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WILLARD MUNGER STATE TRAIL ...AND WEST ADDITION AMENDMENT TO THE MASTER PLAN BARNUM TO CARLTON SEGMENT

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A black and white photograph of a steep, rocky hillside. The hillside is covered with sparse vegetation, including several prominent evergreen trees. The foreground shows a rocky, uneven ground surface.

to the 18th century family
first named [unclear]

**WILLARD MUNGER STATE TRAIL
...AND WEST ADDITION
AMENDMENT TO THE MASTER PLAN
BARNUM TO CARLTON SEGMENT**



**Minnesota Department of Natural Resources
Trails and Waterways Unit , June 1990**

MAY 30 1991

This amendment has been approved by the

Cyprus Wildlife Trail Program, 1998
Trails and Waterways

Adopted by the

Thanks to everyone who took the time to read and
and to the staff of the Cyprus Wildlife Trail Program

It is the policy of the Cyprus Wildlife Trail Program to
provide a safe and enjoyable experience for all

The Cyprus Wildlife Trail Program and the Cyprus Wildlife Trail Program
are committed to providing a safe and enjoyable experience for all

By the Cyprus Wildlife Trail Program and the Cyprus Wildlife Trail Program

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For more information regarding this amendment or other trail

Trail Information
Department
2000-2001
St. John's, A.F. 10000

For general information regarding the Cyprus Wildlife Trail Program

The Cyprus Wildlife Trail Program
2000-2001
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The Cyprus Wildlife Trail Program
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This amendment was prepared by:

Cynthia Wheeler, Trail Programs Section
Trails and Waterways Unit

Acknowledgements:

Thanks to everyone who took the time to participate in the public workshops and/or review and comment on the drafts of the amendment including:

Dan Collins, Gordon Kimball and Kevin Arends for their assistance at the public workshops and thoughtful review and comments on the drafts.

Tom Danger, Angela Anderson and Laurie Young for their helpful comments on the format and content of the text.

Barbara Burgum for all of her graphic abilities and suggestions.

Marge Hartman for her typing and layout of the text and her patience with the endless revisions.

Numerous private citizens for their support for the amendment and input at the public workshops.

Assistance from individuals in the local communities of Barnum, Mahtowa and Carlton for expediently providing community based information.

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Telecommunications Device for the Deaf: (612) 296-5424

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This document serves as an amendment to the Department of Natural Resources (DNR) *Master Plan for the Minnesota-Wisconsin Boundary Trail...and west addition* (1982)¹. It is separated into two parts. Part I describes and justifies the amendment, Part II outlines development recommendations and contains maps of the existing conditions and development recommendations for the proposed Barnum to Carlton segment.

As outlined in a 1981 Memorandum of Understanding between the DNR and the State Planning Agency regarding amendments to Master Plans for Units of the Outdoor Recreation System (Minnesota Statutes, 86A.01 - 86A.11), the DNR will describe and justify the proposed major amendment, assess its impacts on the overall plan, as well as the management unit, and show it to be consistent with the Outdoor Recreation Act (ORA). This document fulfills those criteria.

¹ In 1988 the Minnesota State Legislature changed the name of the Minnesota Wisconsin Boundary Trail to the Willard Munger Trail (Laws of Minnesota, 1988, Chapter 436). This document will refer to the *Master Plan for the Minnesota-Wisconsin Boundary Trail...and west addition* as the *Master Plan*.

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**WILLARD MUNGER STATE TRAIL
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AMENDMENT TO THE MASTER PLAN
BARNUM TO CARLTON SEGMENT**

PART I - THE AMENDMENT



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PART I - THE AMENDMENT

- o Minnesota DNR State Trail System
- o Willard Munger State Trail...and West Addition
- o Background
- o West Addition of the Willard Munger State Trail
- o Description of the Amendment
- o Justification for the Amendment
 - Primary Trail Considerations
 - West Addition of the Willard Munger State Trail (Recreational Resources)
 - Additional System Considerations
- o Assessment of Impacts on the Overall Master Plan and Management Unit
- o Public Input
- o Summary
 - Recommendation

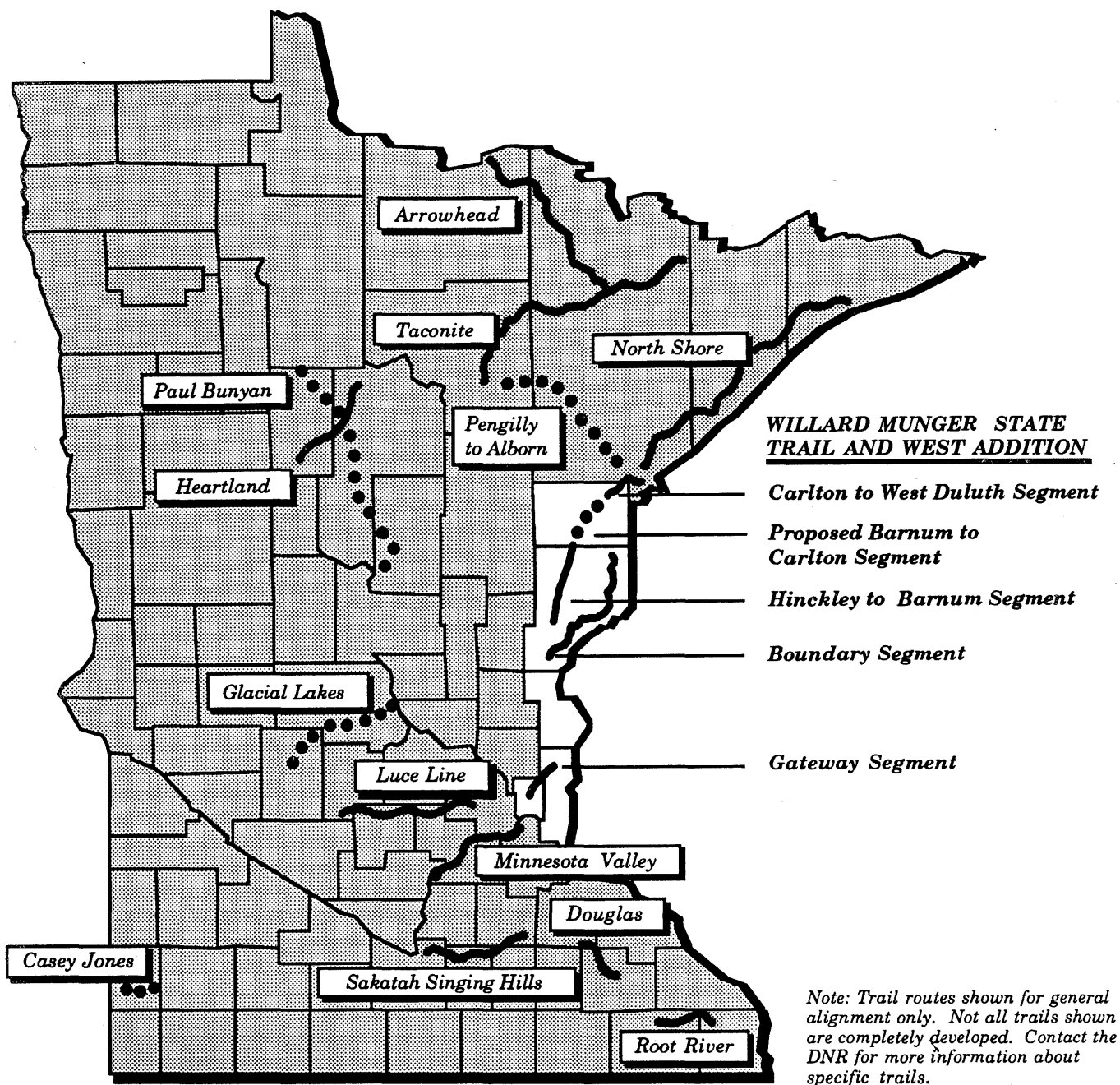
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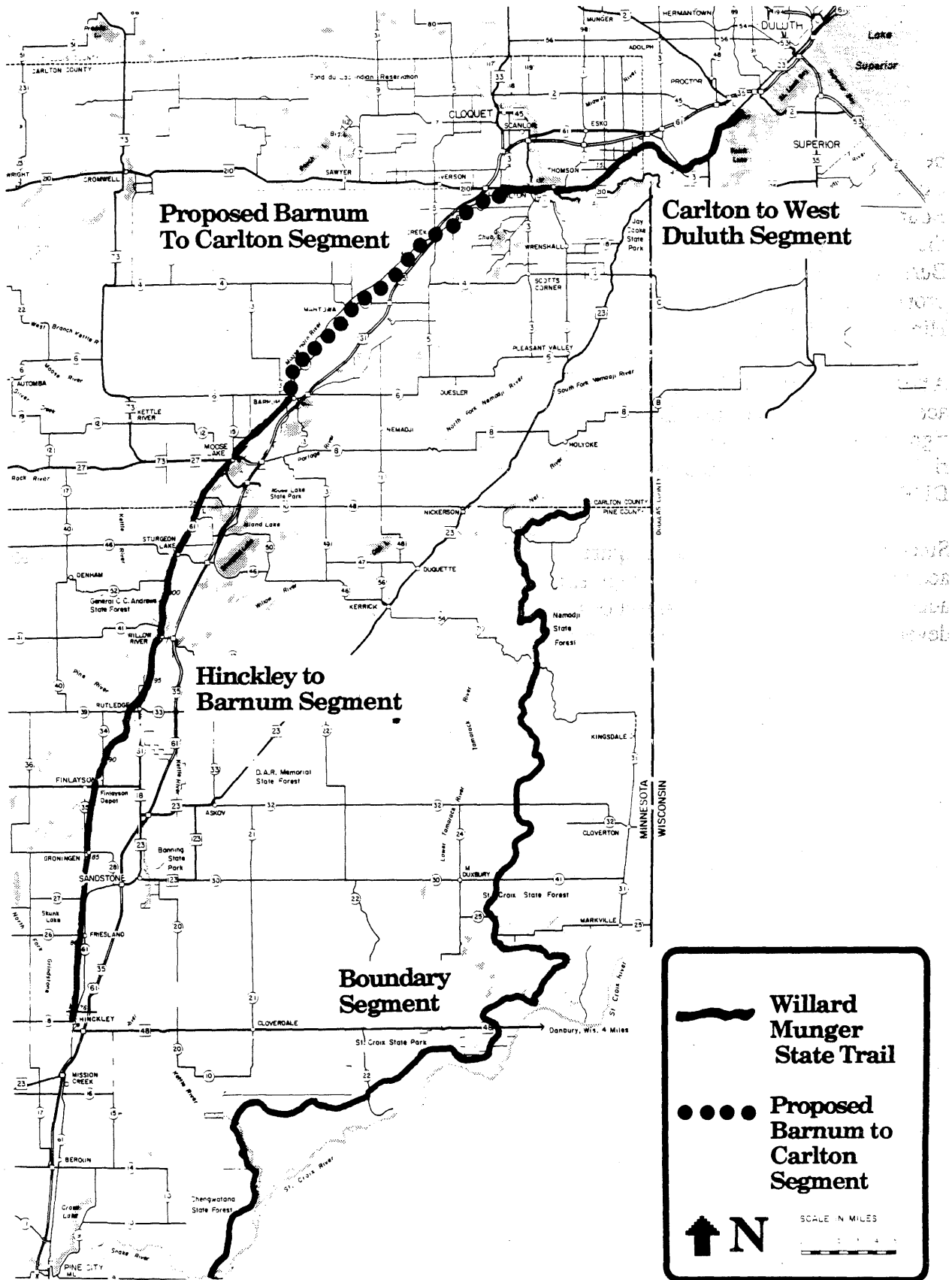


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MINNESOTA DNR STATE TRAIL SYSTEM

~ EXISTING TRAILS
... PROPOSED TRAILS



Willard Munger State Trail ...And West Addition

(Gateway Segment
shown on DNR State
Trail System Map)

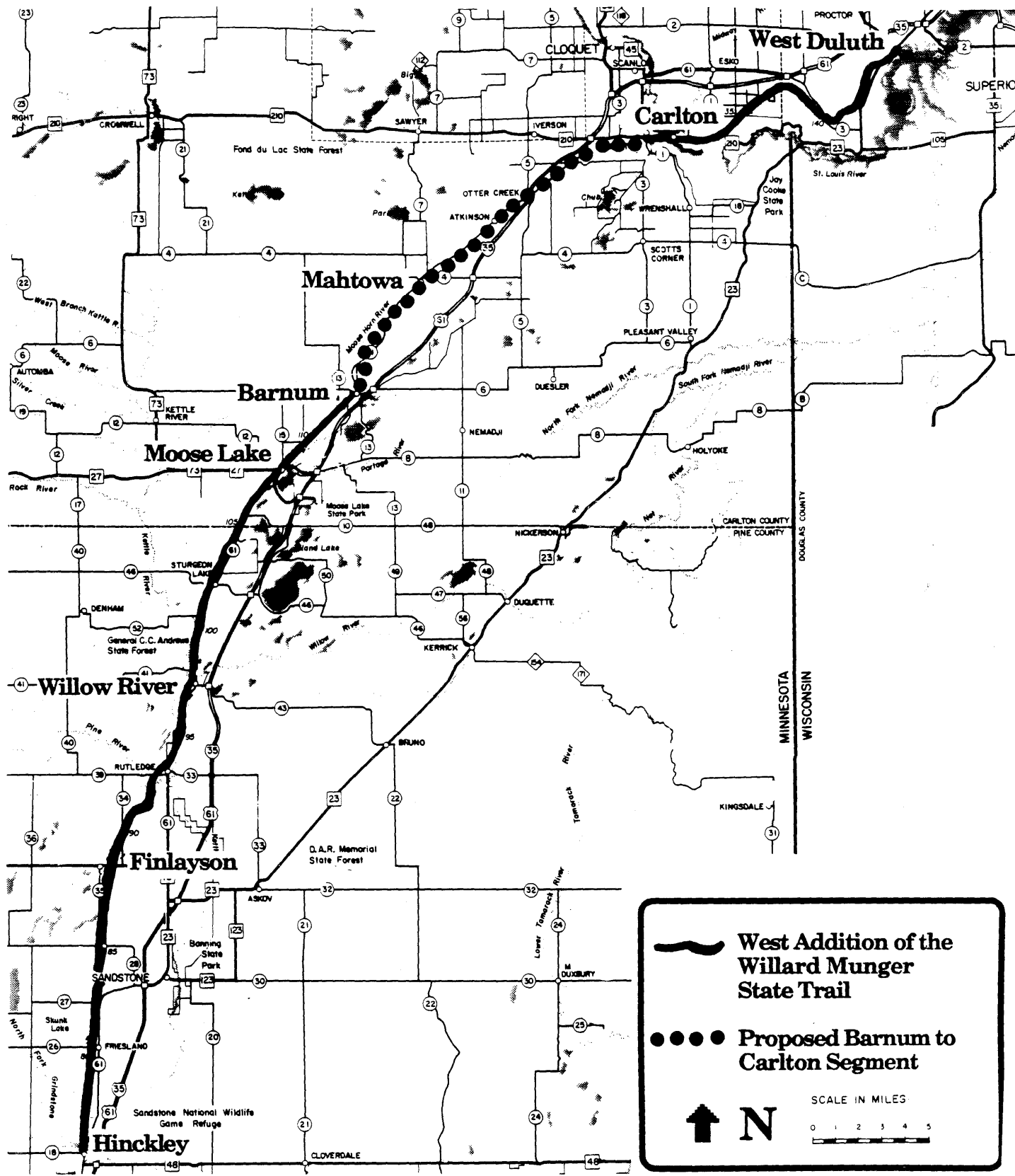
Background

As stated in the *Master Plan* (p.1)², "When Burlington Northern Inc. abandoned its rail lines between Hinckley and Moose Lake and between Carlton and West Duluth, the DNR expressed interest in the right-of-way for a western addition to the Minnesota-Wisconsin Boundary Trail. In March and September of 1980 the DNR acquired both rights-of-way for the trail." As the DNR started the planning process for the development of these segments, Burlington Northern Inc., abandoned its rail lines from Moose Lake to Carlton. The DNR proposed to acquire that segment; also to provide a continuous recreational trail from Hinckley to West Duluth.

After much public review and input, the DNR made the decision to proceed with the acquisition of the segment from Moose Lake to Carlton with the exception of the right-of-way from Barnum to Carlton. The decision was made not to acquire the right-of-way from Barnum to Carlton primarily because of significant local opposition to the DNR's proposal.

Since the development of the acquired segments, the DNR has re-evaluated its decision not to acquire the Barnum to Carlton segment and has decided, based on demand and the lack of adequate year-round trail connections, to amend the plan to allow for the acquisition and development of the Barnum to Carlton segment.

² Page numbers, unless otherwise noted, refer to the *Master Plan*.



West Addition of the Willard Munger State Trail

Description of the Amendment

The DNR proposes to amend the *Master Plan* to allow for the acquisition and development of an approximately 17.5 mile trail link between Barnum to Carlton. It is proposed that the trail link be located on the abandoned Burlington Northern right-of-way with two exceptions: a small segment of right-of-way which has been sold by the railroad to a private entity, and along the active tracks within the city of Carlton.

Justification for the Amendment

The *Minnesota DNR Trail Plan* (1984) proposed a framework by which to evaluate candidates for inclusion into a state trail system. The framework included primary trail considerations, based on the ORA, and additional system considerations. Following is an outline of that framework along with justifications of how the proposed Barnum to Carlton segment meets those criteria.

Primary Trail Considerations

(If considerations are satisfied, meets minimum criteria for designation as a state trail).

- A. **"Trails shall have significant cultural, historical, recreational, or scenic attributes; or connect, or have the potential to connect units of the outdoor recreation system, the national trail system, or other recreational trails."**

The proposed segment will provide an approximate 17.5 mile trail link between the Hinckley to Barnum segment and the Carlton to West Duluth segment of the west addition of the Willard Munger State Trail. These existing segments are two of the most popular biking and snowmobiling trails in the state. As a part of the west addition, it will provide access to General C.C. Andrews State Forest, Jay Cooke State Park, local bikeable roads or paved shoulders and grants-in-aid trails. In addition, development of the proposed segment will provide access under Interstate 35 approximately 1 1/2 miles north of the community of Atkinson. This access will enable trail users, particularly snowmobilers, to link up with existing trails in the surrounding areas. Wisconsin snowmobile trail opportunities will become accessible by linking the proposed segment with another proposed state trail which will run from Carlton to the state line. The DNR is currently negotiating with Burlington Northern to lease the portion of the grade from Carlton to Wrenshall with the long range goal of acquiring it. The DNR already owns the grade from Wrenshall to the state line.

Banning State Park and Moose Lake State Park are in close proximity to the trail and are accessible by utilizing local roads (see p.8). The communities of Barnum and Carlton provide additional attributes which are outlined on page 33 of the *Master Plan*.

B. "Trail location shall take into consideration public needs."

1988 summer survey results completed on the Hinckley to Moose Lake segment indicated that 23 percent of the trail users commented that they would like the trail completed, extended or widened. On the Carlton to West Duluth segment, the figure was 9 percent. These comments were volunteered by the respondents. A specific question on the survey regarding trail extension yielded nearly unanimous support. The need for an off-roadway trail in this location was also illustrated by the submittal of a petition to the DNR with close to 600 local signatures requesting such a trail and by attendance and input at two public meetings which were held by the DNR on August 30 and 31, 1989, to address the proposed acquisition (see pgs.12 - 14).

There has also been considerable demand by snowmobilers for access across Interstate 35 in this vicinity and connections with Wisconsin snowmobile trails.

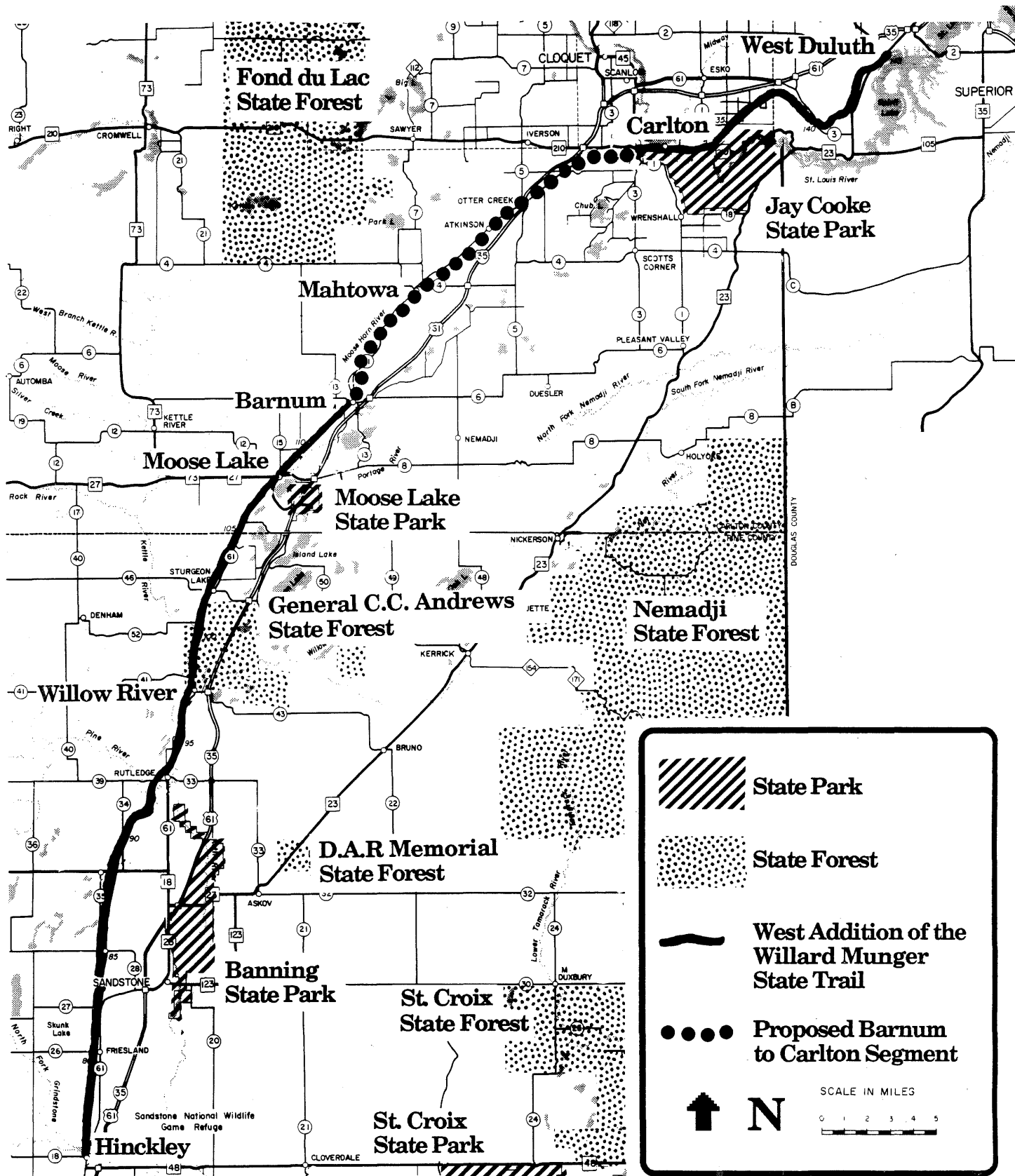
Additionally, the proposed segment fulfills a need by providing close-to-home recreational opportunities for the citizens of Duluth, the state's third largest population center.

C. "Trails shall utilize, to the greatest extent possible, public lands and rights-of-way."

The proposed Barnum to Carlton segment follows the original railroad grade of the Lake Superior and Mississippi Railroad which began in Saint Paul in 1868 and was completed in Duluth in 1870. The line became the Saint Paul & Duluth Railroad in 1877. In 1900 the route was acquired by Northern Pacific Railway. In 1970 the Northern Pacific merged with four other railroad companies to form Burlington Northern, Inc. This segment of line was abandoned by the railroad in 1980.

D. "Trail rights-of-way should be acquired for long term use."

There are many tangible and intangible benefits to acquiring the right-of-way for long term use. Those benefits include preserving a historic railroad corridor, creating and retaining public open space, providing opportunities for wildlife and vegetation management and providing a segment of a statewide trail system for recreational purposes. The DNR is proposing to acquire the right-of-way, in fee ownership, to complement and add to the existing system of state recreational trails.



**Recreational
Resources**

**West Addition of the
Willard Munger State Trail**

Additional System Considerations

(Considerations which should also be satisfied if DNR is to advocate state trail action)

A. "Trails shall be suitable for use over at least a two-day period."

The Minnesota DNR Trail Plan (p.105) states that the bulk of day use trail occasions should be satisfied by local facilities. It stated that for a trail to have statewide significance (i.e., to be a trail that people would travel some distance to use) it must meet some minimum length standards. It proposed that all state trails should provide at least a two day trail experience and proposed the following minimum guidelines:

	Point-to-Point Trail	Loop Trail
Hike	6 miles	12 miles
Ski	9 miles	18 miles
Horse	12 miles	24 miles
Bike	27 miles	54 miles
Snowmobile	54 miles	108 miles

The existing Hinckley to Barnum segment of the west addition of the Willard Munger State Trail is 37 miles in length. The Carlton to West Duluth segment is 14 miles long. By acquiring and developing the Barnum to Carlton segment, approximately 17 miles will be added to the west addition--creating a continuous point-to-point recreational trail from Hinckley to West Duluth of approximately 68 miles. This will provide the opportunity for both of the proposed predominant trail users (bicyclists and snowmobilers) to have a two-day trail experience. (See Part II - Development Recommendations-Predominant Uses.) Long range goals include extending the trail from Saint Paul to Duluth.

B. "Trail alignment is such that it would heighten awareness of that particular landscape region."

The proposed Barnum to Carlton segment lies within the Northern Pine and Lakes Recreational Landscape (The Minnesota DNR Trail Plan p. 103) which is described as "ranges of hills pocked with countless lakes, ponds and bogs." The alignment offers a typical panorama of the eastern edge of the region--numerous bogs and swamps, aspen and birch forest cover with scattered areas of conifer. Mahtowa, which means "high point" in Chippewa/Ojibway, is the highest elevation of the railroad grade between Saint Paul and Duluth.

C. "Corresponds with priority needs as indicated in Figure 45."

Figure 45 of The Minnesota DNR Trail Plan (p. 122) outlines the different types of trail uses and their priority for a particular recreational landscape region. In the Northern Pine and Lakes Recreational Landscape every listed type of trail use: hiking,

cross-country skiing, horseback riding, bicycling and snowmobiling, ranked as a high priority. With the exception of horseback riding and groomed cross-country ski trails, the Barnum to Carlton segment proposes to provide for those trail use priorities.

D. "Trail proposal would provide a significantly different experience from other trails in that landscape region."

The proposed Barnum to Carlton segment, as part of the continuous 68 mile west addition of the Willard Munger State Trail, will traverse General C.C. Andrews State Forest, Jay Cooke State Park and, via local roads, be accessible to two other State Parks--Banning and Moose Lake. Recreational opportunities such as canoeing along the Kettle River, camping, fishing and kayaking are nearby. There is also a variety of history and terrain along the trail from the great historic fires in Hinckley (1894) and Moose Lake (1918), to the Thomson formation rock outcroppings nearer Carlton and beyond. While existing grants-in-aid trails may offer some of the same experiences, the use is seasonal and limited to one type of trail use--snowmobiling. The fact that this trail proposal will offer a multi-use 68 mile continuous trail from Hinckley to Duluth makes the trail experience significantly different from any other in the landscape region.

E. "Trail proposal is in the proximity of lodging, public transportation and other tourism-related facilities."

Throughout the entire length of the west addition of the Willard Munger State Trail, opportunities are available for lodging, camping and public transportation (see *Master Plan*). Specifically as it relates to the proposed Barnum to Carlton segment, facilities are available as follows:

Barnum Area

Lodging is available in Barnum and on Little Hanging Lake just south of Barnum. Camping facilities are available adjacent to the Moose Horn River in a city administered park in Barnum, on Bear Lake at a county administered park just southeast of Barnum, and on Trout Lake approximately 4 miles east of Barnum at a privately owned campground. Barnum also offers amenities such as a public ball diamond, tennis courts, grocery stores, restaurants, and service stations. Although there isn't any public bus or passenger train service to Barnum, bus service, which also serves the Twin Cities and Duluth, is available to Moose Lake, approximately 4.5 miles south of Barnum. Interstate 35, which provides connections from the Twin Cities and Duluth, has an interchange just outside of the city limits, providing access to town. The *Master Plan* (p.129) mentioned a youth hostel on Hanging Horn Lake (located halfway between Moose Lake and Barnum and to the east of the railroad right-of-way) which served as a girls' camp during the summer. This is no longer in existence.

Mahtowa Area

The town of Mahtowa, approximately 6 miles north of Barnum, has a restaurant, a grocery store and a service station. The town is accessible via County Road 61.

Carlton Area

Lodging is available in Carlton and 2 miles west of Carlton at the junction of Interstate 35 and Highway 210 west. Camping facilities are available at a KOA campground, approximately 1 1/2 miles north of Carlton off County Road 1 and at Jay Cooke State Park, approximately 3 miles east of town. Other facilities available include grocery stores, service stations, bike rentals, restaurants, playgrounds and picnic grounds. Although there isn't any public bus or passenger train service to Carlton, bus service is available between Saint Paul and Duluth along Interstate 35. Highway 210 West provides access into Carlton off of Interstate 35.

Assessment of Impacts on the Overall Master Plan and Management Unit

The impact of this amendment on the *Master Plan* will be to reverse the position taken in the *Plan* which was not to acquire the right-of-way from Barnum to Carlton. This will affect the existing segments of the west addition of the Willard Munger State Trail by linking these segments together--thus creating a continuous recreational trail from Hinckley to West Duluth. This development should provide additional opportunities for trail users including access under Interstate 35 and hence increase the number of users on the existing segments. Additional trail mileage, as well as predicted increased trail use, will result in the need for increased expenditures for the operation and maintenance of the existing and proposed segments.

It has previously been illustrated that the amendment is consistent with, and meets the criteria of the Outdoor Recreation Act (ORA).

Public Input

As the proposal met the primary trail considerations and additional system considerations, the DNR held two workshops to gather public input as to what the problems and opportunities might be regarding the acquisition and development of the railroad right-of-way for trail purposes. The workshops were held at the following locations and dates:

1. Barnum
Barnum Community Center
August 30, 1989
2. Carlton
Carlton High School
August 31, 1989

The workshop at Barnum had approximately 50 people in attendance; the workshop at Carlton had approximately 20 people in attendance. Although no official count was taken of the different types of trail users present, it appeared, based on discussion, that a majority were snowmobilers, with bicyclists being second in number. The format of the workshops included: an overview of the DNR's proposal; a short slide presentation on the existing and proposed trail segments; and an opportunity for participants to voice problems and opportunities which they felt surrounded the proposal.

The results of the meeting are published below. Items have been ranked according to the number of people in attendance who felt the issue was a priority. People were allowed to vote for their five highest priority problems and opportunities at Barnum and their three highest at Carlton (this was based on the total number of problems and opportunities which were cited at each meeting). The numbers of votes are indicated in parenthesis.

BARNUM

PROBLEMS CITED

1. Lack of continuity in existing system (34)
2. No existing safe bike and snowmobile trails (31)
3. Lack of progress by Dept. of Natural Resources (DNR) (18)
4. Safety at Highway 61 crossing (15)
5. Safe road crossings (13)
6. Privacy fencing (10)
7. Possible adverse impact on area grants-in-aid trails (10)
8. Unauthorized use on railroad grade (8)
9. Trespass (7)
10. Status of existing leases (3)
11. Concern about liability of adjacent owners (3)
12. Not enough trail promotions by DNR (2)
13. Need for consistent signing (2)
14. Increasing road crossings across the grade (1)
15. Underlying ownership (private) threatens opportunity
16. Consistent uses on whole trail

OPPORTUNITIES CITED

1. Trail would provide safe bike and snowmobile trails (33)
2. Eliminates conflicts with Highway 61 (30)
3. Increased tourism opportunities (24)
4. Satisfy demand (23)
5. Trails would promote independent opportunities for kids (16)
6. Year-round opportunities (15)
7. Provide family enrichment (10)
8. Increase use on other segments (7)
9. Preserve future corridor options (7)
10. Small business opportunities (5)
11. Trail would be a time-saver for users (4)
12. Provides overall safe opportunity (3)

CARLTON

PROBLEMS CITED

1. Want railroad grade acquired speedily (15)
2. Orientation (signage, mileage markers, road signs) (14)
3. Safety (present situation is unsafe) (10)
4. Trail etiquette (example: can't hear bikers coming) (9)
5. Stripe centerline/separation of uses (9)
6. Need for enforcement (5)
7. Control excessive speed (5)
8. Notification of trail off of interstate (5)
9. Maintenance of trail (5)
10. Provide thorough visitor services (3)
11. Crossing Highway 61 (2)
12. User conflicts

OPPORTUNITIES CITED

1. Will provide continuous biking trail opportunity (14)
2. Post "Keep Right" signs (11)
3. Provides more opportunities for tourism (6)
4. Compliments existing systems (6)
5. Develop waysides along trail (5)
6. Take advantage of Jay Cooke State Park opportunities (5)

In summarizing the meetings, there was strong public support by those in attendance for the development of an off-roadway trail from Barnum to Carlton. Reasons cited included: lack of continuity in the existing system; safety; increased tourism opportunities; increased trail opportunities; and to satisfy demand. A number of participants felt that lack of progress by the DNR in acquiring and developing the abandoned right-of-way was a problem and wanted it acquired speedily.

Summary

Part I described and justified the amendment and explained how the amendment fits into the state trail system by illustrating that the proposal meets the criteria as presented in the ORA and the Minnesota DNR Trail Plan. Part I also identified the public need and demand for the proposed amendment, assessed the impacts of the amendment on the *Master Plan* and the two existing trail segments, and included a summary of two workshops which were held to gather public input.

RECOMMENDATION:

The DNR Trails and Waterways Unit hereby amends the *Master Plan* to include the acquisition and development of the abandoned Burlington Northern Railroad right-of-way, and other property, as necessary, to establish a multi-use recreational trail link from Barnum to Carlton.

Development recommendations are presented in Part II of this amendment.

**WILLARD MUNGER STATE TRAIL
...AND WEST ADDITION
AMENDMENT TO THE MASTER PLAN
BARNUM TO CARLTON SEGMENT**

PART II - DEVELOPMENT RECOMMENDATIONS



PART II - DEVELOPMENT RECOMMENDATIONS

- o Overall Objective
- o Trail Alignment
- o Predominant Uses
- o Treadway
- o Bridges
- o County Road 61 Crossing
- o Public and Private Road Crossings
- o Accessibility for those with Disabling Conditions
- o Support Facilities
 - Access Points
 - Waysides
 - Tourism Promotion
- o Visitor Services Concept
- o Vegetation Management
- o Managing User Conflicts
- o Hunting
- o Fencing
- o Maintenance and Operation
- o Maps
 - Site Analysis and Existing Conditions
 - Development Recommendations

Overall Objective

To provide a multi-use recreational trail from Barnum to Carlton which will link together the existing segments of the west addition of the Willard Munger State Trail and will emphasize the natural and historic features of the area.

Trail Alignment

The alignment, as proposed in this amendment, is approximately 17.5 miles in length. It follows the abandoned Burlington Northern Railroad right-of-way from Barnum to Carlton. Beginning just west of Barnum where the right-of-way intersects with Carlton County Road 6, it proceeds along the right-of-way in a northwesterly direction crossing over the Moose Horn River and intersects with numerous public and private road crossings. The right-of-way continues through the towns of Mahtowa and Atkinson. Approximately 3/4 of a mile north of Atkinson the abandoned grade is in private ownership for roughly 3/4 of a mile. The DNR has acquired property outside of the privately owned abandoned right-of-way which will provide a connection with the rest of the alignment. The alignment proceeds along the right-of-way crossing under Interstate 35 and into the city of Carlton running adjacent to an active railroad yard as it approaches Carlton. The alignment ends where the abandoned right-of-way intersects with County Road 1 at the south edge of the city of Carlton. The alignment crosses over Little Otter Creek on four occasions along the approximately 17.5 mile stretch, and passes by several outcroppings of Thomson formation.

Predominant Uses

Trail uses should correspond with the allowed uses on the other segments of the west addition of the Willard Munger State Trail.*

Summer: Primary Use: Bicycling
 Secondary Use: Hiking/Walking

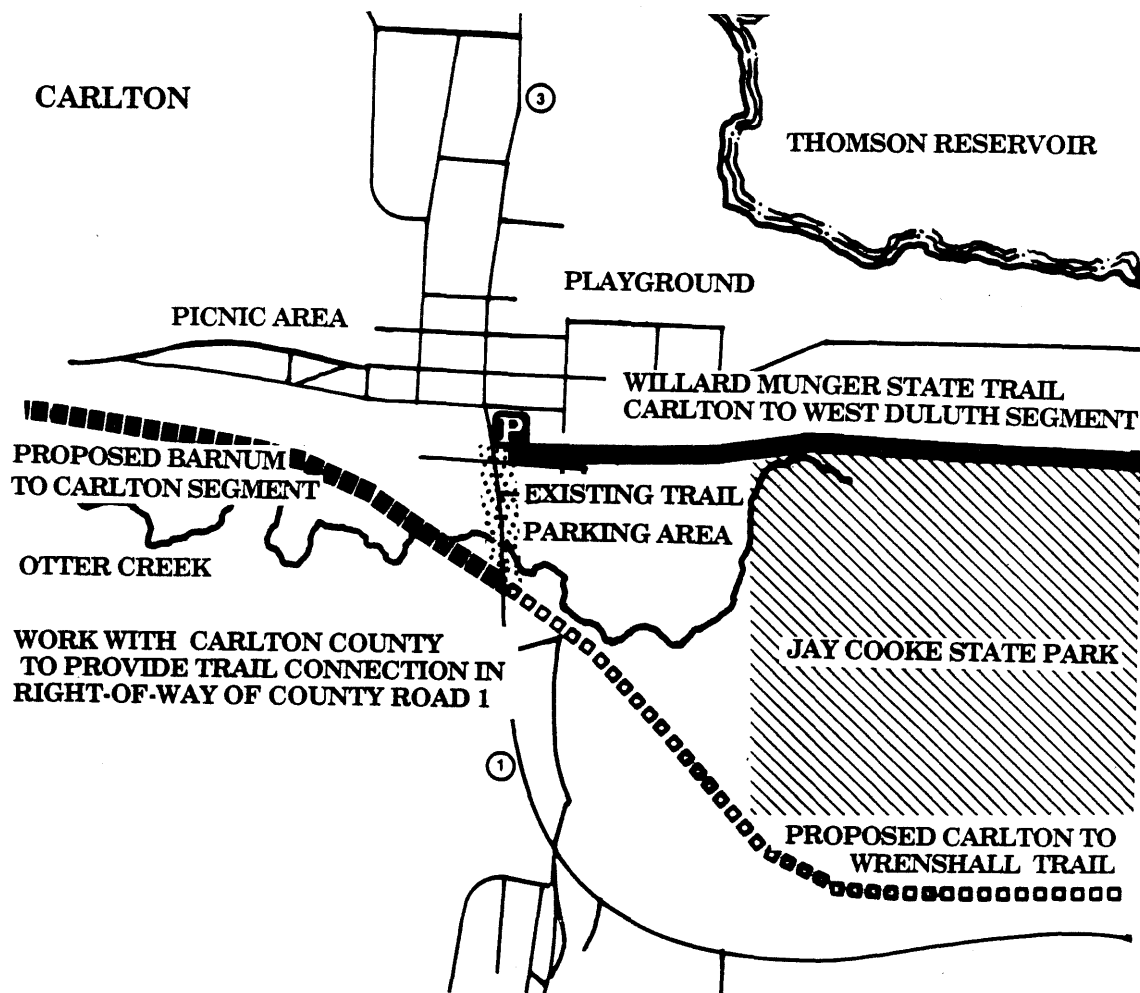
Winter: Primary Use: Snowmobiling
 Secondary Use: Cross-Country Skiing
The *Master Plan* recommends that the opportunity be given to cross-country ski the trail with emphasis given to creating good loop trails for skiers in nearby DNR management units or local recreation areas. The *Master Plan* also recommends linking the loop trails to the Willard Munger State Trail and west addition and its support facilities whenever feasible and compatible.

* Indicates development recommendation.

Treadway

A single bituminous treadway continuous with the existing trail segments of the west addition will be developed between Barnum and Carlton on the abandoned Burlington Northern right-of-way for bicycling, hiking, and snowmobiling. The general width of the treadway will be 8 feet with 2 foot shoulders. *

The portion of the abandoned Burlington Northern railroad grade that the DNR is proposing to purchase under this amendment ends on the west side of County Road 1 in Carlton, several hundred feet south of where the existing Carlton to West Duluth segment of the trail begins. It is recommended that the DNR work with Carlton County to provide a clearly delineated pedestrian crosswalk across County Road 1, and to develop a pathway in the County Road 1 right-of-way that will link the two segments of the trail together. *



Bridges

The segment of the abandoned Burlington Northern railroad right-of-way from Barnum to Carlton contains five bridges. The first bridge crosses over the Moose Horn River just north of Barnum. It is approximately 90 feet in length and has concrete abutments. The remaining four bridges are wooden trestles approximately 20 feet in length and cross over Little Otter Creek at various points between Barnum and Carlton.

All five of these bridges will need to have decking and side railings installed prior to the trail being fully operational. *

County Road 61 Crossing

Approximately 2.5 miles north of Barnum the abandoned railroad grade is bisected by the raised grade of County Road 61. Concerns regarding the safety of crossing County Road 61 were raised at both public workshops, as was the opinion that the off-roadway trail would eliminate conflicts with the County Road. Due to the steepness of the County Road 61 backslope and the fact that the highway curves at this location (providing short sight lines), it is recommended that the DNR work with the county to create a tunnel under the highway. This is recommended to retain the continuity of the railroad grade as well as for safety and accessibility reasons. The tunnel should be designed to accommodate trail users and be of adequate height and width for trail maintenance equipment, including snowmobile trail groomers. If this recommendation proves to be structurally or financially unfeasible, other alternatives will need to be examined.*

Public and Private Road Crossings

The DNR Trails and Waterways Unit has a policy that deals with existing and the establishment of new, public and private road crossings of abandoned railroad rights-of-way which are converted to recreational use. This policy will be in effect once the DNR has acquired the railroad right-of-way. Prior to acquisition of the right-of-way by the DNR, in order to maximize the recreational value of the proposed trail, the DNR should work with the railroad to decrease the rate of permits being granted for new individual driveways and to decrease the number of road crossings already in existence. Additionally, it is recommended that once acquisition is completed, in order to protect the continuity of the trail and trail experience and to maximize trail safety, public and private road crossings be kept to a minimum. The DNR should work with public and private entities to eliminate or consolidate unnecessary road crossings. *

Accessibility for those with Disabling Conditions

Abandoned railroad grades, when developed as trails, can offer unique and desirable outdoor recreation opportunities for people with disabling conditions. To maximize these opportunities it is recommended that the treadway and its main facilities be designed to be barrier free. Special attention should be given to providing minimal slopes, level surfaces,

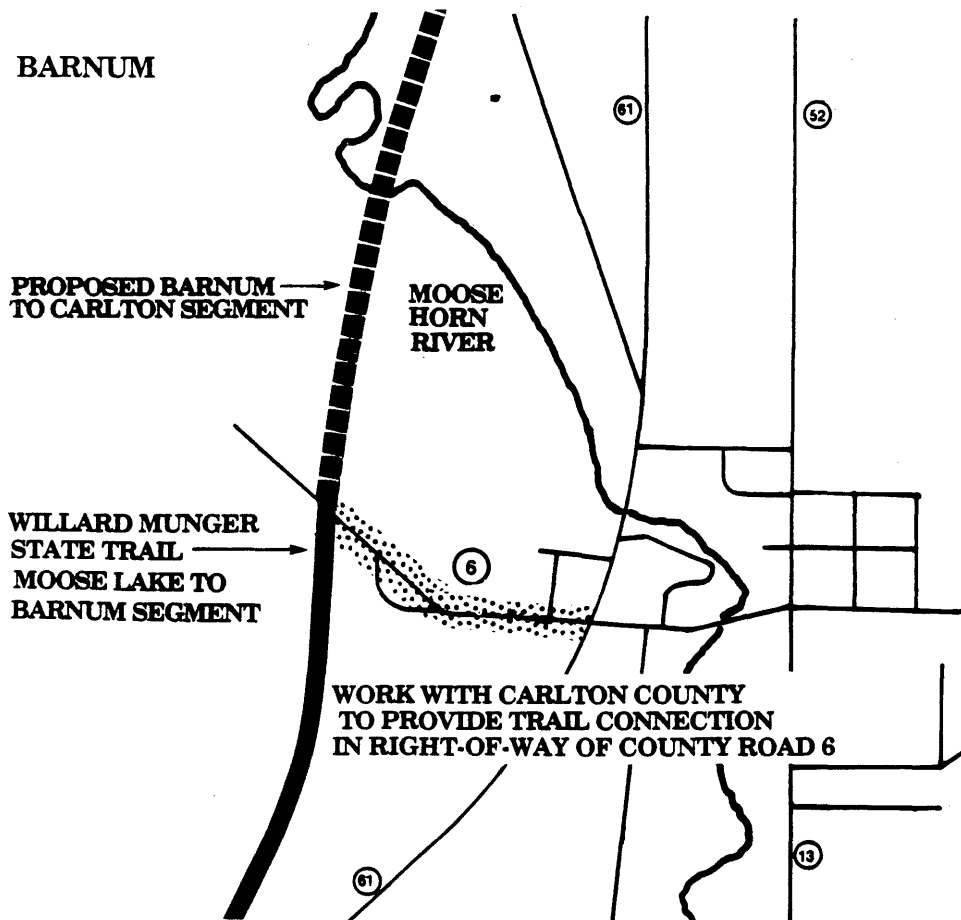
adequate door widths to restrooms, and handrails where appropriate. Federal and state accessibility standards should be followed. Communities which adjoin the trail should be encouraged to provide barrier free access to community services such as trail linkages, restaurants, picnic and camping areas, etc. *

Support Facilities

Access Points

As stated in the *Master Plan*, "in general, access points are to be located in towns...and in areas where existing recreation facilities can be used and expanded."

Currently trail parking areas along the west addition are located at Hinckley, Carlton and West Duluth. The *Master Plan* proposed a major access facility at the southern limits of Moose Lake (p. 128) and a minor access at Barnum (p. 129). This amendment concurs with those recommendations and also recommends the DNR work with Carlton County to provide a trail connection in the right-of-way of County Road 6 from the minor access point into Barnum.



It is also recommended that a minor access be located at Mahtowa which would support a small parking area, and directional and informational signage. Additionally, it is recommended that the existing gravel parking area at Carlton be paved and landscaped due to its high visibility and projected use increase once the development of this segment is completed.*

Potential opportunities have been identified on the Development Recommendations Map for connecting the proposed Barnum to Carlton segment with County Roads 140, 144, 5 and 61 to allow greater and more convenient access to the trail for bicyclists. The map also illustrates where existing grants-in-aid snowmobile trails cross or come in close proximity to the Barnum to Carlton segment providing the potential for trail access. The DNR should continue to work with the administrating agencies to promote and develop access to the trail for bicyclists and snowmobilers.*

Waysides

Both the Moose Horn River and Little Otter Creek are designated trout streams (Commissioner's Order 2062). Because these streams offer an opportunity for enjoyment and recreation, it is recommended that an overlook or pedestrian access be provided at the Moose Horn River at Bridge #1. A minor wayside area should be provided at Little Otter Creek near Bridge #3 just north of Gillogly Road. Due to the proximity of this site to a residence, the area staff should consult the occupants before final siting of site amenities. It is also recommended that a small wayside rest area be developed approximately 1.5 miles south of Carlton near a large rock outcrop of Thomson formation. This location may also provide opportunities for an interpretive display.

Tourism Promotion

Participants at the initial planning workshops expressed the desire to promote and increase tourism in their communities. This desire is consistent with the DNR's goal of providing enjoyable trail experiences. The Department recognizes that the quality of the experience depends, in large measure, on how welcome users feel as they travel through the area. Communities can greatly impact attendance levels on this trail by delivering the "little things" that ultimately determine whether a user will recommend the trail to others.

For communities to determine what services to develop or expand, it is important that they begin to think like trail users, i.e., "Where can I find a soft drink?" "I wish there was a restaurant open on Sunday." "I hope the hardware store/gas station has tire repair kits." "What do you mean, there isn't any gas available after 8:00 p.m.?" etc., etc. By thinking like the trail user, the communities/individual businesses can identify areas to improve service to the trail user. The payoff in increased hospitality could be that more use will be generated, more products sold, more meals served, and more memorable trail experiences will be provided.

Communities can also improve the environment for trail users by providing support facilities such as picnic shelters, water fountains, restrooms, wayside rests, bicycle racks and camping areas. It is recommended upon review and approval by the DNR of appropriate community proposed support facilities within the right-of-way, that the DNR cooperate in the development of such facilities. The purpose of this recommendation is to help support those communities who are willing to undertake such projects and to provide an incentive to those communities who may desire additional facilities, but are unable to provide them without assistance. *

Finally, it is recommended that the local Chambers of Commerce and the towns along the trail consider working together to promote the trail and local trail support facilities. An example of the success of local communities promoting trails can be found along the Root River State Trail in southeastern Minnesota with their formation of what is called "Trail Towns." They develop literature that treats the trail as a whole, they sponsor rides and other special events, and they communicate regularly with the DNR in terms of their needs. *

Visitor Services Concept

(The visitor services concept outlines a plan for providing information on the trail location, area services, safety, trail rules, and the natural and cultural resources of the area. A more detailed plan and specific recommendations for this segment will be made in a subsequent Visitor Services Plan for the trail alignment from Hinckley to Carlton).

Trail promotion was raised as an issue at the two initial public meetings. People wanted to promote the trail from major roads and wanted user information once they got to the trail. To meet these needs and as part of the DNR's continuing effort to provide quality facilities, the following recommendations are made:

- It is recommended that the DNR work with the Minnesota Department of Transportation and the Carlton County Highway Department to promote and direct people to the trail from Interstate 35 and County Road 61.*
- It is recommended that orientation signs be installed (mileage markers, road signs, "you are here" maps, etc.) that are consistent with the DNR's Sign Manual and the rest of the west addition of the Willard Munger State Trail. *
- It is recommended that maps be installed in locations where the trail passes through a community which depict the layout of the town and the area services that are available. *
- It is recommended that trail courtesy signs (informing trail users to keep right, to notify others when passing, etc.) and trail rules be located at major access points along the trail. *
- It is recommended that information on the natural and cultural resources of the area be displayed along the trail where appropriate. The information should be as unique to the area as possible to create a "sense of place" different from other trail experiences. The west addition of the Willard Munger State Trail offers a diversity of history and terrain from the 1894 Great Hinckley Fire to the magnificent rock outcroppings between Carlton and Duluth. The Barnum to Carlton segment is a transition trail, linking these segments and themes together. *

Vegetation Management

Vegetation management for the Barnum to Carlton segment should be consistent with the recommendations presented in the *Master Plan* (p. 143). *

Managing User Conflicts

Due to the multi-use nature of the proposed Barnum to Carlton segment and the varying speeds trail users travel, a certain amount of user conflict is expected to occur.

Conflicts can arise within the same user group (such as bicyclists who are traveling at different speeds), or between different uses. Examples include pedestrians walking three abreast making it difficult for bicyclists to pass, and bicyclists not warning pedestrians that

they are approaching from behind. Conflicts can also occur between snowmobilers and cross-country skiers.

These conflicts can be minimized by employing a variety of means: using informational signage (as discussed under the Visitor Services Concept), enforcing rules and regulations, increasing the trail users' awareness of trail etiquette through the use of maps and brochures, and informing trail users about other trail opportunities in the area which may help to disperse use.*

Hunting

Hunting and trapping are permitted uses on all existing state trails (Minnesota Rules 6100.3000-6100.4300), including those located on abandoned railroad rights-of-way. However, hunters are prohibited from discharging a rifle, shotgun, or bow and arrow upon, over or across the trail treadway at any time. On the Barnum to Carlton segment, with the proposed primary uses being bicycling and snowmobiling, it is recommended that the level of these uses be monitored, particularly during the hunting season. If conflicts arise between hunters and the predominant trail users, consideration should be given to prohibiting hunting within the trail right-of-way. *

Fencing

Fencing along the Barnum to Carlton segment will generally be consistent with DNR's fencing policy and as presented in the *Master Plan* (pp. 150 - 151). *

Maintenance and Operation

The addition of the Barnum to Carlton segment will increase the trail length of the West Addition of the Willard Munger Trail from approximately 51 miles to approximately 68.0 miles--an increase of approximately 25 percent. Funding allocations for the maintenance and operation of this trail should reflect the increased trail length and take into account any additional equipment or staffing needs.

It is recommended that the segment be operated and maintained by DNR's Region 3 Area C, Trails and Waterways Unit, Area Trails and Waterways Supervisor at Moose Lake. *

Addendum: Public and Departmental Review

The preceding amendment to the *Master Plan* was presented to the public at an open house held in Barnum at the Barnum Community Center on September 24, 1990. Approximately 35 people participated. Most urged speedy adoption of the plan. Many of those present said they enjoyed using the already completed segments of the Willard Munger State Trail for hiking, biking and snowmobiling. The most frequent comment regarding the proposal to develop a trail between Barnum and Carlton was "I think it's a good idea. How soon will this be built?" Several of the participants said that they had originally been opposed to the construction of this segment years ago, but had changed their minds, and wanted to show their support for the plan. Many people expressed dissatisfaction with the lack of a trail segment from Barnum to Carlton, saying that the present situation presents hazards, and that the lack of continuity is confusing to users of the other segments of the Willard Munger Trail.

There was support for the idea of a tunnel under Carlton County Highway 61 where the highway bisects the abandoned railway grade, since it was felt that an at-grade intersection would be unsafe.

Concerns were expressed regarding safety/liability issues at private crossings, and repairs to the substantial damage caused by a flash flood to the Carlton to West Duluth portion of the Willard Munger State Trail. In general, the attitude of those present was one of approval for this amendment to the *Master Plan*.

This amendment has been reviewed and approved by the DNR Commissioner's Council of Technical Representatives at the July 17, 1990 meeting and by the DNR Commissioner's Council at the August 13, 1990 meeting.

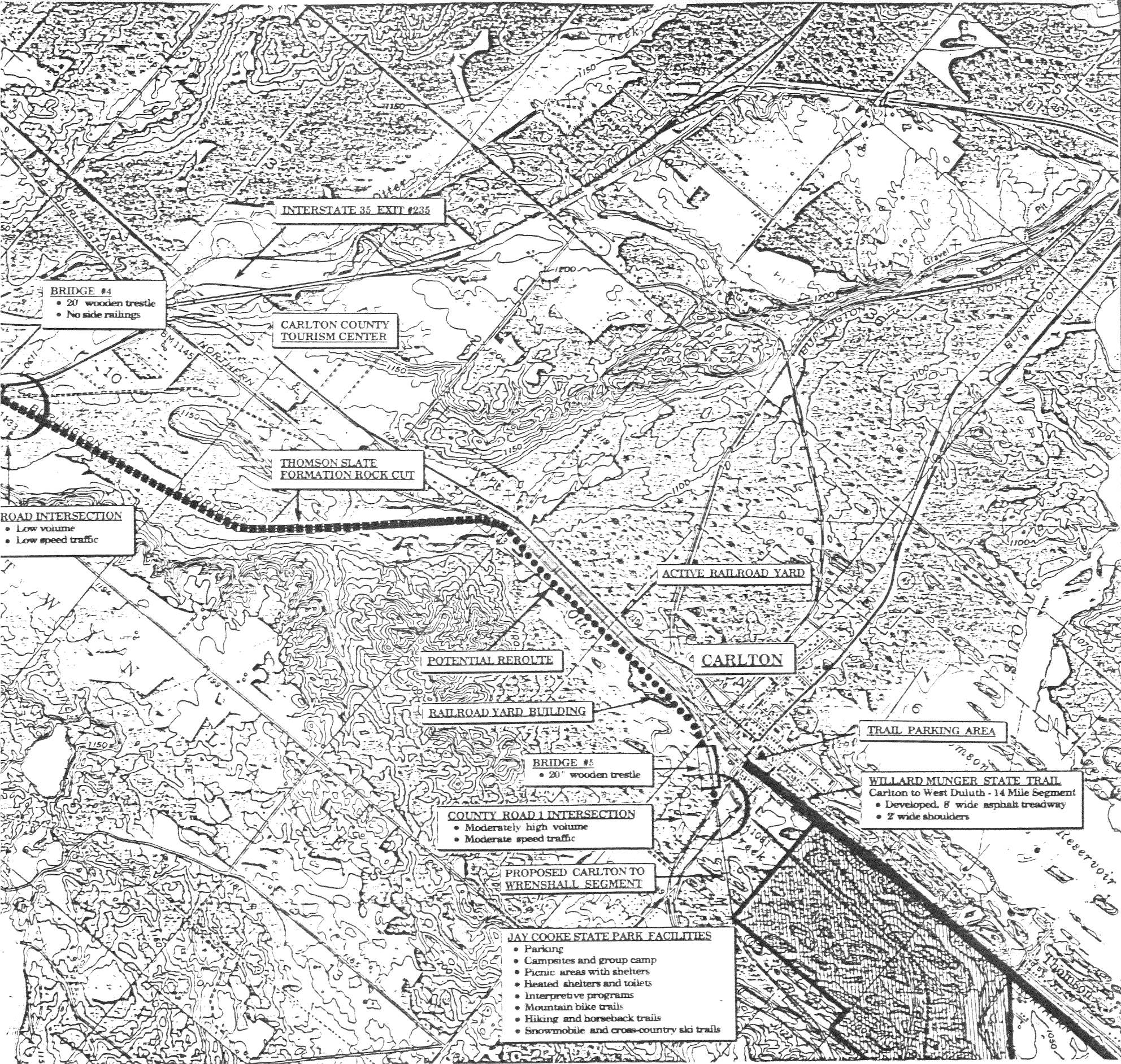
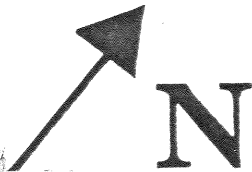
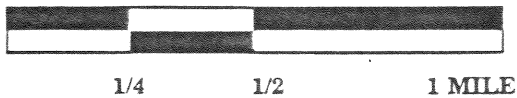
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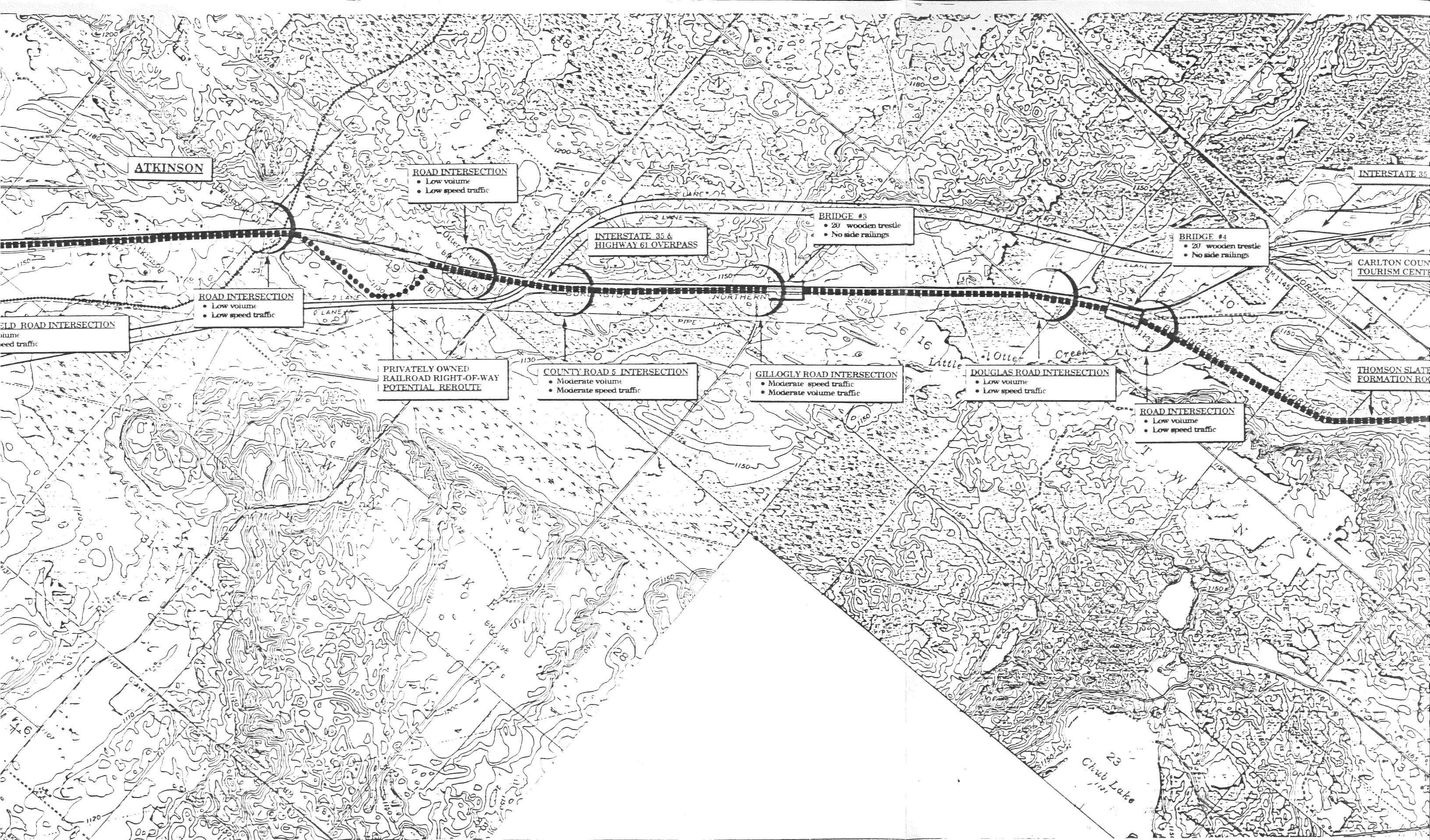
Willard Munger State Trail and West Addition

Proposed Barnum To Carlton Segment

Legend

- Existing Willard Munger State Trail
- Abandoned Railroad Right-of-way
- Potential Reroute
- Road Intersection
- Bridge
- Grant-in-aid Snowmobile Trails
- Elevation Contours - 10 Foot Interval
- Wetland
- State Park
- State Forest





ATKINSON

ROAD INTERSECTION
• Low volume
• Low speed traffic

INTERSTATE 35 &
HIGHWAY 61 OVERPASS

BRIDGE #3
• 20' wooden trestle
• No side railings

BRIDGE #4
• 20' wooden trestle
• No side railings

INTERSTATE 35

CARLTON COUNTY
TOURISM CENTRE

THOMSON SLATE
FORMATION ROAD

ROAD INTERSECTION
• Low volume
• Low speed traffic

OLD ROAD INTERSECTION
• Low volume
• Low speed traffic

PRIVATELY OWNED
RAILROAD RIGHT-OF-WAY
POTENTIAL REROUTE

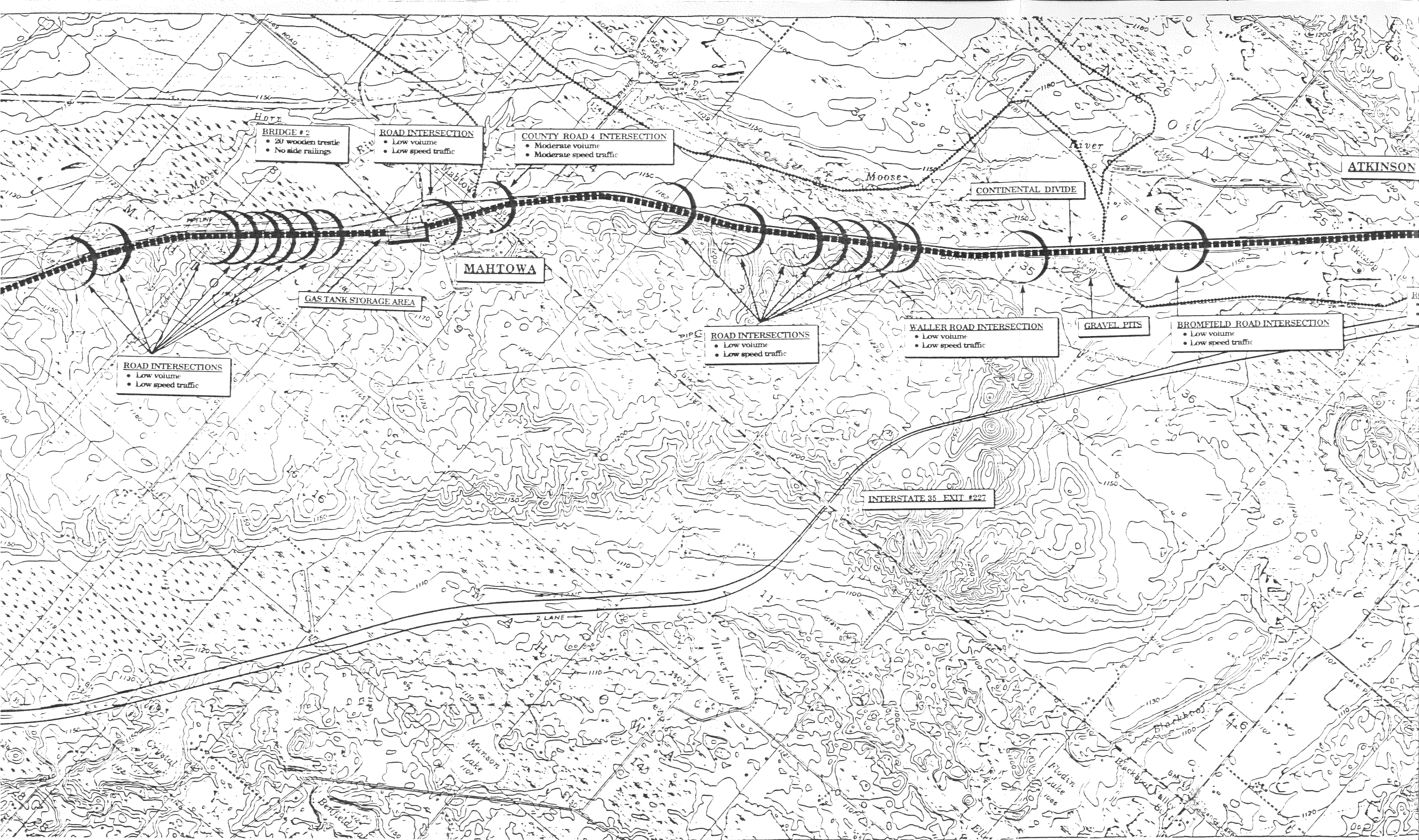
COUNTY ROAD 5 INTERSECTION
• Moderate volume
• Moderate speed traffic

GILLOGLY ROAD INTERSECTION
• Moderate speed traffic
• Moderate volume traffic

DOUGLAS ROAD INTERSECTION
• Low volume
• Low speed traffic

ROAD INTERSECTION
• Low volume
• Low speed traffic

Chubb Lake



BRIDGE #2
• 20 wooden trestle
• No side railings

ROAD INTERSECTION
• Low volume
• Low speed traffic

COUNTY ROAD 4 INTERSECTION
• Moderate volume
• Moderate speed traffic

MAHTOWA

GAS TANK STORAGE AREA

ROAD INTERSECTIONS
• Low volume
• Low speed traffic

ROAD INTERSECTIONS
• Low volume
• Low speed traffic

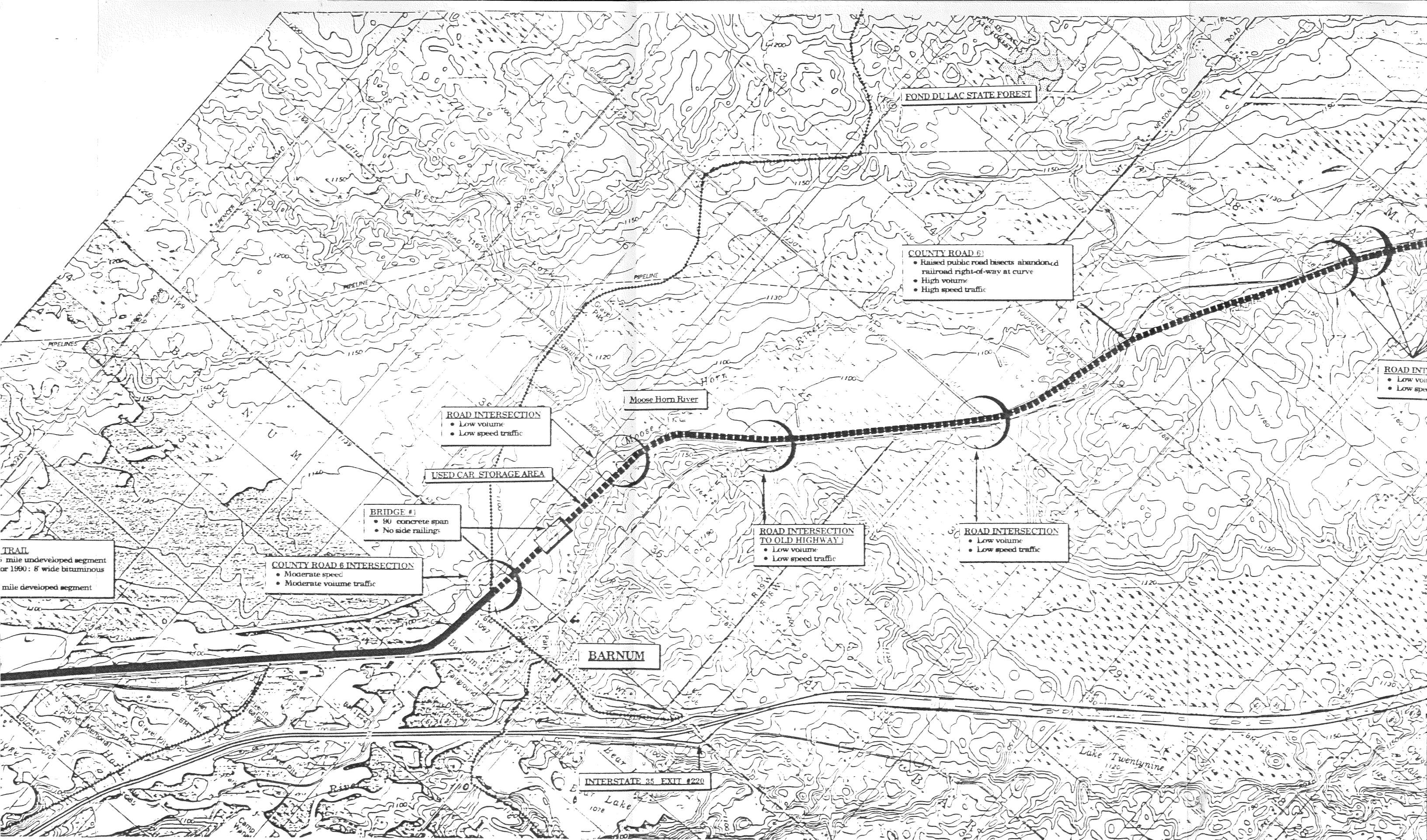
WALLER ROAD INTERSECTION
• Low volume
• Low speed traffic

GRAVEL PIT

BROMFIELD ROAD INTERSECTION
• Low volume
• Low speed traffic

INTERSTATE 35 EXIT #227

ATKINSON



FOND DU LAC STATE FOREST

COUNTY ROAD 61
• Raised public road bisects abandoned railroad right-of-way at curve
• High volume
• High speed traffic

ROAD INTERSECTION
• Low volume
• Low speed traffic

USED CAR STORAGE AREA

BRIDGE #1
• 90' concrete span
• No side railings

COUNTY ROAD 6 INTERSECTION
• Moderate speed
• Moderate volume traffic

ROAD INTERSECTION TO OLD HIGHWAY
• Low volume
• Low speed traffic

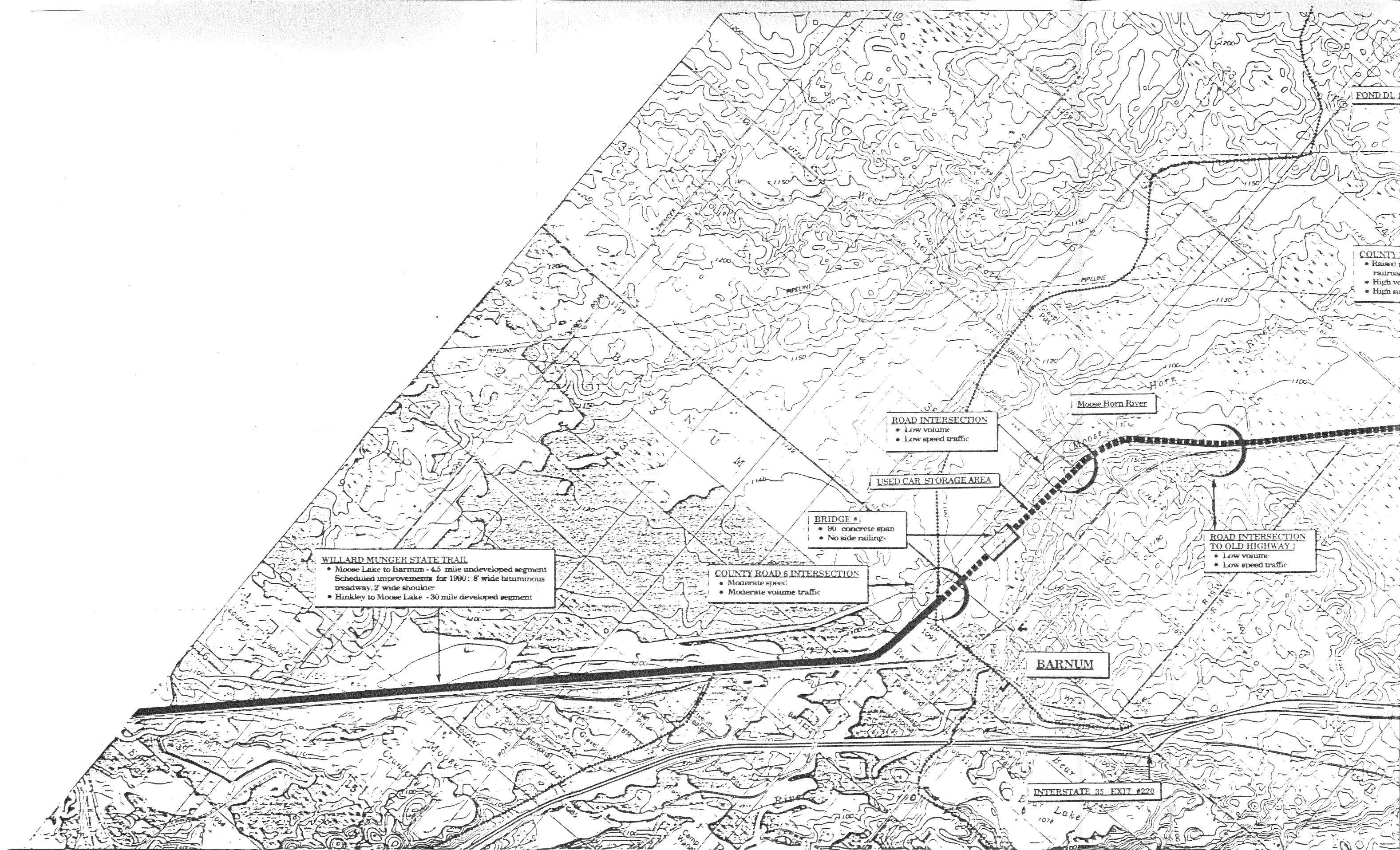
ROAD INTERSECTION
• Low volume
• Low speed traffic

ROAD INTERSECTION
• Low volume
• Low speed traffic

TRAIL
• 1.5 mile undeveloped segment
• or 1990: 8' wide bituminous
• 1.5 mile developed segment

BARNUM

INTERSTATE 35 EXIT #220



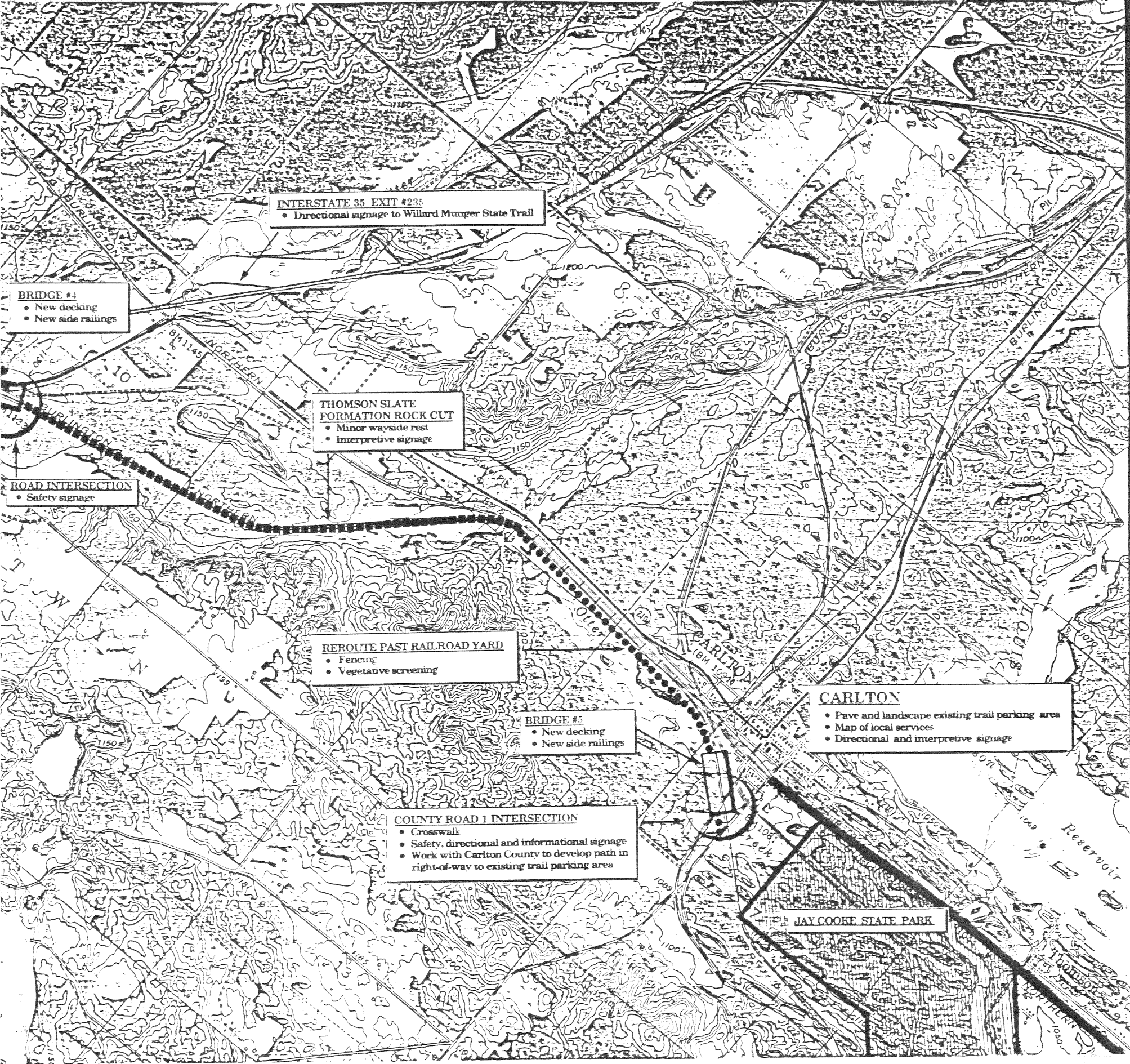
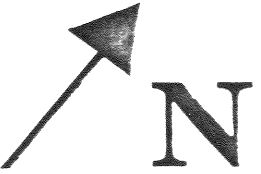
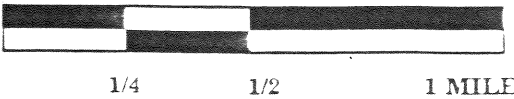
Development Recommendations

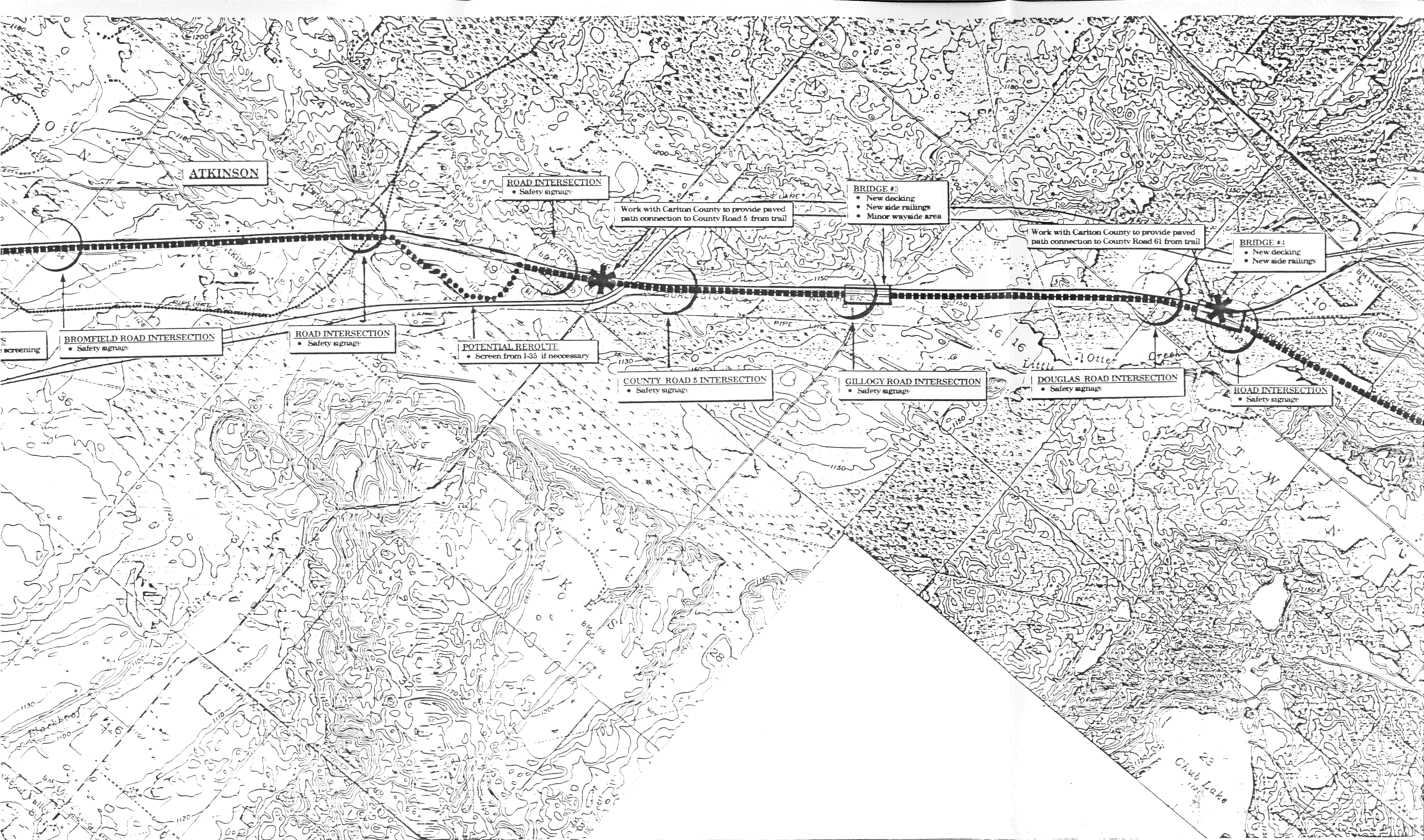
Willard Munger State Trail and West Addition

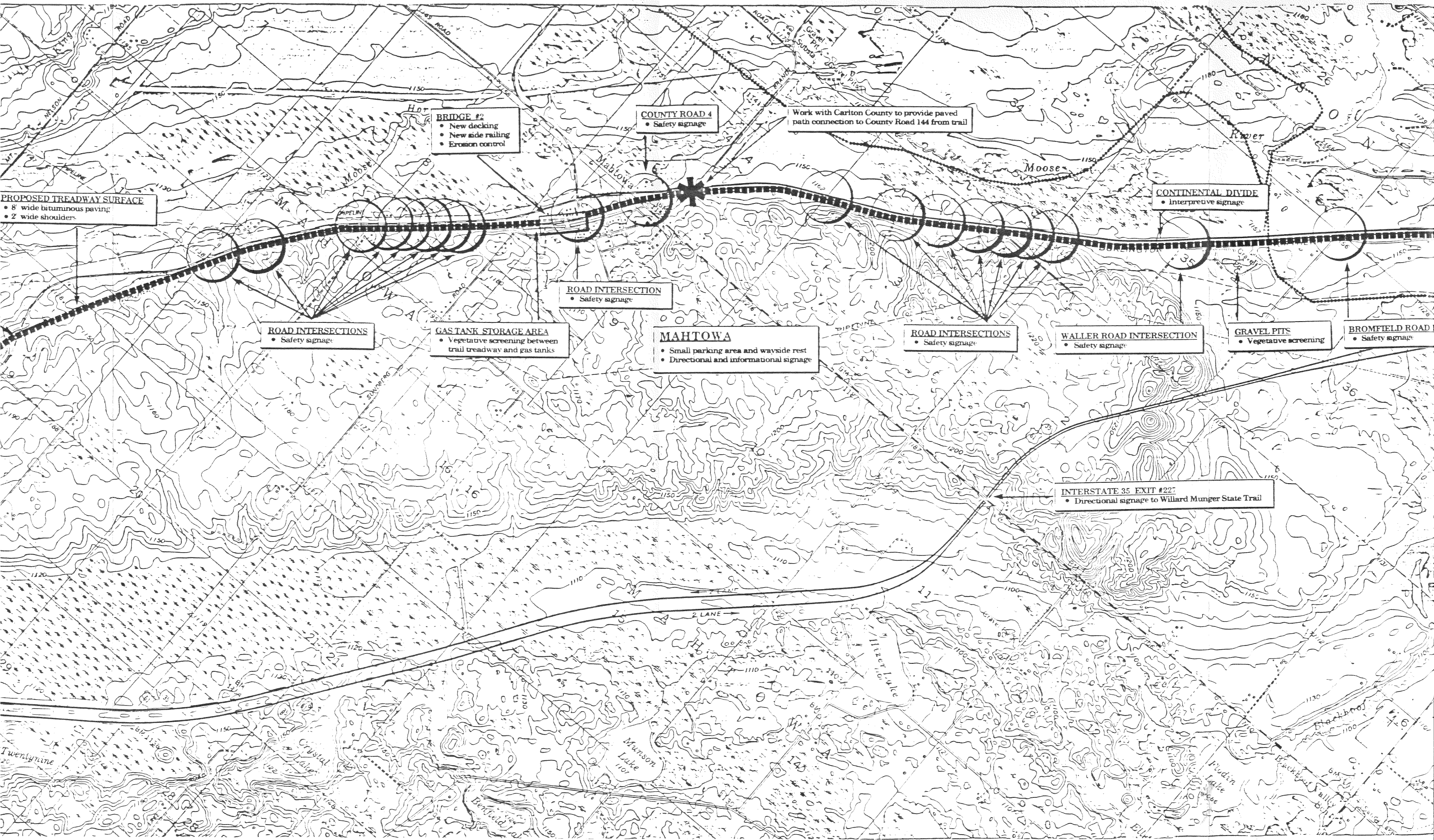
Proposed Barnum To Carlton Segment

Legend

- Existing Willard Munger State Trail
- Abandoned Railroad Right-of-way
- Potential Reroute
- Road Intersection
- Bridge
- Grant-in-aid Snowmobile Trails
- Elevation Contours - 10 Foot Interval
- Wetland
- State Park
- State Forest
- Paved Bike Connection







PROPOSED TREADWAY SURFACE
• 8' wide bituminous paving
• 2' wide shoulders

BRIDGE #2
• New decking
• New side railing
• Erosion control

COUNTY ROAD 4
• Safety signage

Work with Carlton County to provide paved path connection to County Road 144 from trail

CONTINENTAL DIVIDE
• Interpretive signage

ROAD INTERSECTIONS
• Safety signage

GAS TANK STORAGE AREA
• Vegetative screening between trail treadway and gas tanks

ROAD INTERSECTION
• Safety signage

MAHTOWA
• Small parking area and wayside rest
• Directional and informational signage

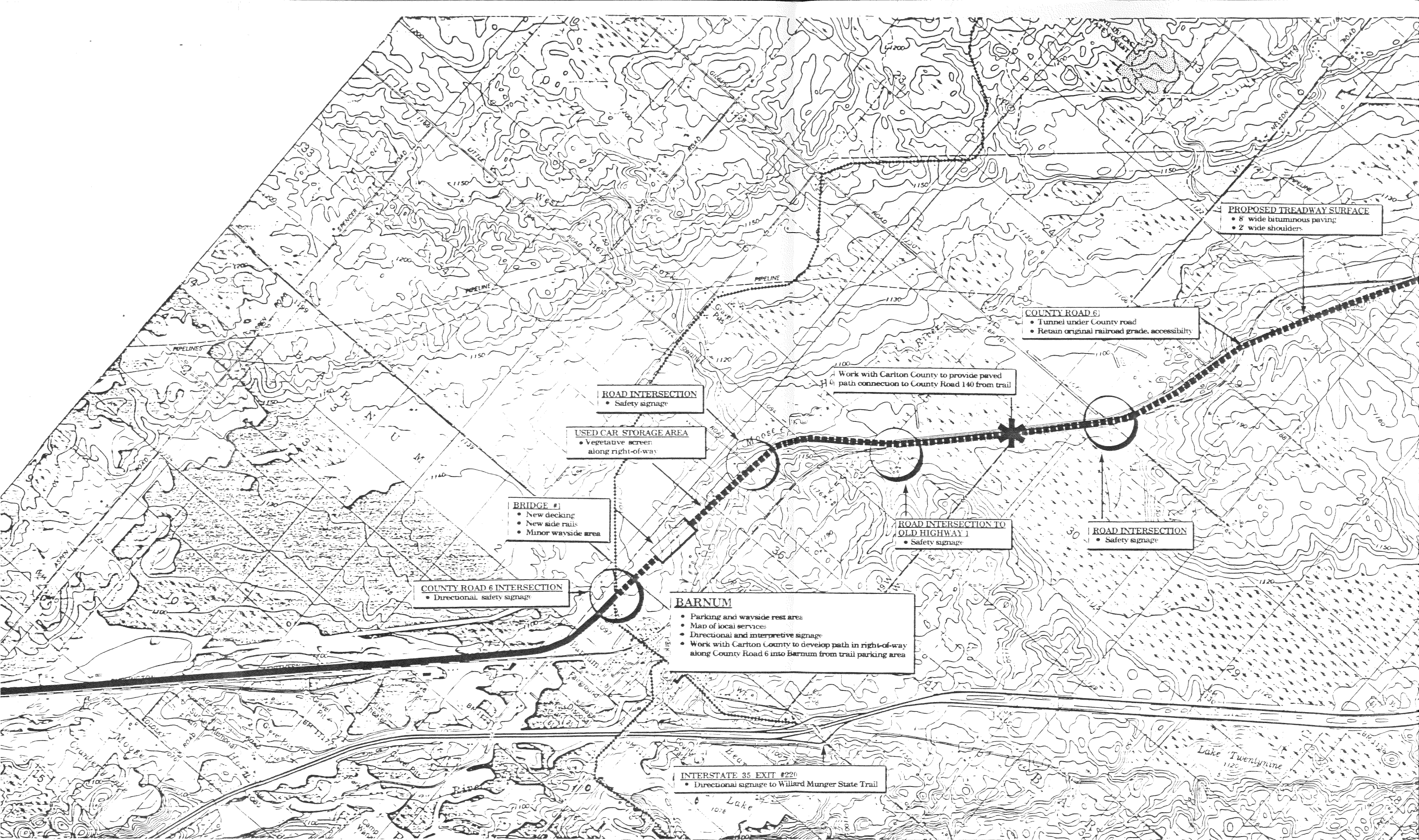
ROAD INTERSECTIONS
• Safety signage

WALLER ROAD INTERSECTION
• Safety signage

GRVEL PITS
• Vegetative screening

BROMFIELD ROAD
• Safety signage

INTERSTATE 35 EXIT #227
• Directional signage to Willard Munger State Trail



PROPOSED TREADWAY SURFACE

- 8' wide bituminous paving
- 2' wide shoulders

COUNTY ROAD 6

- Tunnel under County road
- Retain original railroad grade, accessibility

Work with Carlton County to provide paved path connection to County Road 140 from trail

ROAD INTERSECTION

- Safety signage

USED CAR STORAGE AREA

- Vegetative screen along right-of-way

BRIDGE #1

- New decking
- New side rails
- Minor wayside area

COUNTY ROAD 6 INTERSECTION

- Directional, safety signage

ROAD INTERSECTION TO OLD HIGHWAY 1

- Safety signage

ROAD INTERSECTION

- Safety signage

BARNUM

- Parking and wayside rest area
- Map of local services
- Directional and interpretive signage
- Work with Carlton County to develop path in right-of-way along County Road 6 into Barnum from trail parking area

INTERSTATE 35 EXIT #220

- Directional signage to Willard Munger State Trail



