respond to market demand and community aspirations.

6.1 - Future housing development should respond to needs identified in Duluth's housing studies, including moderate-density housing, senior-friendly options, and other attainable housing types.

6.2 - New housing should be designed as a logical extension of Gary-New Duluth, with careful attention to building scale, access, utility demand, and screening to limit impacts to existing homes and the area's low-density development pattern.

6.3 - Support employment-oriented development only where access, buffering, utility service, and land use compatibility can be adequately addressed.

6.4 - Update City zoning regulations, permitting processes, and permitting standards for quarries and extractive uses to minimize negative impacts to the surrounding area. Any future quarry expansion should be subject to additional review, public process, and formal City approvals as applicable.

See the following pages (pg. 77-82) for quarry-specific guidance regarding permitting and performance standards.

QUARRY POLICY GUIDANCE

The Becks Road corridor includes long-standing quarry activity that predates this study and remains an important consideration for future land use, transportation, environmental protection, and recreation planning. Currently, the City of Duluth's Unified Development Chapter (which encompasses zoning, development standards, and permitting procedures) includes minimal regulations for quarries or extractive uses. If the Ulland Brothers quarry is expected to continue operations and/or consider future expansion, more specific policies will be necessary to protect the surrounding Becks Road area and encourage alignment with the vision outlined in this land use study.

The following recommendations are intended to inform further discussion rather than serve as a complete regulatory framework. Additional research, community input, legal review, and evaluation of site-specific conditions will be necessary before the City adopts quarry-related performance standards or permitting procedures. This process should ensure that future regulations are practical, enforceable, and responsive to the unique environmental, recreational, transportation, and land use conditions of the Becks Road corridor.

PERMITTING

Duration of Mining Permit

Evaluate whether the use could be permitted by an Interim Use Permit or Conditional Use Permit, (Special Use Permit). A quarry may be permitted through an Interim Use Permit when the City wants to authorize the use for a defined period or until extraction and reclamation are complete, while a Conditional Use Permit may be more appropriate for long-term quarry operations that require ongoing performance standards.

- Example language taken from Douglas County, WI:

"The Mining Permit shall last through all Mining Operations and reclamation of the Mining Site so long as the Operator complies with all provisions of this Ordinance, any condition imposed by a Conditional Use Permit/Mining Permit, the terms of a Local Agreement in a Local Agreement/Mining Permit, all required Applicable Laws and Regulations, all permits, orders, conditions or other requirements set forth by any Government Body or Agency, and suspension or revocation of the Mining Permit does not occur pursuant to this Ordinance."

DIMENSIONAL STANDARDS

Minimum Lot Size

Setting a minimum lot size, such as 10 acres, would ensure that no future mining operations are being developed in locations and parcels of land that are not able to properly house them and all of the equipment, along with the scale of the extraction, haul-road layout, and necessary buffer areas.

QUARRY POLICY GUIDANCE

DIMENSIONAL STANDARDS (CONT.)

Setback/Buffering

Setbacks and buffers are crucial to reducing quarry-related impacts such as noise, dust, vibration, lighting, truck activity, and visual exposure.

- Example language taken from Stearns County, MN:

"The following setback requirements shall apply to Mining Operations:

(1) The processing of mined materials shall not be conducted closer than one hundred (100) feet to any residential dwelling units.

(2) Unless approved in writing between the affected property owner and the mining operator, mining of any materials shall not be conducted closer than two hundred (200) feet on any residential dwelling unit or residential zoning district boundary.

(3) For mining operations approved prior to May 24, 2011 mining shall not be conducted within thirty (30) feet of any public road right of way unless approved in writing by the applicable road authority. For mining operations approved after May 24, 2011 mining shall not be conducted within fifty (50) feet of any public road right of way unless approved in writing by the applicable road authority. Mining of materials shall not be conducted closer than thirty (30) feet to any property line unless two (2) or more mining operations are contiguous to one another, the common boundary may be mined if the County Board approved the respective restoration plans.

(4) Mining operations shall not be conducted closer than two hundred (200) feet from the ordinary high-water mark of any public water classified in Section 10.2.3 of this ordinance."

"Screening Barrier. To minimize problems of dust and noise and to shield Mining Operations from public view, a screening barrier may be required between the mining site and adjacent properties or public roads. If a screening barrier is required by the Planning Commission, the barrier shall be maintained between the mining site and any public road within five hundred (500) feet of any mining or processing operations. The screening barrier shall be planted with a type of fast growing trees agreed upon between the applicant and the Department. In all cases, existing trees and ground cover along a public road and property line shall be preserved and maintained for the depth of the setback, except where traffic safety requires cutting and trimming or except where alteration or destruction of the trees and/or ground cover is necessary for an approved reclamation plan."

QUARRY POLICY GUIDANCE

PERFORMANCE STANDARDS (CONT.)

Noise Control

- Example language taken from Douglas County, WI:
"The Operator shall control off-site noise levels to the maximum extent practicable to avoid adverse impacts to neighboring landowners. The noise levels at the boundaries of the mining or processing site shall not exceed 65 dB. The noise levels at the boundaries of any school, medical facility, nursing home, or community based residential facility shall not exceed 60 dB. Decibels shall be based on dB(A), which is the unit of sound level expressed in decibels (dB) and A-weighted as described in ANSI § 1.4-1983 and shall be measured in accordance with accepted protocols.
Noise levels shall be monitored at the Mining Site's property boundary by an independent testing company. The tests shall occur for a 10-day period at least once per quarter. The results shall be reported to the County within 30 days of the last test result."
- Example language taken from the City of Credit River, MN:
"Noise from mining operations, including crushers, screens, generators, and mobile equipment, shall not exceed 60dBA Leq(1-hr) at the property line. Evening/Saturday after 6:00pm: not to exceed 55 dBA Leq(1-hr) at the property line. Compliance shall be demonstrated through baseline monitoring and quarterly third-party monitoring that shall be submitted to the City."
Note: Credit River also requires a Noise Mitigation Plan be submitted.

Groundwater Quality

- Example language taken from the City of Credit River, MN:
"The permittee shall install and maintain groundwater monitoring wells on-site and, where required by the City Engineer, off-site, in locations sufficient to characterize groundwater conditions and potential impacts from mining operations.
Baseline groundwater elevations and water quality data shall be collected prior to commencement of mining activities. Groundwater monitoring shall occur annually and be submitted to the City for their review, or more frequently as determined by the City.
If monitoring indicates degradation of groundwater quality or significant changes in groundwater elevation attributable to the mining operation, the permittee shall implement corrective actions as directed by the City and within an appropriate timeline as determined by the seriousness of this degradation."

Financial Assurance

- Example language taken from the City of Credit River, MN:
"Financial security shall be provided before issuance of any mining permit or annual operating permit and shall be maintained for the duration of the operation and until reclamation is complete and accepted in writing by the City."

QUARRY POLICY GUIDANCE

Financial Assurance (cont.)

- Example language taken from the City of Harris, MN:
"The City shall require the applicant or owner of the property on which the mineral extraction is occurring, to post a bond, letter of credit or cash escrow in such form and sum as determined by the City Council as part of the permit. The security shall be sufficient to reimburse the following costs:
 - (a) Costs of bringing the operation into compliance with the mineral extraction permit requirements, including site monitoring and enforcement costs.*
 - (b) Extraordinary costs of repairing roads due to the special burden resulting from the hauling of materials and traffic associated with the operation. The amount of such cost shall be determined by the City Engineer.*
 - (c) Site restoration.*
 - (d) Costs the City may incur in enforcing the terms of the mineral extraction permit, including attorney's fees."*

RECLAMATION PLANS & STANDARDS

Pre-Mining Operation Requirements

- Example language from Dakota County, MN
"Providing for the orderly and continuing rehabilitation of all excavated land shall be required. Such plan shall illustrate, using appropriate photographs, maps, and surveys drawn to a scale of one-inch equals two hundred feet (1" = 200') and with a five-foot (5') contour interval satisfactory to the engineer, the following:
 - 1. Removal Of Planned Contours: The removal of planned contours of the land when the mineral removal operations are completed.*
 - 2. Timetable: The estimated period of time that the pit will be operated and a schedule setting forth the timetable for excavation and rehabilitation of land lying within the active, inactive and restoration areas*
 - 3. Soil Stockpiles: Those areas of the site used for storage of topsoil and overburden.*
 - 4. Depth; Slope; Revegetation: The depth of all water bodies, the slopes of all slopes after rehabilitation and a description of the type and quantity of plantings where revegetation is to be established.*
 - 5. Contour Extension: The five-foot (5') contours shall extend at least two hundred feet (200') beyond the boundary of the operation or beyond the adjoining right of way, whichever is more inclusive.*
 - 6. Ancillary and Accessory Uses: Ancillary and accessory use rehabilitation, reclamation, and restoration plan.*
 - 7. Maximum Slope: The maximum slope of the reclamation area that is developable shall be at no steeper than five feet (5') horizontal to one foot (1') vertical. The maximum slope of the reclamation area that is undevelopable, such as the area between a water body and a right of way line shall be no steeper than two feet (2') horizontal to one foot (1') vertical. Any slope greater than three feet (3') horizontal to one foot (1') vertical shall be designed by a licensed engineer and approved by the city engineer.*

QUARRY POLICY GUIDANCE

Pre-Mining Operation Requirements (cont.)

8. Development: The reclamation and rehabilitation plan shall provide for reasonable development consistent with the adopted Comprehensive Plan. Grades provided on the plans must provide for installation of utilities and roadway systems consistent with the regulations of the city and the engineering standards for road and utility installation.

(B) End Use Grading Plan

For mining operations that are expected to require more than twenty (20) years to complete, the city council may approve an end use grading plan for the area that is expected to be completed within twenty (20) years. The city council shall not approve an annual operating permit for an area without an approved end use grading plan.

(C) Removal of Buildings, Structures and Vehicles

Within eighteen (18) months of the reclamation of each phase, all buildings, structures, and plants incidental to that phase of operation shall be dismantled and removed by and at the expense of the operator last operating the building, structure or plant, or the owner of the property, unless the structure or use is compatible with the anticipated ultimate use of the property. All buildings, structures or plants not removed as required by this section may be removed by the city with the costs for the removal charged to the permittee or the owner of the property.

(D) Separation, fill, and Topsoil

1. Where the final mine floor is within 15 feet of the bedrock surface, a 15-foot separation buffer is required over the bedrock surface to protect groundwater and allow for future development.

2. A topsoil layer shall be placed above the buffer layer where the buffer layer extends above the water table. For pit lakes where the buffer layer is greater than 15 feet below the water table, no topsoil layer is required above the buffer layer. For pit lakes where the buffer layer leaves less than 10 feet of water depth (on average), a reclamation design approved by a licensed professional shall be submitted that addresses the potential surface water quality related to consistency with development plans and the potential for excess nutrient accumulation in a shallow pit lake.

3. Buffer layer material and topsoil should consist of clean, native fill material derived from the Project site. If imported off-site materials are necessary, a testing plan certified by a licensed professional shall be provided to ensure that the soils placed below the water table do not cause contamination in the pit lake. Topsoil material shall consist of suitable plant growth material, organic matter content, and thickness to support adequate plant growth. Vegetation selection should be based rapid stabilization of the soil, avoidance of invasive species, and be sustainable with respect to long term weed management.

4. Vegetation used shall be native species or similar that do not require regular or seasonal application of nutrients or pesticides."

- Example language taken from Credit River, MN:

"(E) Obligations Run with the Land

The approved reclamation, rehabilitation, and restoration plan, together with all obligations to complete reclamation and maintain financial security, shall run with the land and shall bind the property owner, permittee, operator, successors, assigns, and any subsequent owner or operator until the City determines in writing that reclamation has been completed and accepted.

QUARRY POLICY GUIDANCE

Pre-Mining Operation Requirements (cont.)

(F) Recording.

The City may require the approved reclamation plan, permit conditions, development agreement, financial security agreement, or other instrument acceptable to the City Attorney to be recorded against the property."

Mining Operation Requirements

- Example language taken from Stearns County, MN:

"All mining sites shall be reclaimed immediately after Mining Operations cease. Reclamations shall be completed within one (1) year. The following standards shall apply:

A. Within a period of three (3) months after a final termination of a Mining Operation, or within three (3) months after abandonment of such operation for a period of six (6) months, or within three (3) months after expiration of an interim use permit for a Mining Operation, all buildings, structures, and plants incidental to such operation shall be dismantled and removed by, and at the expense of, the mining operator last operating such buildings, structures and plants.

B. The peaks and depressions of the mined area shall be graded and backfilled to a surface which will result in a gently rolling topography in substantial conformity to the land area immediately surrounding. Finished slopes shall be stabilized to minimize erosion due to rainfall.

C. The finished grade shall be such that it will not adversely affect the surrounding land or future development of the site. The finished plan shall restore the mining site to a condition whereby it can be utilized for the type of land use proposed to occupy the site after Mining Operations cease."

CONCLUSION

The Becks Road study area is a place with tremendous natural character, strong recreational assets, and a community that cares about thoughtful growth. Through this planning process, a clearer picture has emerged of how the area can evolve over time – one that balances development opportunities with environmental stewardship and the unique identity that already makes this corner of Duluth special.

Overall, the analysis shows that growth here will happen gradually and intentionally, guided by improvements to water and sewer infrastructure and by choosing development locations where services can be extended efficiently. While population trends show only modest change, this also means the community has the chance to shape growth in a way that reinforces what residents value most: open space, trails, natural beauty, and a quiet, rural feel. Future residential opportunities – particularly single-family homes and townhomes – can fit comfortably into this context without overwhelming the existing character.

The land use and infrastructure findings also point to several promising opportunities. Areas along Becks Road offer room for light industrial uses, neighborhood-scale commercial spaces, and small mixed-use gatherings spots that could serve residents and trail users alike. At the same time, the extensive parks and trail network – including connections to the Munger Trail, DWP Trail, and nearby trailheads – remains one of the study area's greatest strengths. Protecting and enhancing this system will help ensure the area continues to be a place where recreation, nature, and community intersect seamlessly.

While utilities and topography present challenges, they also help guide responsible decision-making. Focusing development in locations that can be served cost-effectively, protecting sensitive creeks and drainageways, and making small but meaningful transportation improvements will allow the area to grow sustainably and safely. Becks Road itself has plenty of extra capacity, meaning future growth can be supported through targeted intersection and access improvements rather than major roadway expansion.

Taken together, these findings point toward a future that is balanced, achievable, and community-centered. With careful planning, the Becks Road corridor can welcome new homes, jobs, and amenities – while preserving the parks, trails, open spaces, and natural character that make this area such a valued part of Duluth.

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