Carver County

Dakota Rail regional trail

Master Plan

April 16, 2007

CARVER COUNTY

SRF Consulting Group, Inc.

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INTRODUCTION

The Carver County Dakota Rail corridor master planning process provides a vision for the Dakota Rail corridor as a multi-use trail extending 12.4 miles east to west across northern Carver County. The master plan outlines the development requirements and operations costs associated with constructing and managing a regional trail facility. Carver County, along with Hennepin and McLeod County Regional Railroad Authorities, purchased the corridor in 2001 to preserve it for future transit operations. The Metropolitan Council identifies the Dakota Rail corridor as an important regional trail that links the growing western suburbs with the more rural communities in western Carver and McLeod Counties.

The master planning process is designed to identify issues and opportunities, outline the costs and identify public need and interest in the proposed trail project. Public input is an important component of the master planning process. As such, the public was given multiple opportunities to learn about the proposed trail and provide comments to the proposed operating agencies, including Carver County and the Metropolitan Council.

1. BOUNDARIES AND ACQUISITIONS COSTS

The Dakota Rail corridor, an abandoned railroad corridor that extends from Wayzata, Minnesota, on the east to Hutchinson, Minnesota, on the west bisects the northern portion of Carver County. Throughout Carver County the Dakota Rail corridor typically has a 100-foot right-of-way. In certain locations the width of the corridor varies. Around the South Fork of the Crow River the corridor right-of-way is approximately 80 feet wide. The corridor right-of-way widens to 250 feet in the City of New Germany and 300 feet in the City of Mayer.

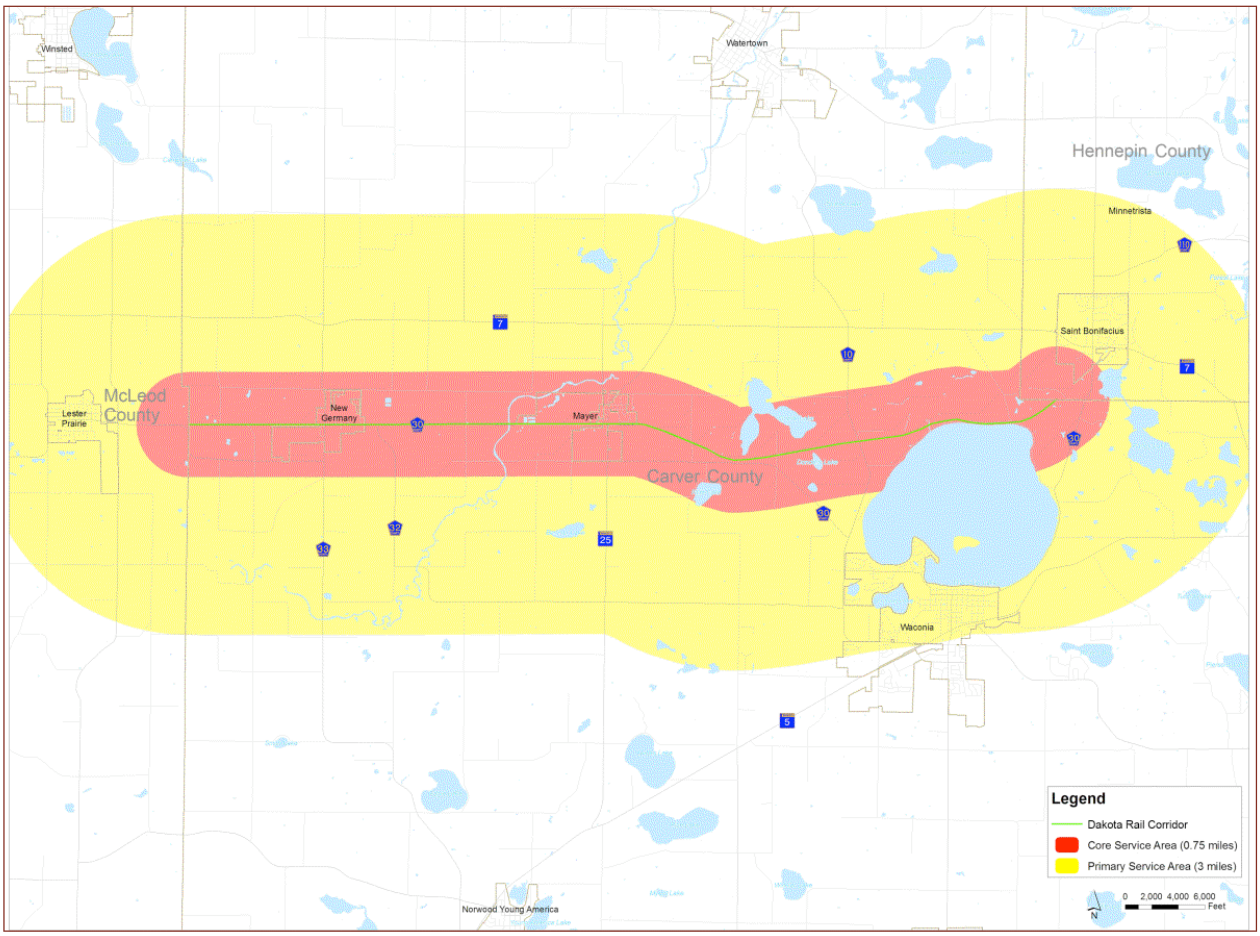


Figure 1: Primary Service Area

The Dakota Rail corridor is wide enough to construct a multi-use trail on the existing rail bed. Additional land acquisition may be necessary in some locations for trail amenities or trail connections. The significant grade change between the existing rail bed and County Road 10 in Waconia Township may require additional land acquisition to create a trail connection at this location.

Approximately one acre would be required to make a connection to County Road 10 at a cost of $7,000 per acre. Land necessary to make the trail connection may be incorporated into a new bridge or crossing structure when the County Road 10 bridge is replaced.

Elsewhere along the Carver County section of the corridor, there are at-grade crossings that intersect with existing roadways and communities. The communities of Mayer and New Germany have shown interest in creating community focal points along the trail and there is adequate room in both communities for such development.

Carver County will explore three alternatives for the west terminus of the Carver County segment of the corridor. The trail could stop at the County line without making a connection to County Road 30 or into Lester Prairie; the trail could connect to County Road 30, allowing users to continue into Lester Prairie on the roadside shoulder; or, the trail could extend into Lester Prairie on the existing railroad grade. Carver County will coordinate with McLeod County and the City of Lester Prairie regarding the best alternative for the west terminus of this trail segment.

2. STEWARDSHIP PLAN

The railroad rails and ties were removed from the corridor in 2004 and 2005. In its current state, the rail bed is undeveloped, uneven and overgrown, with trestle structures that lack railings or solid decking. Carver County has posted the corridor as closed to public use. The County performs minimal maintenance in the corridor and has a modest budget to perform weed control, brush removal, diseased tree removal and works to maintain drainage structures. The County, with consent fro the Carver County Regional Railroad Authority, will sign the property boundaries of the former railroad corridor.

Existing Dakota Rail corridor leases with Carver County Regional Railroad Authority will continue to be honored until such time as circumstances change. Carver County may permit trail crossings or community structures in the corridor. Revenue generated from leases is retained by the Carver County Regional Railroad Authority and may be used for operations, maintenance and capital expenditure of the railroad corridors administered by the Authority.

3. DEMAND FORECAST

Regional parks and trails in the greater metropolitan area are very popular. The population in Carver County and the metropolitan area is growing steadily and this will further increase the demand for regional trails. According to the Metropolitan Council 2030 Regional Development Framework Forecast, Carver County's population will grow by 120,000 people between 2000 and 2030.

Carver County Population Forecast

2000	70,205
2010	109,410
2020	153,350
2030	190,680

2030 Regional Development Framework–Revised Forecast, Metropolitan Council, March 8, 2006.

Outdoor recreation is important to Minnesota residents. According to a 2004 survey, 57 percent of Minnesotans indicate that outdoor recreation is "very important" to their life.[1] Among the outdoor activities most favored by Minnesotans, trail uses are popular. These include walking, bicycling, running or jogging, in-line skating and snowmobiling.

2004 Minnesota Outdoor Recreation Participation (Trail-Related Activities)

Activity	Percent of Population
Walking/Hiking	54%
Biking	29%
Running or Jogging	14%
In-line Skating	11%
Snowmobiling	10%
Cross-country Skiing	7%
Horseback Riding	5%
Snowshoeing	4%

2004 Outdoor Recreation Participation Survey of Minnesotans. Minnesota DNR, 2005.

[1] **2004 Outdoor Recreation Participation Survey of Minnesotans**. Minnesota DNR, 2005.

In the Twin Cities region, visits to regional parks and trails has increased 28 percent between 1995 and 2004 to over 30 million visits.[2] Forty percent of these visits were made possible because new parks and trails were developed around the region. Walking/hiking accounted for 30 percent of park activity in 2004. Bicycling accounted for 13 percent while jogging/running accounted for six percent and in-line skating for four percent.

Carver County park use is increasing in levels relative to other areas of the metropolitan area. As the population of Carver County increases, use of the parks and trails will also rise. Annual visits to Carver County from 1996 to 2004 increased 54 percent.[3] Visitors to Carver County parks are predominantly from Carver County and the surrounding region.

Origin of Carver County Parks Visitors

Location	Percent of Visits
Carver County (local)	42%
Regional	30%
Greater Minnesota	26%
Out of state	2%

Annual use estimate of the metropolitan regional parks system for 2004: Metropolitan Council Report, 2005.

2 Vlaming, J., **Annual Use Estimate of the Metropolitan Regional Parks System for 2004**. Metropolitan Council Report #78-05-036, 2005.

3 Vlaming, J., **Annual Use Estimate of the Metropolitan Regional Parks System for 2004**. Metropolitan Council Report #78-05-036, 2005.

4. DEVELOPMENT CONCEPT

General Elements

Carver County plans to develop its segment of the Dakota Rail Corridor into the Dakota Rail Trail, a multi-use, bituminous (paved) trail that will complement Carver County's existing trail system. The trail will be suitable for bicycling, walking, running, in-line skating, commuting, dog walking and other typical non-motorized trail uses during the spring, summer and fall seasons. During the winter season, the trail may be open to snowmobile use if the governing land use authorities including cities, townships and Carver County, permit the activity. In addition, Carver County and a qualified snowmobile association would need an agreement that defines maintenance, usage, and insurance responsibilities for the operation of a snowmobile trail.

The proposed trail will generally utilize the existing rail bed on which the rails and ties have been removed. The trail may divert from the right-of-way center line where realignment may provide additional buffering to adjacent properties. The current condition of the rail bed varies from relatively flat and packed to rough, rutted and strewn with ballast material. Weeds and grasses are growing on the rail bed, and the adjacent tree canopy, which was trimmed back for rail removal, is once again encroaching on the corridor.

Site preparation along the corridor will require standard construction preparation, tree trimming, minor excavation, sub-grade preparation and miscellaneous removals. Minimal grading will be necessary along the railroad centerline to accommodate the typical trail section.

Primary Trail Elements

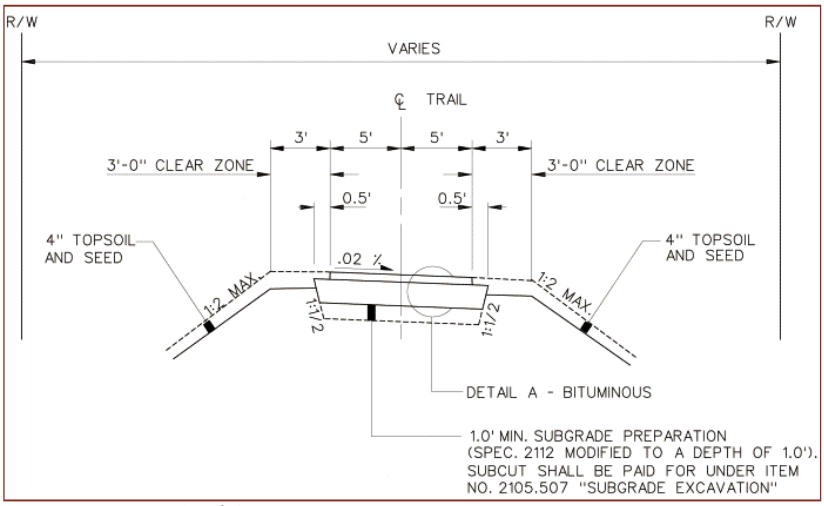


Figure 2: Typical Section

The proposed trail will be designed in accordance with applicable American Association of State Highway Transportation Officials (AASHTO) *Guide for the Development of Bicycle Facilities*, 1999, and Minnesota Department of Transportation's, *Minnesota Bicycle Transportation and Planning Guidelines*, 1996. The trail will be ten feet wide with a minimum three-foot grass clear-zone on each side.

The trail will have a bituminous or crushed rock agricultural lime surface. A bituminous trail surface is the preferred surface treatment because it is more cost effective through its life cycle than other surface treatments. Bituminous trails offer a wide variety of trail uses including bicycling, walking, running, and in-line skating, which are all popular activities on other regional trails. In addition, Three Rivers Park District plans to develop the adjoining segment of the Dakota Rail Corridor in Hennepin County with a bituminous trail.

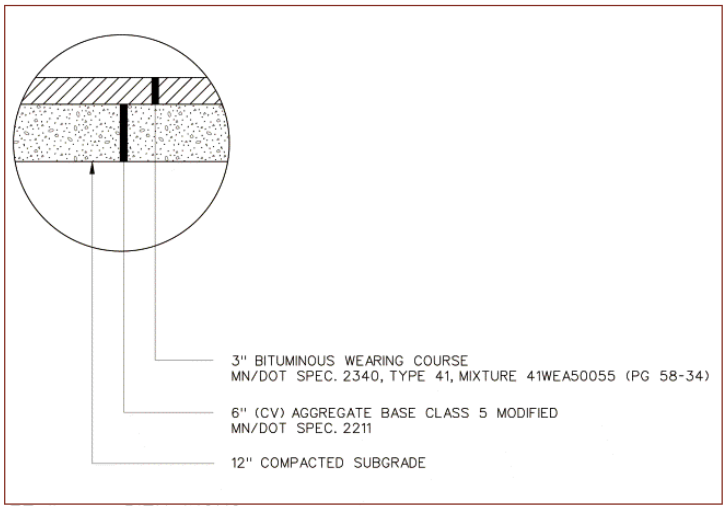


Figure 3: Bituminous Trail Section

A crushed rock or agricultural lime surface may be used as an interim trail improvement. Carver County will actively pursue funding which would address corridor preservation, safety, and usability. Realizing funding constraints and the need to first address corridor preservation, safety and usability, paving on portions of the trail may occur after or concurrent with other improvements to the corridor.

Recent discussions with trail managers throughout Minnesota indicate that snowmobile use does not pose a significant impact to trail surfaces.

There are 12 at-grade road crossings along the proposed trail segment. Two will require Type I Crossings and 10 will require Type II Crossings. In addition to safety signing, roadway crossings will have surface paint marking the trail location.

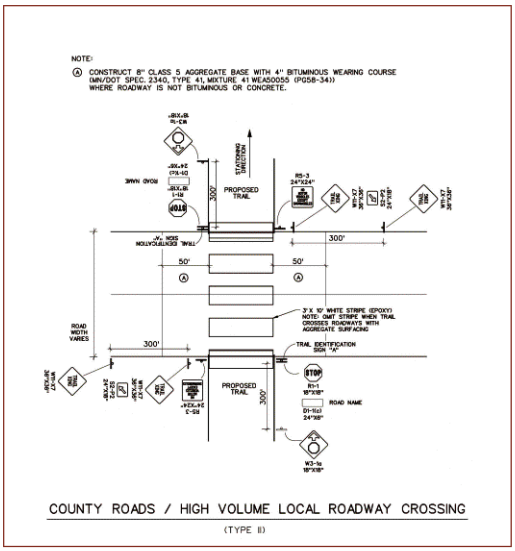


Figure 4: Type I Crossing

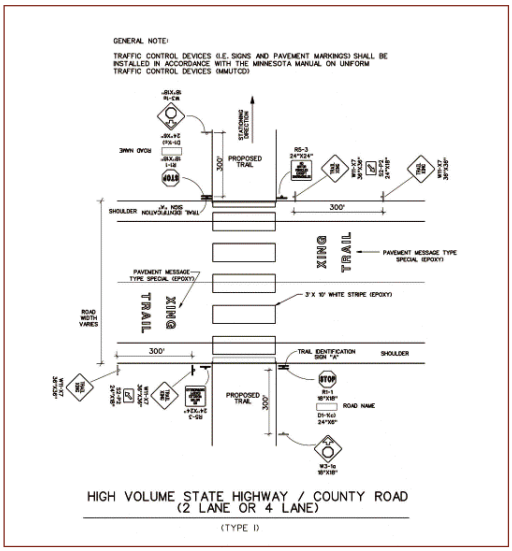


Figure 5: Type II Crossing

Roadway Crossing Schedule

Road (East to West)	Crossing Type
County Road 155	Type I
North Shore Road	Type II
Goose Lake Drive	Type II
Quartz Avenue	Type II
State Highway 25 / Ash Avenue	Type I
Hidden Creek Boulevard	Type II
Union Avenue	Type II
County Road 32	Type II
Hilda Avenue	Type II
Adams Avenue	Type II
County Road 33 / State Avenue North	Type II
Yale Avenue	Type II

Where the trail crosses a gravel road, a paved trail crossing will be constructed with pavement extending 50 feet down the roadway from the trail centerline on both sides. This will minimize the amount of gravel deposited on the trail crossing, which can be hazardous to trail users.

The Dakota Rail Corridor has five trestles that connect the rail bed across wetlands, creeks and rivers as it crosses Carver County. The following trestles are located within the proposed trail corridor (in order east to west):

- Trestle over wetlands north of Lake Waconia
- Donders Creek Trestle
- South Fork Crow River Bridge
- East Crane Creek Trestle
- West Crane Creek Trestle

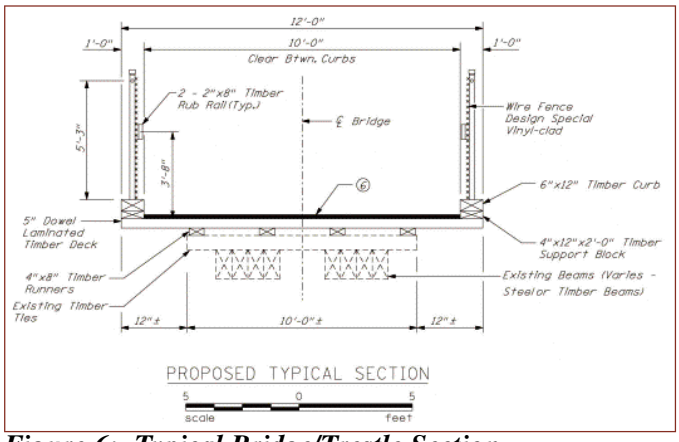


Figure 6: Typical Bridge/Trestle Section

Carver County intends to repair damage to trestles at the time of construction as needed for structural integrity. The trestle retrofits that will be needed to accommodate a trail include adding safety fencing and rub rails to the sides and timber planking or bituminous overlay on the tread surface.

Supporting Trail Elements

Access, signage, vegetative screening, overlooks, and rest areas are important elements of regional trails. Their proper design, stewardship and placement add aesthetic and functional value to the trail. Signature features such as trailheads are important elements because they provide the amenities visitors need to prepare for trail use and a location for visitors to access the trail. As a part of the master plan, Carver County intends to construct trailhead facilities that would include parking areas and informational signage. Waste receptacles and portable latrine facilities may also be provided. Other site amenities may be considered at these locations. Upon permit approval, each community will be responsible for installing and maintaining the signature features on the Dakota Rail Trail in their community. Signature features may include landscape features, benches or tables, bicycle racks, restroom facilities, trash receptacles, and space for people to prepare before getting on the trail. Carver County will coordinate with communities who wish to construct trail elements in the rail corridor.

The Dakota Rail corridor passes through beautiful wetlands and scenic rural settings. There are a number of locations where scenic overlooks could be constructed along the trail to allow trail users to admire the views from a location other than on the trail itself. Bridges are often good locations for overlooks because they are elevated and can provide better views.

Proper signage along the trail is important for safety and way finding. Traffic control signs, such as stop signs at road crossings and street name signs at bridges and intersections will be installed on the trail. Informational and directional signage will be consistent with other Carver County parks signage.

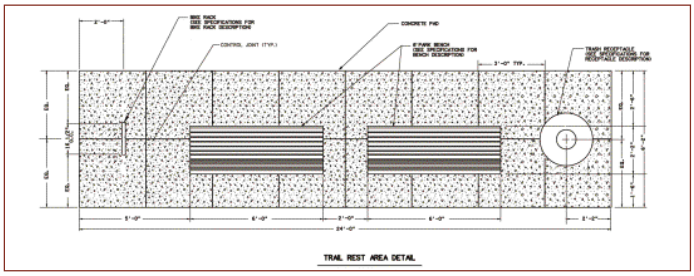


Figure 7: Typical Rest Area Detail

Rest stops on regional trails are useful elements because they provide places for trail users to exit the trail and provide an area for amenities that are not generally found mid-corridor such as trash receptacles, benches and bicycle racks. Rest stops will be incorporated into the design of the Dakota Rail Regional Trail.

The Dakota Rail corridor has some very scenic locations with spectacular views of area lakes, wetlands, the Crow River and the Crane Creek wildlife area. Carver County will explore trail designs that provide construction of scenic overlooks at these locations to allow visitors a chance to step off the trail and enjoy these unique natural features.

Old rail corridors are sometimes very overgrown with both beneficial and invasive vegetation because the management regime utilized by the railroads was done more for function than aesthetics. The Dakota Rail Corridor is no exception. The corridor will need to be trimmed enough to provide adequate clearance for the trail and clear zones. In addition, there are locations that will require safety screening and fencing at trestles, which will be identified during the design phase of the project. Using vegetation to screen the trail is aesthetically pleasing and very effective in providing visual protection to and from the trail. In areas that require additional protection, other options may be considered.

Connections

The Dakota Rail Regional Trail will become part of the greater metropolitan regional trail system and an added asset to Carver County's parks and trail system. Connections between the trail and other regional parks and trails are good for trail users and adjacent communities. The Dakota Rail Regional Trail will have the potential for access to trails in McLeod and Hennepin Counties at the eastern and western segments of the same corridor. A connection to Waconia Regional Park may be made along County Road 155 and County Road 30 along the east side of Lake Waconia to Lake Waconia Regional

Park. The Luce Line Trail, which is operated by the state, runs parallel to this trail approximately four miles north and could be connected via County Road 33, State Highway 25 or County Road 10. The Metropolitan Council's 2030 Regional Parks Policy Plan identifies the potential for a future regional trail near the Crow River extending north from Norwood Young America to the Cities of Mayer and Watertown, and the north County boundary. If constructed, this trail corridor would connect Baylor Regional Park, the Dakota Rail Trail in Hennepin County and the Luce Line trails. Other significant regional features in close proximity to the Dakota Rail Trail are Gale Woods Regional Park, Noerenberg Gardens and Carver Park Reserve.

Each adjacent community has an opportunity to connect their parks and trails to the Dakota Rail Regional Trail, which provides access to the regional trail and park system for area residents.

Sources of Revenue and Development Costs

Carver County has secured $1,027,200 of Federal Transportation Enhancement funding for trail construction for the eastern segment of the trail from the Hennepin County border to the City of Mayer. Other funds for trail development will come from the Metropolitan Council and Carver County.

Trestle Modifications, Trail Elements and Trail Construction Costs

Grading and Removals	$ 333,500
Paving	$ 955,400
Trestle Modifications	$ 165,340
Drainage	$ 27,900
Traffic and Turf Establishment	$ 390,061
Total (2006 dollars)	**$1,872,201***

** The complete detailed cost estimate is listed in Appendix A.*

5. CONFLICTS

The public process brought to light a number of concerns with safety, noise, effects on property values and parking. This section will address these concerns and identify ways these issues can be minimized through design.

Safety and Security

When a new trail is proposed, a common concern of residents adjacent to the trail is the potential effect on their safety and security, as well as the safety and security of the trail users. These concerns were voiced by several people at the open houses and at meetings with city and township officials.

Regional trails around the metropolitan area generally have not had much criminal activity. In Hennepin County, Three Rivers Park District reported an average of one incident per 31,429 visits on the heavily used (222,000 visits annually) North LRT Regional Trail, which runs from Carver Park Reserve along the south shore of Lake Minnetonka east to the City of Hopkins.

The Carver County Sheriff's Office provides patrolling for all County parks and trails. Sheriff's Deputies and Community Service Officers share the responsibility for regularly patrolling parks and trails. In addition to the patrols, the 911 First Responder system answers emergency calls made from the trail. Trail and trestle structures will allow access for emergency vehicles on and along the trail corridor.

Privacy

Carver County will work with local communities and residents to minimize the impact on adjacent residents. The design stage of the trail development will address specific situations using a variety of methods. For example, the design process may identify the need to shift a short segment of trail away from the center of the corridor when the corridor is narrow and residents live only on one side. In other cases, vegetative screening may be employed or fences installed. Not all residents will want screening. Where screening is desired, adjacent property owners may be permitted by the County to landscape an area of the trail corridor.

Property Values

Several studies assessing the effect of trails on property values have been conducted for trails throughout the United States. The studies showed that trails have no negative impact on either the marketability of property (easier or more difficult to sell) or its value. There was a belief among some, typically between 20 and 40 percent of a study sample, that there was a positive impact on marketability and value.[5]

Aesthetic Design

Members of the public expressed interest in safety, design of the trail and of the trestles reconstructed for trail use. The trail design may incorporate a paved asphalt or unpaved aggregate surface with three-foot mowed grass shoulders on both sides of the trail. The shoulders are required for safety purposes. Specific plantings, fencing, trestle design and other amenities will be identified during the design phase of the project.

Parking

Carver County will work with the Cities of Mayer and New Germany to identify parking locations for trail users within their communities. In other locations along the corridor, Carver County is not planning to construct additional trailheads. On-street parking, where permitted, will be monitored by the Carver County Sheriff's Department.

Appropriate Uses of the Trail

Carver County allows walking, running/jogging, bicycle riding, in-line skating, skateboarding, kick scooters, bird watching, and dog walking on regional trails. With the exception of seasonal, sanctioned snowmobile use, motorized vehicles of any kind will not be allowed on the Dakota Rail Trail. Motorized vehicles not allowed include, but are not limited to, motorized scooters, all-terrain vehicles, golf carts, motorcycles, automobiles, trucks, and sport utility vehicles. Equestrian use will not be allowed on the Dakota Rail Regional Trail because demand is low and the Dakota Rail Trail is in close proximity to the Luce Line horse trail. In addition, a separated horse trail facility would be necessary to reduce disturbances to horses, which can be hazardous for all trail users.

5 Crompton, J.L., 2004. The Proximate Principle: **The impact of parks, open space and water features on residential property values and the property tax base**; Second edition; National Recreation and Park Association, VA; pages 107-123.

Trail Surface

The master plan recommends that the Dakota Rail Regional Trail be a paved trail the entire 12.4-mile length through Carver County. However, in the best interest of completing the trail, an aggregate surface may be considered as an interim solution if inadequate funding is available to pave the entire trail. Several factors led the decision-making process for determining trail surface. They were: 1) input from the public process; 2) the obligation of Carver County to provide a diversity of opportunities on its trail network; 3) consistency with the planned paved segment of the Dakota Regional Trail in Hennepin County; 4) costs associated with construction and maintenance of the trail surface; and 5) eligibility for federal funding for paved surface.

Members of the public who attended the open houses or submitted comments were divided about whether the trail surface should be paved or aggregate. Some individuals indicated that the aggregate surface is better suited for rural areas like Carver County and is better suited for snowmobile use in the winter. Others indicated that the aggregate surface would limit speeding by bicycles, and that aggregate provides less impact when running. Some members of the public indicated that a paved surface would provide a clean-looking trail corridor that would allow for a wider variety of uses including bicycling and in-line skating.

Three Rivers Park District has indicated that it intends to pave their segment of the Dakota Rail Regional Trail running from the Hennepin County border to the City of Wayzata. Consequently, it would provide consistency for trail users if both segments of the trail were paved.

Bituminous trails, despite the higher construction cost, are less expensive to maintain than aggregate trails over the life span of the asphalt. The higher maintenance costs are due to the less durable surface that suffers washouts in heavy rain events, the cost of annually replacing aggregate, the labor that is needed to fix washouts and the extra cleaning that is needed when the aggregate begins to migrate away from the trail bed.

Snowmobiles

In early April 2006, staff members from Carver County met with snowmobile enthusiasts to discuss issues and ideas which may allow snowmobile use on the proposed trail. Local snowmobile associations could assist the County in maintaining and grooming the trail as part of the larger snowmobile trail network. A significant snowmobile destination is Lake Waconia. The Dakota Rail corridor could provide an important connection to the lake and other north south trail routes in central and western Carver County.

There are snowmobile trails in Minnesota that operate smoothly over multi-use, bituminous and aggregate trails. Maintenance, patrolling and education are key elements to making snowmobile use a success on snow-covered trails.

Given the interest and support of snowmobile use, Carver County could permit snowmobile use on the Dakota Rail Regional Trail when adequate snow levels exist during the winter snowmobile season of December 1 through March 31.

Equestrian Use of the Trail

Carver County does not recommend allowing equestrian use on the Dakota Rail Regional Trail. The demand for equestrian use does not warrant another equestrian facility in the area. The Luce Line State Trail, which runs parallel to the Dakota Rail corridor four miles north, has a surface that is maintained for equestrian use. The former rail grade of the Dakota Rail corridor is generally not wide enough to construct a separate trail for equestrian users.

Dog Walking

Dogs are allowed on all Carver County trails. Dog-walkers are required to keep their dogs on leashes no longer than six feet and must clean up after the pets. These policies will also be in effect for the Dakota Rail Regional Trail.

Encroachments

Except by permit or lease, encroachments within the Dakota Rail corridor are not permitted by the Carver County Regional Rail Authority. Unauthorized encroachments are unlawful and are not allowed. Existing agreements with Carver County Regional Rail Authority continue to be honored.

6. PUBLIC SERVICES

The Dakota Rail Regional Trail would be a self-contained recreation feature that would not need additional service to function at a base level. Electricity, sewer, additional roads and other public services would not be required for everyday use of the trail. Services such as electricity, water, sewer and roads may be necessary if neighboring communities would like to construct special community features. Carver County may partner with interested communities to develop such amenities by providing space, financial contribution or support.

7. TRAIL OPERATIONS AND MANAGEMENT

The Dakota Rail Trail will pass through both rural and agricultural landscapes as well as through the downtowns of Mayer and New Germany and the growing suburban developments on the outskirts of these communities. Much of the trail will be visible from adjacent roadways. The high visibility and expected high use of the trail make the need for routine maintenance a high priority for Carver County.

Routine maintenance will include mowing, sign maintenance, sweeping and blowing the trail surface, noxious weed management and solid waste collection. County maintenance staff will routinely mow the three-foot grass shoulders along both sides of the trail to maintain an orderly appearance and a safe environment that is free of overhanging vegetation. Tree branches or storm debris will be trimmed or removed as necessary. Trail signs will be inspected annually and as part of other routine maintenance activities to ensure the signs are not damaged or missing. The trail will be swept or blown free of debris in the spring and fall to maintain a safe and smooth surface for users. County staff will monitor road crossings to maintain a debris-free trail where gravel roads or shoulders may spread onto the trail. The presence of noxious weeds in the trail right-of-way will be monitored and addressed when necessary by mechanically pulling, mowing or spraying the affected area. Solid waste such as litter will be collected from trash receptacles located at trail heads, rest areas and overlooks on a regular schedule by the operating agency. Litter found along the trail will be collected by County maintenance staff during routine maintenance activities.

Bridge structures will be visually inspected annually in the spring and during routine maintenance operations throughout the year. Carver County staff will minimize the amount of driving on the corridor to levels that are necessary for maintenance in an effort to reduce the amount of energy required to maintain a safe and aesthetically pleasing trail.

Public safety on the Dakota Rail Trail in Carver County will be handled by the Carver County Sheriff's office, which is responsible for patrolling other County parks and trails. A Sheriff's Deputy or a Community Service Officer will regularly patrol the trail—both segments that are visible along roadways and segments that are not adjacent to any roads. Community Service Officers are uniformed, non-sworn officers. In addition to the patrols, the 911 First Responder system will answer any emergency call made from the trail.

Operations Costs

Carver County will make use of existing personnel and equipment and hire part-time staff as needed to maintain the Dakota Rail Trail. The following chart lists the equipment and associated costs that will be needed.

Carver County will require additional annual maintenance materials to maintain a safe trail. These materials include:

Annual Maintenance Materials

Sign replacement	$ 500
Aggregate for shoulders	$2,000
Material for minor bituminous repair	$1,500
Total (2006 dollars)	**$4,000***

** The complete detailed cost estimate is listed in Appendix A*

Sources of Revenue for Operations and Maintenance

Carver County has identified two funding sources to cover on-going operations and maintenance costs for the Dakota Rail Trail. Carver County will continue to receive corridor preservation funding from Carver County Regional Railroad Authority to preserve railroad land, repair and replace structures, construct drainage facilities, maintain vegetation, issue leases and permits, and address other issues as it pertains to the preservation of the former rail corridor. These funds are issued to the County Parks Department. When the Dakota Rail Trail in Carver County is adopted into the Metropolitan Regional Parks and Open Space System, the Metropolitan Council will fund a portion of operating and maintenance costs.

8. NATURAL RESOURCES

Existing Conditions

The corridor is presently owned and managed by the Carver County Regional Railroad Authority (CCRRA). Operations and maintenance of the former rail corridor have been assigned to the Division of Public Works – Parks Department. In 2004, as part of the abandonment process, the CCRRA removed all the railroad rails and ties from the rail bed. Presently, the corridor receives minimal maintenance from Carver County. The rail bed, which was cleared of vegetation to allow access for the abandonment process, is becoming overgrown with native and non-native vegetation. The existing rail bed has a compaction rate similar to a typical bituminous roadway. Paving the rail bed to construct the Dakota Rail Trail should not increase the rainfall runoff volume, discharge rate, or pollutant loading to the land adjacent to the railroad right-of-way. Consequently, the project will have a negligible impact on adjacent water resources.

Carver County will plant the soft shoulders of the trail with a mixture of deep-rooted, native grasses that can withstand frequent mowing and heavy public use. This will enhance the infiltration of runoff from the bituminous or aggregate surface of the trail.

Natural Resources Management Plan

Carver County will be responsible for maintaining a 16-foot wide corridor, generally located on the existing rail bed within the Dakota Rail corridor. The middle ten feet of the trail corridor will consist of a paved or crushed rock trail. On each edge of the trail, three-foot grass shoulders will be maintained with regular mowing. The grass on these shoulders will consist of a native mix of deep-rooted grasses that are capable of withstanding frequent mowing. Overhead vegetation within the 16-foot trail corridor will be trimmed to sufficient height to allow users, maintenance and emergency vehicles unobstructed use. In instances where vegetation overhangs from outside the trail corridor, Carver County staff will trim the vegetation to keep it clear of the trail users. The areas outside of the 16-foot trail corridor are considered low maintenance areas. Native and non-invasive plant species are encouraged for visual screening, wildlife and shade purposes.

9. CITIZEN PARTICIPATION

Local communities and individuals were invited to participate in the master planning process for the Dakota Rail corridor. Several methods of public involvement, which are listed below, were used to notify, inform and educate the public on the master plan process.

Survey of Adjacent Landowners

All owners of private and commercial property within 500 feet of the Dakota Rail corridor in Carver County were invited to attend an open house on February 28, 2006, to learn about the master planning process for the Dakota Rail corridor. An invitation to the open house that included a survey was mailed to 330 landowners on February 14, 2006. The survey identified the corridor on a map and asked a few questions about appropriate activities for the corridor, how the landowner might use the corridor if a trail were constructed and what their interests or concerns are regarding potential development of the trail. One hundred seventy-three surveys were returned to Carver County or were completed at the open house.

Public Open House Meetings

The first open house, held at the Mayer Community Center on February 28, 2006, was well attended. Over 100 people attended the open house to learn about the master planning process for the Dakota Rail corridor and to provide their input on future uses in the corridor. Carver County prepared a series of display boards that described the corridor history, master planning process and timeline and explained typical elements for a multi-use trail. Attendees also had a chance to view a map of the Dakota Rail corridor displayed on an aerial photograph of the area. Carver County staff and consultants were on hand and responded to questions and provided feedback on the master planning process.

A second open house was held on May 16, 2006, to present the draft findings of the Carver County Dakota Rail corridor master plan. Forty-one people attended the open house. Attendees reviewed summary boards from each section of the master plan and had an opportunity to review the proposed trail corridor on an aerial map. Attendees were asked to fill out comment cards to respond to the material presented at the open house.

Meetings with Local Governments and Recreation Groups

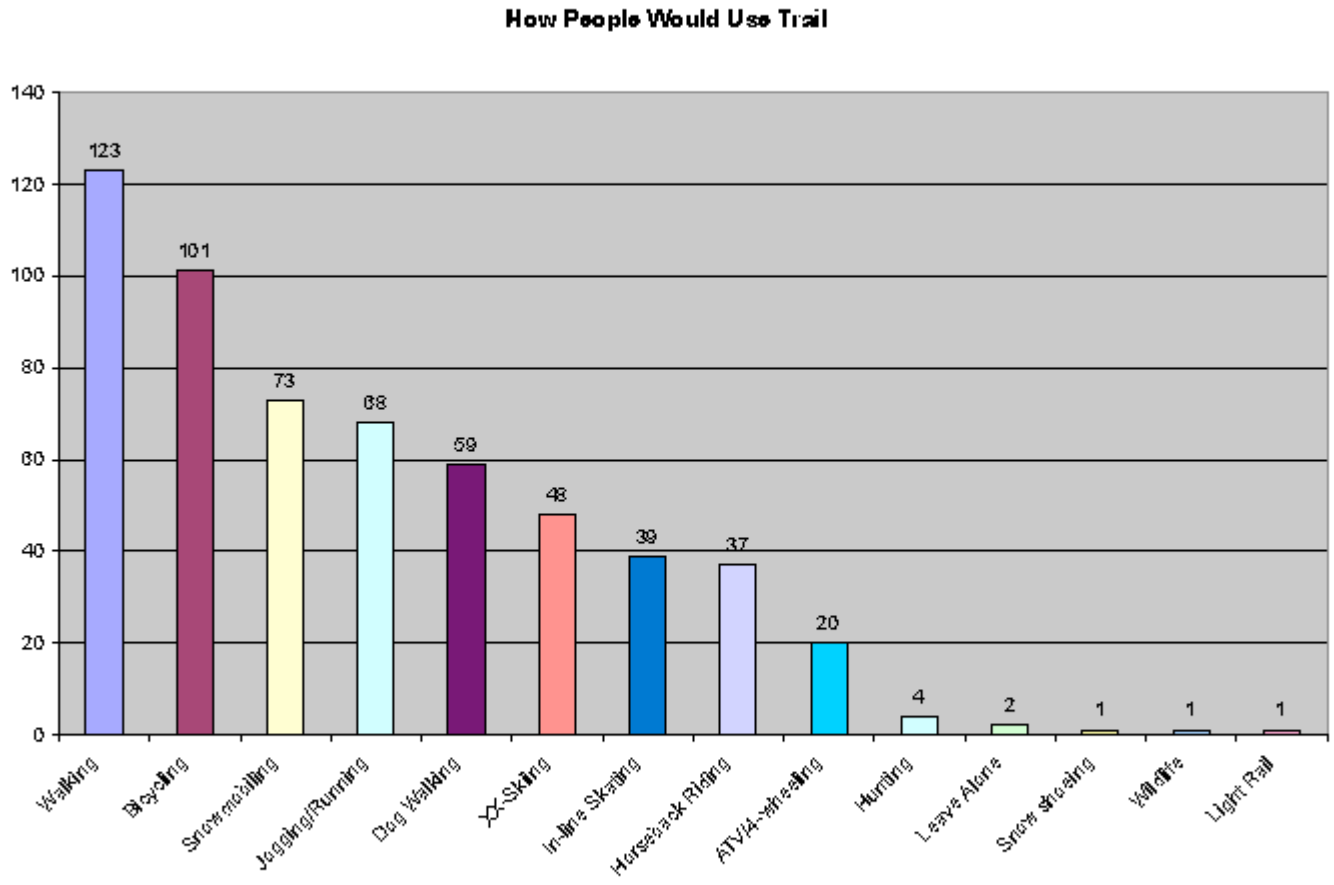
In April 2006, Carver County staff met with officials from adjacent communities including Laketown Township, Waconia Township, Camden Township, the City of Mayer and the City of New Germany to explain the master planning process, answer questions and discuss partnership ideas. Carver County staff and consultants also met with the Carver County Snowrunners, the local snowmobile club, to discuss issues related to seasonal snowmobile use on the Dakota Rail corridor in Carver County.

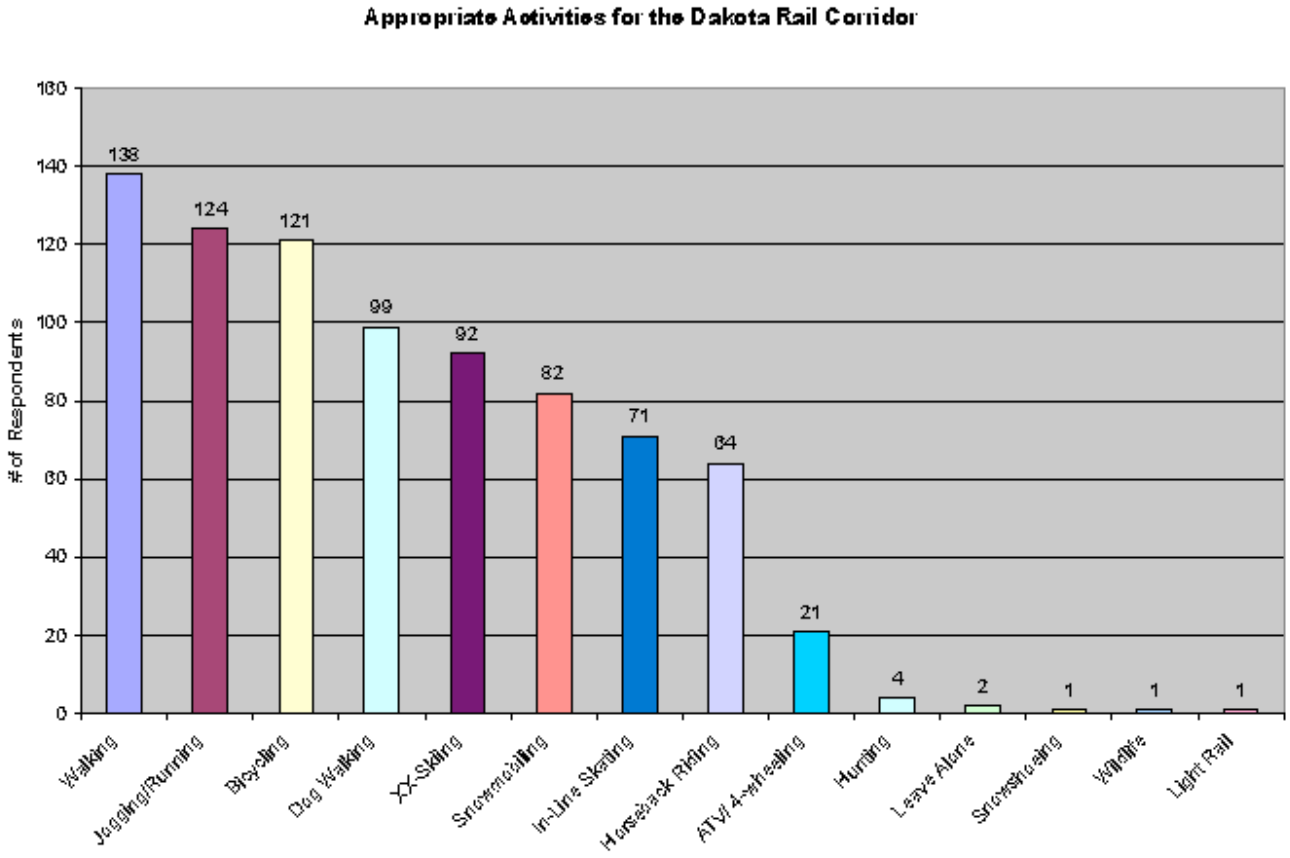
Postings on the Carver County Website

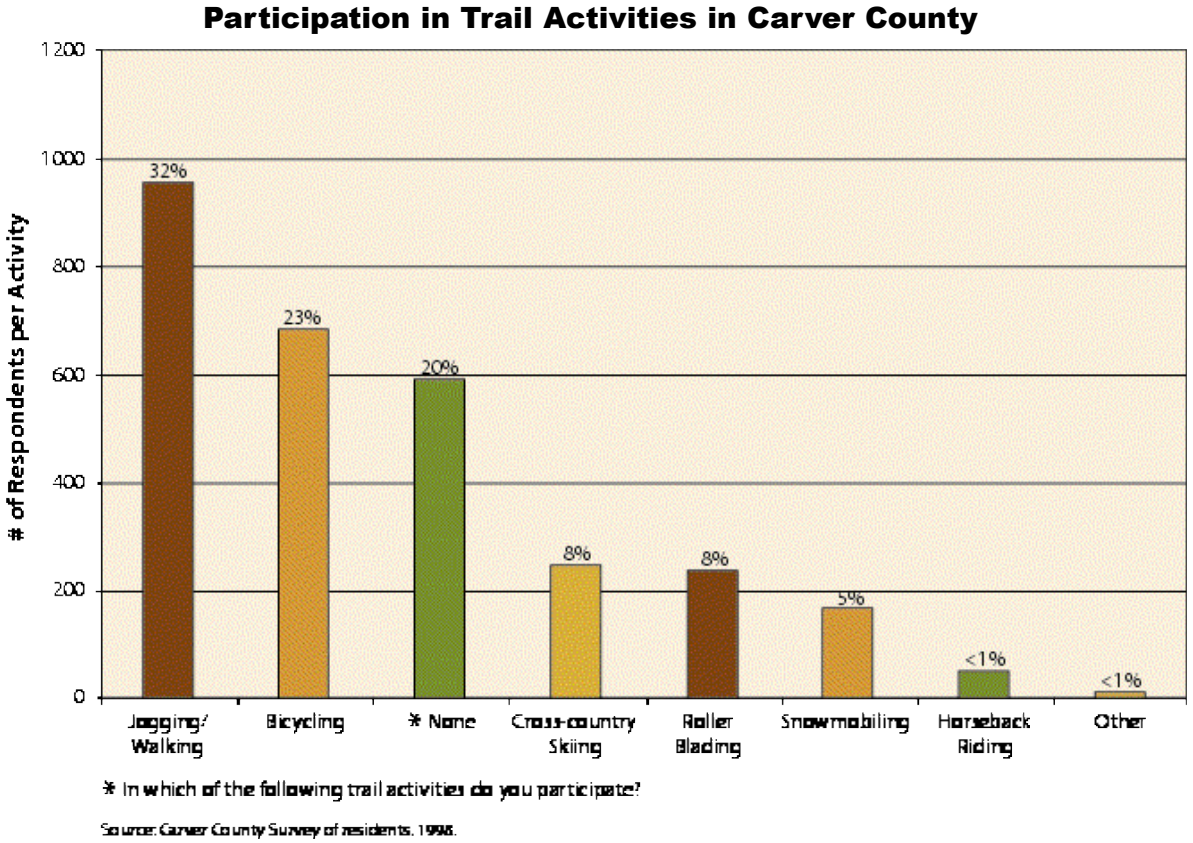
The Carver County website has been continuously updated to provide all current information about the master planning process for the Dakota Rail corridor. Press releases, the public survey sheet and all material from the open houses were posted on the website for the public to view.

Findings from the Public Process

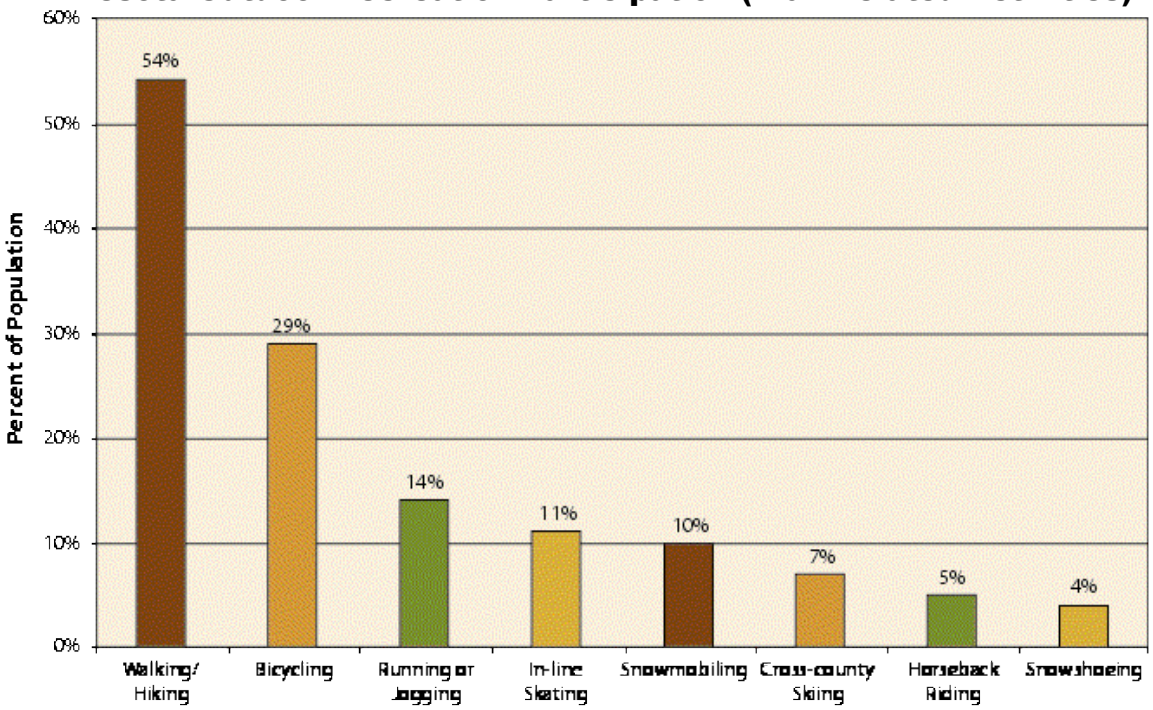
The open houses for the Dakota Rail corridor master plan were well attended by members of the local communities that border the trail. The survey that was sent to 330 landowners resulted in 173 completed and returned surveys. The survey was not intended to represent the opinions of the general public. Rather, the survey is representative of only those members of the public who took the time to fill out and return the survey.




Appropriate Activities for the Dakota Rail Corridor
# of Respondents
160
140
120
100
80
60
40
20
0
138
124
121
99
92
82
71
64
21
4
2
1
1
1
Walking
Jogging/Running
Bicycling
Dog Walking
XX-Skiing
Snowmobiling
In-Line Skating
Horseback Riding
ATV/ 4-wheeling
Hunting
Leave Alone
Snowshoeing
Wildlife
Light Rail


Participation in Trail Activities in Carver County
# of Respondents per Activity
1200
1000
800
600
400
200
0
32%
23%
20%
8%
8%
5%
<1%
<1%
Jogging/ Walking
Bicycling
* None
Cross-country Skiing
Roller Blading
Snowmobiling
Horseback Riding
Other
* In which of the following trail activities do you participate?
Source: Carver County Survey of residents, 1998.

2004 Minnesota Outdoor Recreation Participation (Trail-Related Activities)



Source: 2004 Outdoor Recreation Participation Survey of Minnesotans. Minnesota DNR. 2005.

10. PUBLIC AWARENESS

The Dakota Rail Trail, if approved and constructed, would be an exciting opportunity for Carver County and the adjacent communities. A grand opening celebration would be planned to officially open the trail to public use. The trail would be recognized as an integral component of the regional trail system and would be identified on all Carver County Park system maps and on the County's website. The trail would also be included in other regional and local trail maps and in Metropolitan Council's region-wide awareness program.

11. SPECIAL NEEDS

Carver County provides equal access for all users to its park and trail facilities. Park facilities are designed to meet or exceed guidelines established by the Americans with Disabilities Act. For instance, the Dakota Rail Regional Trail will be designed with slopes less than five percent along the trail and at entry points so that strollers, wheelchairs and bicycle trailers will be able to operate on the trail effectively.

The Carver County Division of Community Social Services provides a wide variety of services that reach out to assist the population of Carver County. Services include transportation assistance, child, adult and senior services.

Carver County provides reduced park entrance fees for qualified park users through the Park Pass Assistance program.

12. APPENDICES

Appendix A – Detailed Cost Estimate

Appendix B – Proposed Trail Alignment

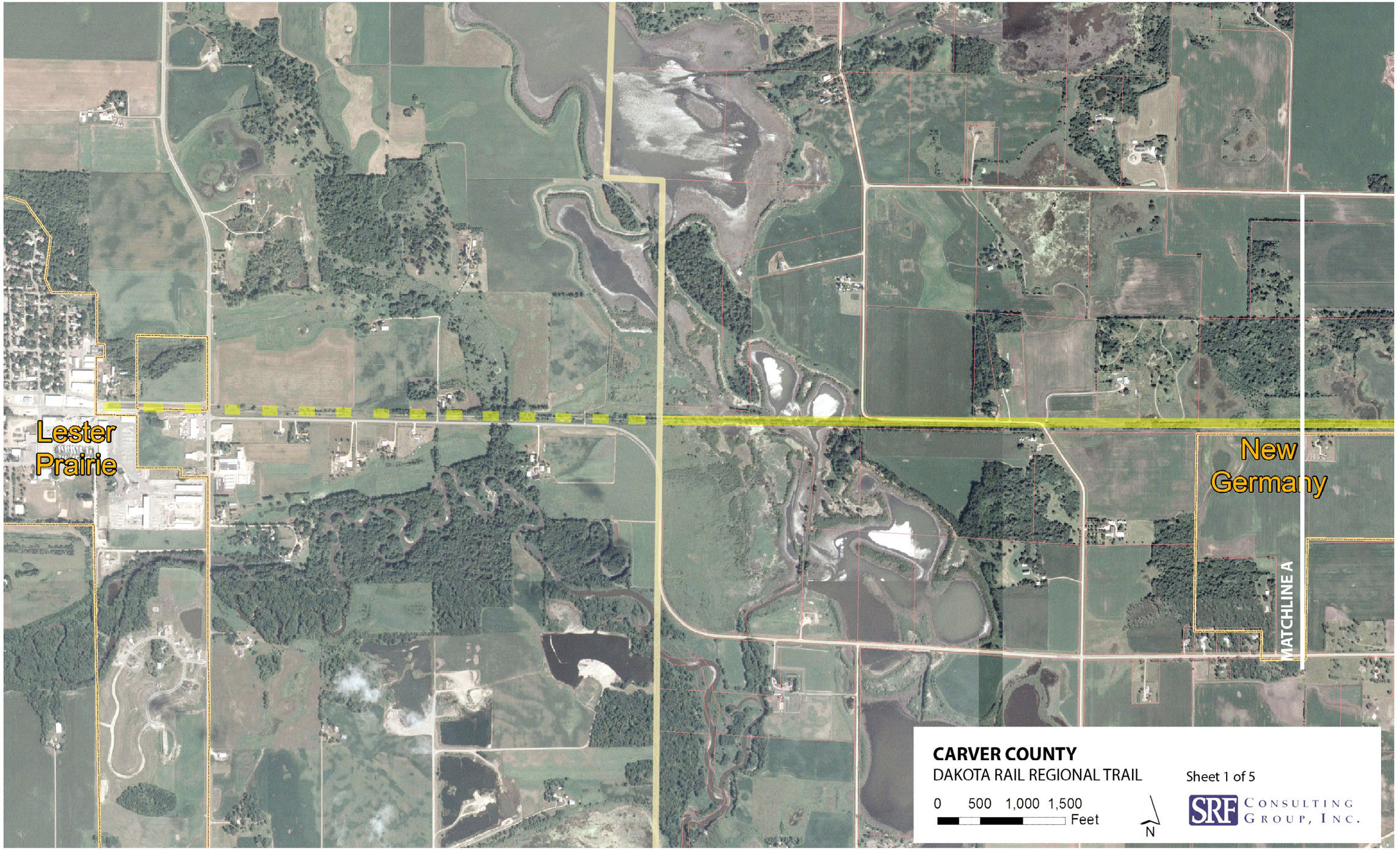
ENGINEER'S ESTIMATE: Bituminous Trail *(2006 construction dollars) - DRAFT*

NOTES	ITEM NUMBER	ITEM DESCRIPTION	UNIT	TOTAL ESTIMATED QUANTITY	EST. UNIT PRICE	TOTAL ESTIMATED COST
		GRADING / REMOVALS				
1	2021.501	MOBILIZATION	LUMP SUM	1	$56,000.00	$56,000.00
2	2101.501	CLEARING	ACRE	2	$3,000.00	$6,000.00
2	2101.506	GRUBBING	ACRE	2	$3,000.00	$6,000.00
		ROCK CONSTRUCTION ENTRANCE	EACH	6	$2,000.00	$12,000.00
		TREE / BRUSH TRIMMING	HOUR	60	$100.00	$6,000.00
3	2105.507	SUB GRADE EXCAVATION	CU YD	30,000	$6.00	$180,000.00
	2105.525	TOPSOIL BORROW (LV)	CU YD	3,750	$18.00	$67,500.00
		SUBTOTAL: GRADING / REMOVALS				**$333,500.00**
		PAVING				
	2211.503	AGGREGATE BASE (CV) CLASS 5	CU YD	14,600	$24.00	$350,400.00
	2340.501	BITUMINOUS WEAR MIX 2340, TYPE 41	TON	12,100	$50.00	$605,000.00
		SUBTOTAL: PAVING				**$955,400.00**
4		**BRIDGE MODIFICATIONS**				
		BRIDGE DECK MODIFICATIONS	SQ. FT.	5,500	$25.00	$137,500.00
	2557.501	WIRE FENCE DESIGN SPECIAL	LIN FT	870	$32.00	$27,840.00
		SUBTOTAL: BRIDGE MODIFICATIONS				**$165,340.00**
		DRAINAGE				
	2501.511	18" CS PIPE CULVERT	LIN FT	300	$20.00	$6,000.00
	2501.515	18" GS APRON	EACH	5	$180.00	$900.00
	2511.505	HAND PLACED RIPRAP	CU YD	80	$350.00	$21,000.00
		SUBTOTAL: DRAINAGE				**$27,900.00**
		SIGNAGE & STRIPING				
	2563.601	TRAFFIC CONTROL	LUMP SUM	1	$15,000.00	$15,000.00
5	2564.531	FURNISH AND INSTALL SIGN PANELS TYPE C	SQ FT	500	$50.00	$25,000.00
		MISCELLANEOUS TRAIL SIGNAGE	LUMP SUM	1	$8,100.00	$8,100.00
	2564.602	PAVEMENT MESSAGE (SPECIAL) - EPOXY	EACH	4	$250.00	$1,000.00
	2564.603	4" SKIP LINE YELLOW - PAINT	LIN FT	16,368	$0.50	$8,184.00
	2564.603	4" SOLID LINE WHITE - PAINT	LIN FT	250	$0.50	$125.00
	2564.604	ZEBRA CROSSWALK WHITE - EPOXY	SQ FT	2,400	$5.00	$12,000.00
		SUBTOTAL: SIGNAGE & STRIPING				**$69,409.00**
		LANDSCAPING				
6	2573.502	SILT FENCE, TYPE PREASSEMBLED	LIN FT	35,000	$3.00	$105,000.00
	2575.501	SEEDING	ACRE	30	$2,500.00	$75,000.00
	2575.523	WOOD FIBER BLANKET TYPE REGULAR	SQ YD	767	$6.00	$4,602.00
	2575.532	COMMERCIAL FERTILIZER ANAL. 10-0-10	POUND	140	$5.00	$700.00
	2575.608	SEED MIXTURE 30B	POUND	3,070	$5.00	$15,350.00
		TRAIL REST STOP	EACH	12	$10,000.00	$120,000.00
		SUBTOTAL: LANDSCAPING				**$320,652.00**
					SUBTOTAL	**$1,872,201.00**
					5% CONTINGENCY	**$93,610.05**
					(8%) DESIGN & ENGINEERING	**$149,776.08**
					(10%) CONSTRUCTION OBSERVATION AND CONSTRUCTION ADMINISTRATION	**$187,220.10**
					TOTAL PROJECT COST	**$2,302,807.23**

NOTES:

1. Includes survey and layout (assume 5%).
2. Assumes that majority of clearing and grubbing occurred during track removal project.
3. Common and subgrade excavation calculated for 12.4 miles, twelve feet wide, one foot deep.
4. Bridge figures are estimates based on combined trestle lengths. Assume 12 foot trail width and standard wire mesh railing treatment.
5. See page 11 for typical signage.
6. Assumes the equivalent of one side of the trail for half of the entire length of the trail.

APPENDIX B – PROPOSED TRAIL ALIGNMENT



CARVER COUNTY

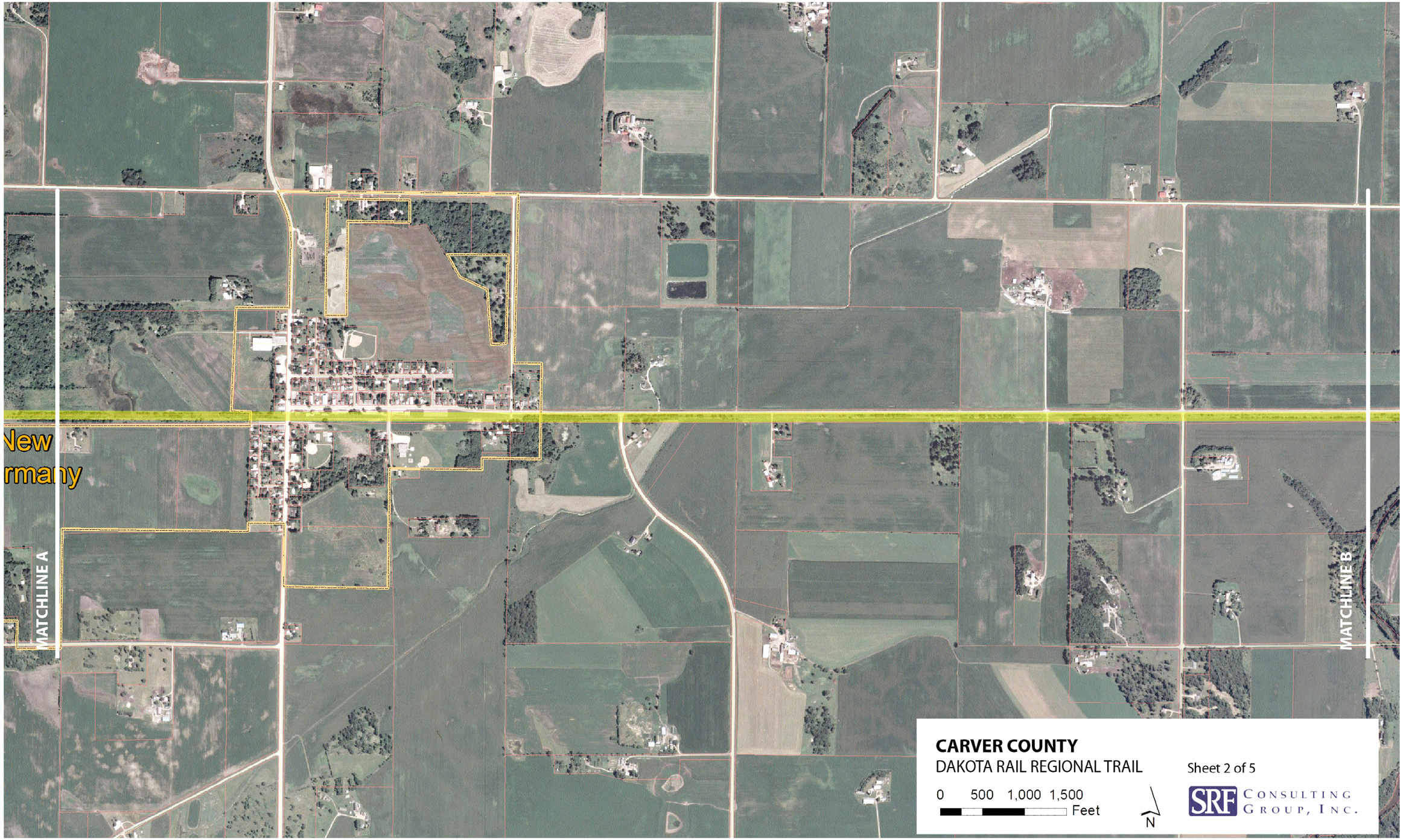
DAKOTA RAIL REGIONAL TRAIL

MASTER PLAN

APRIL 16, 2007

SRF CONSULTING GROUP, INC.

CARVER COUNTY



CARVER COUNTY

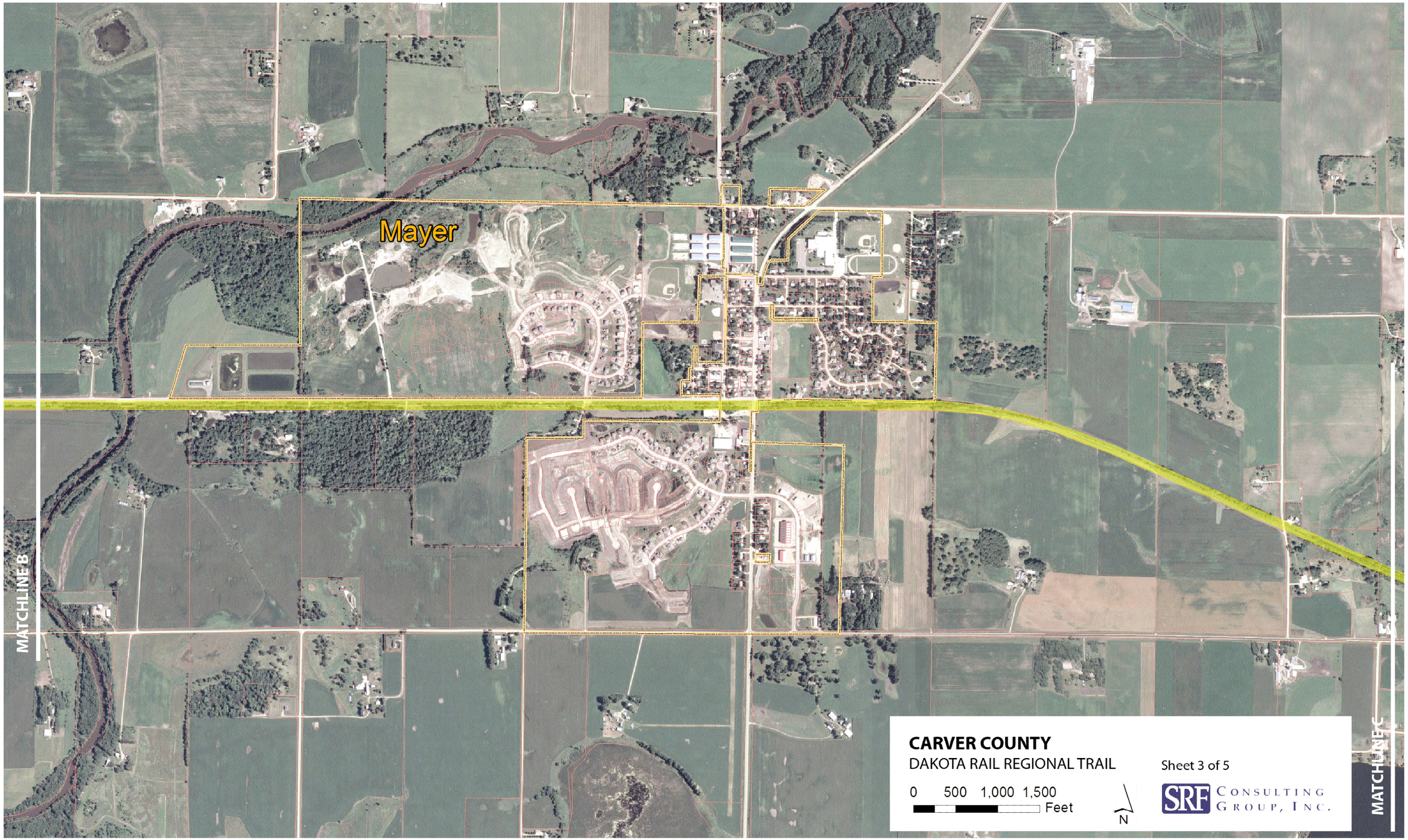
DAKOTA RAIL REGIONAL TRAIL

MASTER PLAN

APRIL 16, 2007

SRF CONSULTING GROUP, INC.

CARVER COUNTY



CARVER COUNTY

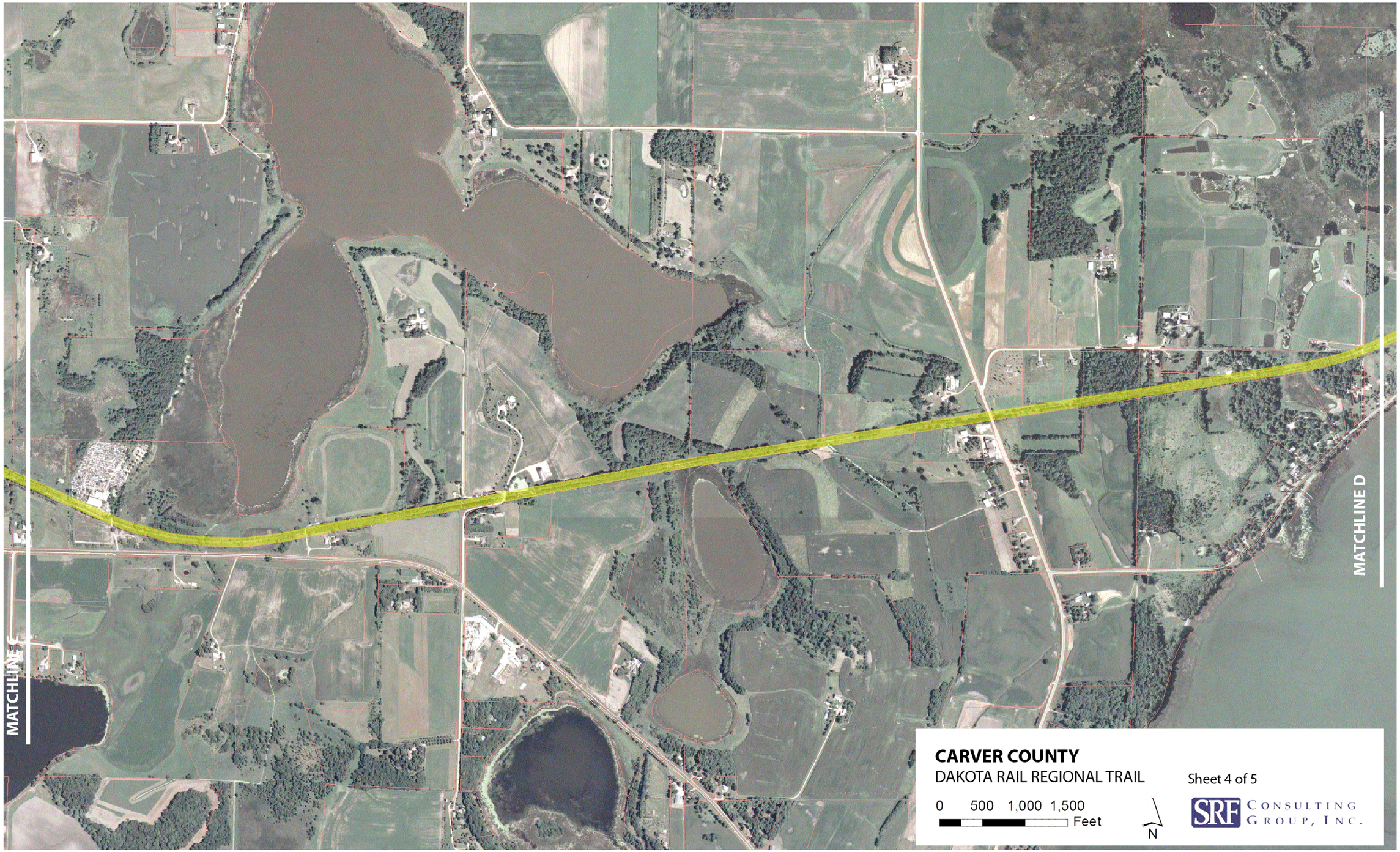
DAKOTA RAIL REGIONAL TRAIL

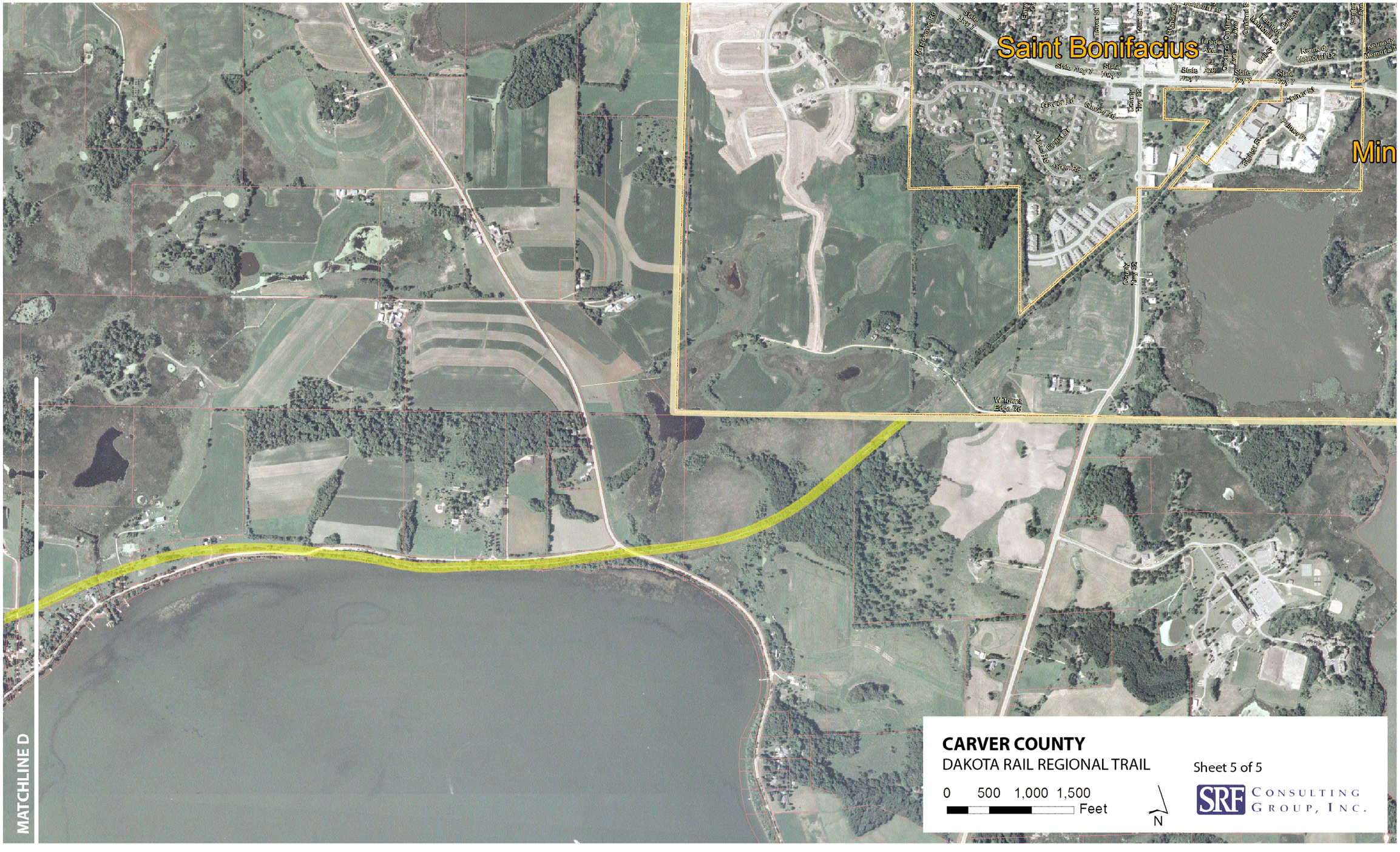
MASTER PLAN

APRIL 16, 2007

SRF CONSULTING GROUP, INC.

CARVER COUNTY


MATCHLINE C
MATCHLINE D
CARVER COUNTY
DAKOTA RAIL REGIONAL TRAIL
Sheet 4 of 5
0 500 1,000 1,500
Feet
N
SRF CONSULTING GROUP, INC.



CARVER COUNTY

DAKOTA RAIL REGIONAL TRAIL

MASTER PLAN

APRIL 16, 2007

SRF Consulting Group, Inc.

CARVER COUNTY