

## CHAPTER FOUR

# TRAIL SYSTEM PLAN

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## INTRODUCTION

For the purpose of this plan, the definition of ‘trail’ is understood to mean “*a linear recreation corridor and associated facilities that are marked, mapped and maintained and allows for travel by people in one or a combination of non-motorized and motorized modes.*”<sup>1</sup> Existing and proposed trails and/or routes in New Scandia Township are described in further detail as follows.

Over sixty percent of respondents to the 2004 New Scandia Township Community Survey underscored the importance of trails as either important or very important to their own quality of life. Yet, when asked to rate the existing trail system, many respondents were not satisfied with Township trails as they exist today.

Throughout the planning process, the Park and Recreation Committee emphasized the need to develop a trail system that provides a strong network of recreation opportunities throughout the Township. This chapter examines the benefits and impacts of trails, identifies existing and proposed trails and routes in and around New Scandia Township, and provides general recommendations for expanding the trail system.

## BENEFITS OF TRAILS

1. **Trail as Link.** Roads, open space, and commercial/industrial development often separate residential areas, but trails can help link neighborhoods and strengthen the sense of community. In addition, trails can serve as wildlife corridors that help connect fragmented areas of habitat.
2. **Trail as Recreation Benefit.** Walking, running, jogging, biking, horseback riding, snowmobile riding, and nature observation are typical recreation uses for trails. They provide a variety of opportunities and appeal for people of all ages.

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<sup>1</sup> [www.sturgeoncounty.ab.ca/heartland/may\\_4glos.html](http://www.sturgeoncounty.ab.ca/heartland/may_4glos.html)

3. **Trail as Economic Benefit.** Studies show that trails often increase the value of adjacent property and that they can provide economic benefits to the community as a whole. Regional trails generally benefit local economies. Trail users frequently support local businesses and new businesses (for example, bicycle rental) may develop to serve trail users. In addition, new businesses and industries may be more apt to locate in communities where trails and parks help provide a higher quality of life.
4. **Trail as Alternative Transportation Mode.** Trails provide safe and enjoyable transportation alternatives to the road system.
5. **Trail as Land Use Buffer.** Trails can help buffer different land uses. For example, a trail could provide a buffer between adjacent commercial and residential uses.

## **THE NEED FOR PUBLIC PARTICIPATION IN THE TRAIL PLANNING PROCESS**

Public support for trails is critical to successfully planning and developing a trail system plan. Generally, landowners support trail systems when they are part of the planning process and when they are aware of the benefits that trails offer. This trail system plan recommends a general framework for trails, but the Township should work closely with landowners, developers, and residents when designing and constructing specific trails.

## **INVENTORY AND ANALYSIS**

The Federal Highway Administration recognizes certain roads as National Scenic Byways based on one or more qualities of archeological, cultural, historic, natural, recreational and scenic significance. The following has been designated in New Scandia Township (see Fig. 3-1: Regional Parks and Trails):

**St. Croix Scenic Byway.** Located along the eastern boundary of the Township, State Highway 95 extends north from William O'Brien State Park to Taylors Falls in Chisago County. From the southern boundary of the Township, there exists a separated paved trail on the east side of the State Highway 95 north to State Highway 97. Currently in disrepair, renovation of the existing trail and its extension north through the entire Township should be made.

Regional trails provide a potential link for connecting the Township trails to adjacent communities (see Fig. 3-1: Regional Parks and Trails). Nearby existing and proposed regional trails include:

**Gateway Trail/ Extension Search Area.** Referred to as the most-used trail in the state (*Star Tribune September 12, 2005*), the Gateway Trail extends just over 18 miles from Saint Paul to Pine Point Park, just north of Stillwater. This multi-use trail has a single, paved lane until it is about 10 miles north of St. Paul, where it becomes a paved and unpaved dual treadway. In August of 2005, the Gateway Trail Association obtained additional trail easements for the trail to extend through the Wilder Forest in May Township, just west of Marine-On-St.-Croix. Eventually, proponents hope to connect the trail to Taylors Falls and beyond. In order to realize this, a Gateway Trail extension search area has been identified in New Scandia Township (see Figure 4-1: County Trails/Routes Plan).

**Swedish Immigrant Trail.** At 20 miles in length, this proposed multi-use trail celebrates the trail of Swedish immigrants along an abandoned railroad corridor that connects the Lakes of southern Chisago County (just north of New Scandia Township) with the Dalles of the St. Croix River through the communities of Chisago City and Lindstrom.

**Hardwood Creek Trail.** The Hardwood Creek Trail is a county trail that runs parallel to U.S. Highway 61 in the abandoned Burlington-Northern Railroad corridor from Hugo to Forest Lake. North of Forest Lake, it becomes the **Sunrise Prairie Trail** and runs to the Township of North Branch. The trail consists of a bituminous trail that is used for bicycling, in-line skating, and walking. It also has a parallel turf trail that is used for horseback riding and snowmobiles.

**Rice Creek Snowmobile Trail.** This grant-in-aid snowmobile trail runs through the Hardwood Creek Wildlife Management Area. It also runs in the right-of-way of part of Highway 97. The trail receives funding through the Minnesota Department of Natural Resources and is maintained by Rice Creek Snowmobile Association.

**C.S.A.H. 2.** County State Aid Highway 2 (known as North Shore Trail on the east side of Forest Lake) has a two-foot wide area on the outside of the driving lanes that is designated for bicycles. A painted line separates the driving lane from the bicycle lane.

**County Road 23 Relief Route.** County Road 23 Relief Route is a proposed off-road trail for development at same time as an alternative route for southern bypass of Chisago Lakes area in the southern part of Chisago County.

*The Washington County Linear Park System Master Plan; A Policy Guide to 2015*, proposes a county-wide system of linear open space and trails for the purpose of recreation, exercise, enhanced driving, bicycle commuting, beautification and environmental preservation (see Figure 4-1: County Trails/ Routes Plan). The following are located within New Scandia Township:

**Washington Parkway.** Considered the ‘backbone’ or arterial of the system, this north-south trail would provide direct connection from Cottage Grove Ravine Regional Park to Big Marine Park Reserve.

**Washington Greenway.** Primarily considered connector ‘ribs’, the Greenways include State Highway 97, and link State Highway 95 via a north-south collector trail which extends through New Scandia Township along its eastern edge to Marine-On-St. Croix.

**Olinda Trail North.** Although identified in the *Linear Park System Master Plan*, this portion of trail proposed in the right-of-way along Olinda Trail North had not passed in its first referendum.

**Historic Loop Trail.** This 11- mile circuit includes State Highway 95, County Road 52, County State Aid Highway 3 and County State Aid Highway 4.

**Supplementary County Routes.** In recent years, it has been Washington County’s policy to provide paved shoulders for bicycle use as roads improvements are made.

**Washington County Scenic Road System.** The County proposes to promote and maintain specific routes for their visual quality, including Manning Avenue/ CSAH 15 from State Highway 97 south to May Township, Lofton Ave. N/ CSAH 1 from State Highway 97 north to Chisago County border, CSAH 3 from the north border of Washington County to CSAH 7 in May Township and County Road 52.

Please refer to the end of this chapter for a detailed description of the Washington County Linear Park System Master Plan trails, which includes locations, trail length, connections, issues and opportunities.

**FIG. 4-1 COUNTY TRAILS/ ROUTES PLAN.**



## VISIONING SESSION: TRAIL ISSUES, OPPORTUNITIES & RECOMMENDATIONS



Visioning Workshop, December 2004

The following issues, opportunities and recommendations were developed over a series of meetings and workshops with the Park and Recreation Committee that included a Visioning Session with members of the School District and Town Board in December of 2004:

### ISSUES:

1. Lack of trail connections.
2. Need for better access to Lower St. Croix River and Township shoreline.
3. Uncertainty regarding trail locations.
4. Conflicts between motorized use & non-motorized use.
5. Safety of trail users.

### OPPORTUNITIES:

1. Provide a corridor for the Gateway Trail with connections to and from Township trails.
2. Promote coordination between local, regional and state agencies.
3. Provide better trail connectivity within Township.
4. Improve pedestrian connections to include sidewalks from Village Center.
5. Provide better trail connectivity outside of Township to surrounding area and regional trails (Hardwood Creek Regional Trail).
6. Explore alternative funding sources for trail development.
7. Accommodate diverse trail user groups (equestrian, hikers, bikers, etc.).
8. Promote linkage of all Township parks along trail network.
9. Provide trail access to Lower St. Croix Scenic Riverway.
10. Promote trail safety (especially on State Highway 95 and State Highway 97).
11. Provide locations for trailheads and rest areas.
12. Promote signage and way-finding.
13. Limit dependence on automobile for recreation.
14. Identify the needs of special user groups.

*“I walk almost daily along township roads in spite of the noise and danger passed by constant...traffic in the summer. I’d like a safer alternative and so would several of my neighbors.”*

-Response from 2004  
Community Survey

### RECOMMENDATIONS:

1. Opportunity to revisit Olinda Trail North as part of trail system.
2. Locate connection to Gateway Trail.
3. Locate equestrian trails, other special-interest user group trails.
4. Identify locations for trailheads and rest stops.

## GOALS AND STRATEGIES

The following goals and strategies express the community's vision for trails in New Scandia Township. The goals are broad, general statements that the Township will strive to attain. The strategies are specific, action-oriented statements that provide the framework for a wide range of trail system decisions that the Township will make through the year 2025. The Township should periodically review and update the goals and strategies expressed in this plan. The trail system goals and strategies are as follows:

**Goal 1: Develop a trail system that meets the needs of all residents of the Township.** To accomplish this goal, the Township establishes the following strategies:

1. Develop a Trail and Bicycle Route Masterplan to serve residents and visitors to the Township, while connecting to surrounding communities and regional trails.
2. Develop, maintain, and improve the Township's trails to meet the changing needs of the community.
3. Use the Trail System Plan as a general guide for trail development, but work with residents, landowners, and developers in designing and constructing specific trails.
4. Maintain an equitable distribution of trails throughout the community.
5. Develop multi-use and multi-seasonal trails that are safe, enjoyable, and accessible to the public.
6. Provide a balance of transportation and recreation-oriented trails throughout the community.
7. Work closely with adjacent property owners when planning trails.
8. Design the trail system to be accessible to people with physical disabilities. Guidelines for developing accessible trails are available from many sources including the Minnesota Department of Natural Resources.
9. Provide safe trails. Enforce rules, install necessary lighting where appropriate and patrol the trails to discourage inappropriate uses and vandalism from occurring.

10. Create programs and incentives that establish a high level of maintenance and improvement of the Township's trails. Strive to provide public trail access along the waterfront of all newly developed lakeshore properties, if feasible. This applies to large parcels and/or planned communities, rather than infill between existing properties.

**Goal 2: Develop a close working relationship with other agencies and groups to develop trails and routes in the Township.** To accomplish this Goal, the Township establishes the following strategies:

1. Seek assistance from others to provide funding for trail development, and maintenance.
2. Continue to work with State and County transportation agencies to plan for trails.
3. Do not expect the Township to design, fund, build, and maintain every trail in New Scandia Township. Special interest groups like snowmobile riders and equestrians, in particular, often work with private landowners to provide trails on private land. The Township should help coordinate planning efforts between the various organizations that are interested in developing trails.
4. Coordinate trail planning efforts with the following entities:
  - a. Town Board and Planning Commissions
  - b. Washington County and the Metropolitan Council
  - c. Township and local organizations, including but not limited to snowmobile clubs, riding clubs, cycling clubs, cross country skiers, civic organizations, and service clubs.
5. Work with Minnesota Department of Natural Resources to explore the option to extend the Gateway Trail along existing rail line(s), as per Carnelian-Marine Watershed District recommendations.

**Goal 3: Design and locate trails and routes in a manner that best meets their purpose.** To accomplish this Goal, the Township establishes the following strategies:

1. Provide trails that link important areas of the Township. For example, provide trails that link major residential areas to schools, the Village Center, parks, open space and regional trails.
2. Consider how the trail system might be integrated into new residential, commercial, and industrial subdivisions. Design and construct trails with proposed development; do not wait until after development has already occurred.
3. The Township should consider requiring a developer to dedicate and improve routes and trails that are referenced in the Comprehensive Parks, Trails, Open Space and Recreation Plan, or if not referenced in the Comprehensive Parks, Trails, Open Space and Recreation Plan, have the potential for connection to New Scandia's routes and trails system. If trail dedication and construction is not feasible in the opinion of the Township, the developer may pay a fee of \$1500.00 per parcel in lieu of dedication and construction. New Scandia Township should review each case individually to best evaluate the appropriateness of the respective trail or route.
4. When it is determined that the land on which a development or subdivision has been proposed is a likely candidate for a trail, easements could be acquired as part of the parks dedication process. These trail easements may be held by the Township, the Minnesota Department of Natural Resources, or other public or nonprofit trail entities.
5. Develop consistent trail signage and install signs at each trail entrance or in locations which are easy to see and difficult to vandalize. Provide appropriate signs that describe hours of operation, rules, delineate public areas from private areas or boundaries, and other pertinent information.
6. Avoid developing trails that would adversely affect ecologically sensitive areas.
7. Where necessary, screen, fence and/or buffer trails for the safety and protection of the user as well as the adjoining property owners.

8. Provide trail loops of various lengths that allow users to return to their starting point without backtracking. Various loops may link major Township features *and* make smaller, neighborhood connections.
9. Provide facilities for pedestrians and bicyclists in conjunction with street improvement projects when financially feasible.
10. Coordinate the Township's trail system with surrounding communities and the regional trail system.
11. Provide safe and convenient pedestrian and bicycle access to all recreation and school facilities within the community.
12. Provide trail connection(s) to all Township parks.
13. Although topography can add interest to a trail, avoid constructing trails in areas that will require extensive cut and fill.
14. Explore the potential for using drainage and utility easements and road right-of-ways for trail development.

**Goal 4: Develop an effective planning approach to constructing and maintaining trails and routes.** To accomplish this goal, the Township establishes the following strategies:

1. Involve the Park and Recreation Committee, along with the Rural Landscape Preservation Committee, in the review process of all subdivisions beginning with the pre-concept stage.
2. Use consultants to help address significant planning issues and prepare trail plans.
3. Involve adjacent landowners and local neighborhoods in trail decisions.
4. Provide a maintenance program that ensures trails will be properly maintained. Poorly maintained trails can be more of a liability than an asset.
5. Establish a procedure for effective Park and Recreation Committee communication with all individuals and organizations interested in maintaining and developing trails:

- a. Hire additional staff to work closely with Township Staff as necessary.
- b. Work with and enlist professional advice and services to ensure that improvements are properly designed to accommodate proposed facilities in a safe and economical manner.
- c. Work closely with local citizens on long-term and complex development proposals/issues.
- d. Respond to Town Board requests.
- e. Initiate special recommendations and requests for the Town Board.
- f. Work with Township Staff in planning for future trails.

**Goal 5: New Scandia Township supports the establishment of a public, multi-use, non-motorized trail such as the Gateway Trail Extension or other trails that the Town Board might establish on its own as part of a program of providing outdoor recreational amenities and community-wide trail linkages that serve the health and welfare of the Township's residents.** The Gateway Trail Extension is planned to connect the Gateway Trail at Pine Point Park to Taylors Falls. The exact location will be determined by willing landowners or park and trail dedications as part of new developments. To accomplish this Goal, the Township establishes the following strategies:

1. It is the policy of New Scandia Township to encourage the development of the Gateway Trail Extension and connecting trails. To that end,
  - a. Consideration should be given to the Township providing development incentives (for example, the extra lot bonus granted in the May Township Development Code) in exchange for the granting of trail easements on land suited for that purpose but not yet ready for development and
  - b. All new subdivisions and land developments need to be considered for designation of trail easements to assist in the establishment of the Gateway Trail Extension and other trails within the Township.
2. In consideration of approval, all subdivisions and land developments should be analyzed as to whether they are possible locations for a trail, including but are not limited to:
  - a. Land that is adjacent to large undeveloped tracts,
  - b. Land that is in the vicinity of existing trail easements,

- c. Land that is situated in such a way that there is a reasonable, possibility it could be used for the Gateway Trail Extension or other trails to connect to the Gateway Trail Extension, and
  - d. Land that is otherwise suitable for a recreational trail because of the land's scenic value, or proximity to or linkage between clustered neighborhoods or outdoor attractions, such as William O' Brien State Park.
3. When it is determined that the land on which a development or subdivision has been proposed is a likely candidate for a trail, easements should be acquired as part of the parks dedication process. These trail easements may be held by the Township, the Minnesota Department of Natural Resources, or other public or nonprofit trail entities.

**Goal 6: Identify the search area for a trail connection between William O'Brien State Park and Big Marine Regional Park Reserve.** To accomplish this Goal, the Township establishes the following strategies:

1. It is the policy of New Scandia Township to encourage the development of a trail connection between William O'Brien State Park and Big Marine Regional Park Reserve. To that end,
  - a. Consideration should be given to the Township providing development incentives (for example, the extra lot bonus granted in the May Township Development Code) in exchange for the granting of trail easements on land suited for that purpose but not yet ready for development and
  - b. All new subdivisions and land developments need to be considered for designation of trail easements to assist in the establishment of a trail connection between William O'Brien State Park and Big Marine Regional Park Reserve within the Township.
2. In consideration of approval, all subdivisions and land developments should be analyzed as to whether they are possible locations for a trail, including but are not limited to:
  - a. Land that is adjacent to large undeveloped tracts,
  - b. Land that is in the vicinity of existing trail easements,
  - a. Land that is situated in such a way that there is a reasonable, possibility it could be used for a trail connection between William O'Brien State Park and Big Marine Regional Park Reserve or other trails to connect to this trail, and
  - b. Land that is otherwise suitable for a recreational trail because of the land's scenic value, or proximity to or linkage between clustered neighborhoods or outdoor attractions.

3. When it is determined that the land on which a development or subdivision has been proposed is a likely candidate for a trail, easements should be acquired as part of the parks dedication process. These trail easements may be held by the Township, the Minnesota Department of Natural Resources, or other public or nonprofit trail entities.

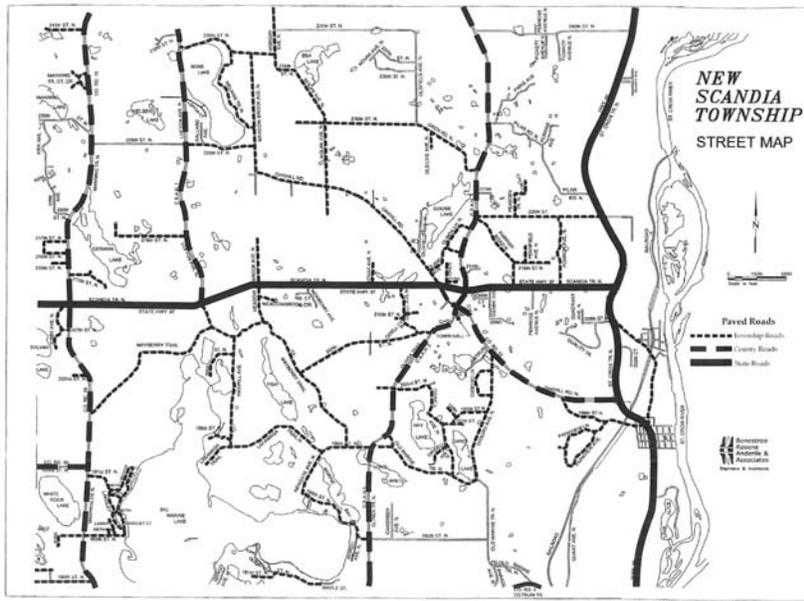
**Goal 7: Consider potential trail connection when/if abandoned Soo Line railway corridor from White Bear Lake to Wisconsin through New Scandia Township becomes available.** To accomplish this Goal, the Township establishes the following strategies:

1. Work with Minnesota Department of Natural Resources, Division of Trails and Waterways as liaison in discussions with the Soo Line Railroad to explore the possibility of this corridor being shared with non-motorized, multi-purpose trail users.

## TRAIL SYSTEM PLAN

This Trail System Plan provides a broad vision and an overall framework for the development of New Scandia Township's trails (see Figure 4-2: Bicycle Routes Plan). As such, it identifies general locations for proposed trails and it guides the Township in working with developers and landowners in finding specific areas for trails. The plan proposes developing trails and routes within road right-of-ways and in off-road locations.

The vast majority of New Scandia Township roads will be paved over the next several years, see below: *Paved Roads 2004* giving the Township an unprecedented opportunity to improve the trail system. While Scandia sidewalks provide an important connection in and around the Village Center, the Trail System Plan does not include an inventory of existing sidewalks.



## GENERAL LOCATIONS AND GUIDELINES FOR TRAIL DEVELOPMENT

The goals and strategies described in this chapter set forth guidelines for development of the overall trail system. The following describes general guidelines for specific types of trails and routes.

**TRAILS WITHIN ROAD RIGHT-OF-WAYS.** There are several reasons why the Township should develop some trails within road right-of-ways:



*Trail Adjacent to State Highway 95*

1. Sufficient right-of-way space is generally available for trails. In most cases, additional land would not have to be acquired. Especially in areas that have already developed, the Township may find it easier to develop trails in an existing road right-of-way than trying to acquire private property for public trails.
2. Reduced construction costs can be expected when trails are constructed with new roads and road improvements. Construction obstacles (for example, wetlands, steep grades, creeks, and so on) are more easily dealt with.
3. Trail crossings are generally easier and safer where trails are integrated with the road system.
4. Landowners in established areas are often more accepting of trails that are integrated with the road system rather than trails that run through the landowner's backyard.

In general, trails within road right-of-ways are used primarily for transportation. The Township, County, and State can construct a variety of trails in road right-of-ways including trails separated from the driving lanes, bicycle lanes integrated with driving lanes, and bicycle routes. New Scandia Township's Trail System Plan simply identifies trails in road right-of-ways. It does not specify the type of trails to be developed. Where feasible, the trails should be bicycle-pedestrian trails separated from the driving lanes. Where this is not feasible, the trails may be constructed as a bicycle lane, or the road may simply be designated a bicycle route. The following provides design guidelines for each type of trail.

**Bicycle-Pedestrian Trails Separated from the Driving Lanes.** An existing separated trail on the east side of State Highway 95 is currently in disrepair. New Scandia Township should consider bringing this section of trail up to recommended standards and extending it north to the Township boundary.

Because trails are separated from roads, they provide a safe and enjoyable way to use the trail system. The following guidelines will help the Township design and construct bicycle-pedestrian trails:

1. Provide bicycle-pedestrian trails in areas where they are most needed. For example, provide trails that link residential neighborhoods to parks, schools and the Village Center.
2. Provide trails on both sides of busy or wide roads that are difficult or on lightly traveled, low-speed roads, provide a minimum five-foot separation between trails and roads. Where trails are next to heavily traveled, high-speed roads, consider providing a minimum ten-foot separation between trails and roads and providing berms and plantings to buffer the trails from the roads.
3. Pave trails with bituminous or concrete. Bituminous paving is the less expensive of the two and is most commonly used. In some cases, a compacted aggregate surface like aglime may be acceptable.
4. Avoid obstacles like mailboxes, signs, and power poles.
5. Provide a minimum ten-foot wide trail where the trail is intended to accommodate both pedestrians and bicyclists.
6. If a trail is expected to be heavily-used by both pedestrians and bicyclists, consider providing separate trails for each user. The pedestrian lane could be separated from the bicycle lane by striping, or they could be physically separated by distance. The pedestrian portion of the trail should be at least five feet wide and the bicycle portion of the trail should be at least eight feet wide.
7. Limit the number of locations that trails cross streets. Where crossings are required, provide crossings in highly visible areas and where street traffic can be controlled. Provide curb cuts where there are existing curbs.

***“I would like to see paved trails so you can ride your bicycle and not have to be afraid of the fast moving cars on highways 97, 95 and 3.”***

-Response from 2004  
Community Survey

**Bicycle Lane.** County Road 15A north of State Highway 97 and State Highway 97 east of Oak Hill Road North have paved shoulders that serve as emergency pull-offs, but that also serve as a bicycle lane. A bicycle lane is identified by signage and separated from motor vehicle lanes by striping. Although pedestrians can use bicycle lanes, many pedestrians prefer using trails that are separated from the road. In New Scandia Township, bicycle lanes are most appropriate in rural areas of the Township where traffic levels are relatively low and where constructing a trail separate from the road may be too expensive. The following guidelines will help the Township in designing and constructing bicycle lanes:

1. Provide bicycle lanes on both sides of designated roads.
2. Pave lanes with bituminous or concrete surfacing.
3. Provide a minimum eight-foot wide lane where the lane serves as a bicycle lane and as an emergency pull-off. If an emergency pull-off is not needed, provide a minimum four-foot wide lane. Generally, provide as wide a lane as is feasible. The minimum widths described above assume that the traffic flow in the lane is one-way.
4. Avoid on-street parking on roads that have bicycle lanes. If on-street parking is needed, provide a minimum five-foot bicycle lane between the parking area and the driving lane or provide a bicycle trail separate from the road.
5. Provide striping to visually separate bicycle lanes from driving lanes and parking areas and provide signage that identifies the lane as a bicycle lane.
6. Avoid physical obstructions in bicycle lanes such as pavement rumble strips, signs, and so on.

**Bicycle Route.** A bicycle route simply encourages bicyclists to use a designated road for bicycle travel. It does not provide a separate trail or lane. Oren Road North, Oak Hill Road North, Mayberry Trail North, Lakamaga Trail North, Old Marine Trail North, among others, currently serve as bicycle routes (see Figure 4-2: Bicycle Routes Plan). 185<sup>th</sup> Street west of Olinda Trail, 205<sup>th</sup> Street North from Mayberry Trail North to Olinda Trail, Pomroy Avenue N. north of CR 97 to 220<sup>th</sup> Street, 220<sup>th</sup> Street from Pomroy Avenue west to Olinda Trail, among others, should be designated as bicycle routes in the Township. Guidelines for designating a road as a bicycle route follow:

1. Designate a road as a bicycle route if it is not feasible to develop a trail or lane and if the road provides good reasons to encourage bicycle traffic on it. For example, if a trail is needed in a general area, consider designating the safest, the most efficient, or the most scenic road in the area as a bicycle route. This will encourage bicyclists to use the best possible road to get to where they want to go.
2. Provide adequate signage and maps so that bicyclists know which roads are bicycle routes.

**OFF-ROAD TRAILS.** New Scandia Township's trail system should not be limited to the road system. There are several reasons why the Township should develop some off-road trails:

1. Off-road trails serve equestrians, cross-county skiers, and hikers better than those trails associated with the road system.
2. Off-road trails can help buffer development from sensitive natural areas.
3. Off-road trails can help provide wildlife corridors that link fragmented patches of wildlife habitat.
4. Off-road trails often provide safer and more enjoyable experiences than do trails in road right-of-ways.
5. New development can often successfully incorporate off-road trails into an area in a manner that benefits the future residents of the development as well as the overall community.

Off-road trails are used primarily for recreation. Where possible, the Township should strive to provide off-road trails as an enjoyable way to link parks, schools, residential neighborhoods and the Village Center. In residential areas, an off-road trail could consist of a paved bicycle-pedestrian trail. In parks and less developed areas, off-road trails may include nature trails, snowmobile trails, cross-country ski trails, or equestrian trails. Although some of these trails could be integrated with the road system, the goal is to separate them from roads. The following provides general guidelines for the development of off-road trails.

**FIG. 4-2 BICYCLE ROUTES PLAN**



**Bicycle-Pedestrian Trail.** The following guidelines will help the Township design and construct bicycle-pedestrian trails:

1. Provide bicycle-pedestrian trails in areas where they are most needed. For example, provide trails that link residential neighborhoods to parks, schools and the Village Center.
2. Locate trails to maximize enjoyment to the user, but minimize adverse impacts to the natural area and surrounding landowners. Where needed, provide berms and plantings to buffer the trails from adjacent landowners.
3. Pave trails with bituminous or concrete surfacing. In some cases, a compacted aggregate surface like aglime may be acceptable.
4. Provide a minimum ten-foot wide trail where the trail is intended to accommodate both pedestrians and bicyclists.
5. If a trail is expected to be heavily used by both pedestrians and bicyclists, consider providing separate trails for each user. Striping could separate the two uses, or they could be physically separated by distance. The pedestrian portion of the trail should be at least five feet wide and the bicycle portion of the trail should be at least eight feet wide.
6. Limit the number of locations that trails cross streets. Where crossings are required, provide crossings in highly visible areas and where street traffic can be controlled. Provide curb cuts where there are existing curbs.



*Wind in the Pines Park*

**Nature Trails.** Many people have chosen to live in New Scandia Township because of its rural character and the quality of its natural areas. Residents want trail access to at least some of these areas. Trails can provide enjoyment for many residents, but unless carefully designed they can also have a negative impact on the natural areas.

Where proposed development incorporates existing natural areas, developers should be encouraged to provide nature trails in the development.

The following guidelines will assist the Township in designing and constructing nature trails:

1. Locate nature trails to maximize enjoyment to the user, but minimize impact to the natural area. For example, set trails away from sensitive areas, but allow trail users the opportunity to view the area from a reasonable distance.
2. Minimize the number of locations where trails cross streams or wetlands, or where trails traverse steep slopes. Where trails occur in these areas, provide bridges, boardwalks, and steps to provide a trail that is safe to pedestrians and sensitive to the natural environment.
3. Limit trails to foot, snowshoe, and cross country ski traffic only. Do not allow bicycles, snowmobiles, or horses on nature trails.
4. Provide interpretive signs along the trails and signage that encourages people to stay on the trails.
5. Where appropriate provide some seating areas for resting or wildlife observation.
6. Provide a variety of nature trails that accommodate various users and are sensitive to the natural environment. For example, provide some trails that are accessible to physically disabled people. These trails should be six feet wide and paved with an appropriate material like concrete or bituminous surfacing. Other trails may not be fully accessible to all people, but would be more sensitive to the natural environment. For example, some nature trails could be as little as two feet wide and covered with wood mulch.
7. Maintain nature trails to ensure that they are safe.

**Snowmobile Trails.** Snowmobile trails provide winter recreation opportunities for many people. In general, snowmobiles are allowed on the outside shoulder of county and state road ditches and on private land with landowner permission. The snowmobile trails in the New Scandia Township area are designed and maintained by the snowmobiling associations with assistance from the Minnesota Department of Natural Resources. New Scandia Township does not need to develop Township-owned and maintained snowmobile trails. Rather, the Township should work with residents and snowmobiling associations to ensure that trails are properly located, designed, maintained, and used.

While snowmobile trails provide enjoyment for many, they can also have negative impacts. Concerns include trespassing, noise, destruction of natural areas, and snowmobile-related accidents. These concerns have spurred some communities to consider banning or severely restricting snowmobiling in their communities. This plan does not recommend eliminating snowmobile trails in New Scandia Township, but the Township should recognize that the potential for snowmobile accidents and conflicts will increase as New Scandia Township continues to grow. To reduce conflicts, snowmobile trails must be properly designed and maintained, and snowmobile riders must use the trails in a safe and respectful manner. The Township should work with snowmobile associations, Washington County and the Minnesota Department of Natural Resources to address concerns related to snowmobiling.

The following guidelines are intended to assist the Township in evaluating existing and proposed snowmobile trails:

1. Avoid trails in areas where the potential for conflicts is high; for example, in densely populated areas, near schools, and so on.
2. Avoid trails in significant natural areas as identified in the Open Space Plan. Where possible, provide a minimum 200-foot buffer between trails and significant open space.
3. Separate snowmobile trails from other trails, including cross-country ski trails.
4. Minimize road crossings. Where trails must cross roads, provide designated crossing areas that have adequate visibility and provide proper signs.
5. Provide signage as needed to identify trail boundaries and reduce the potential for trespassing.
6. Maintain trails regularly to ensure they are safe.
7. Where safety, noise, or other concerns may exist, consider reducing speed limits and limiting the hours that trails can be used.
8. Consider sponsoring a meeting with snowmobiling associations that would focus on addressing the concerns of residents and also on promoting safe and respectful use of the trail system.

New Scandia Township should contact the Minnesota Department of Natural Resources Division of Trails and Waterways for additional information.

**Cross-Country Ski Trails.** Like snowmobile trails, cross-country ski trails provide winter recreation opportunities for many people. Although the Township may choose to develop cross-country ski trails in specific parks, the Township should generally work with the Minnesota Department of Natural Resources, Washington County, and cross-country skiing associations to provide ski trails in the Township.

The following guidelines are intended to assist the Township in planning cross-country ski trails:

1. Provide separate cross-country ski trails. Do not overlap ski trails with snowmobile trails.
2. Route trails away from sensitive ecological areas.
3. Locate trails in manner as to avoid hazardous areas such as congested areas, lakes, sharp curves, and so on.
4. Provide bridges where needed.
5. Design ten-foot wide trails for two-way use and six to ten-foot trails for one-way use.
6. Provide appropriate signage.
7. Maintain trails regularly to ensure they are safe.
8. Work closely with adjacent landowners.

New Scandia Township should contact the Minnesota Department of Natural Resources Division of Trails and Waterways for additional information.

**Equestrian Trails.** Equestrian trails can provide recreation activities for residents and nonresidents. Several stables exist in and around New Scandia Township. Most equestrian activities occur on private land, but equestrians also ride their horses on the side of rural roads throughout the Township. Horses are a legal form of transportation and can use roads throughout the Township.

Equestrians have expressed a need for additional trails within Washington County. Although New Scandia Township could plan and develop equestrian trails, the Township should encourage equestrians to negotiate with landowners to develop trails on private land. The Township should work with the County and State to provide a regional equestrian trail. This regional trail could be developed collaboratively as part of the Gateway Trail. The Minnesota Horse Council can provide information on obtaining grant money to help fund these trails.

Equestrian trails, like all trails, must be designed to be safe and enjoyable for the users. They must also be designed to minimize potential negative impacts including soil erosion and soil compaction, damage to vegetation, trespassing, disposal of manure, and conflicts with motor vehicles. The following guidelines will help the Township in planning or evaluating proposed equestrian trails:

1. Involve the Minnesota Horse Council and equestrians in road improvements in New Scandia Township. Where appropriate, provide trails along roads.
2. Avoid trails in areas where erosion or compaction may be a problem; for example in creek beds or on steep slopes.
3. Avoid trails in significant natural areas. Heavily used equestrian trails can compact soil and damage sensitive vegetation.
4. Avoid trails in wetlands or trails that are immediately adjacent to creeks or lakes where soil erosion and sedimentation may become a problem.
5. Limit locations where equestrian trails cross roads. Where trails must cross roads, provide crossings in areas with high visibility and where road traffic can be controlled. Provide signs that identify trail crossings.
6. Maintain trails regularly to ensure they are safe.
7. Provide signage as needed to identify trail boundaries and reduce the potential for trespassing.
8. Coordinate trail development with neighboring communities.

New Scandia Township should contact the Minnesota Horse Council for additional information regarding equestrian trails.

## **GENERAL GUIDELINES FOR TRAILHEAD/ REST STOP DEVELOPMENT**

The purpose of a trailhead or rest stop is to provide comfort and convenience for trail users en route to their destination. Effort should be made to accommodate some or all of the following in a typical trailhead or rest stop to the degree it is feasible: off-street parking, water, restroom facilities, seating and/or picnic areas, maps and/or information, lighting as appropriate and shade (in the form of planting or shelter).

## **GENERAL LOCATIONS FOR PROPOSED TRAILHEADS/REST STOPS**

The Trail System Plan proposes developing trailheads in or adjacent to park and trail locations within the New Scandia Township system in generally underutilized areas. The following six areas are recommended for potential trailhead locations:

**Big Lake School Trailhead.** Currently underutilized, this site is located just east of County Road 15/ Manning Avenue at the intersection of Mayberry Trail North. Washington County has proposed the Washington Parkway along this route for non-motorized, multi-purpose use (see Figure 4-1: County Trails/ Routes Plan).

**Bone Lake Trailhead.** A trailhead located in Bone Lake Park east of County Road 15/ Manning Avenue would introduce new purpose to this area.

**New Scandia Community Center Trailhead.** Located near the heart of the Village Center, this site already has many of the features favored for a trail rest stop.

**199<sup>th</sup> Street/State Highway 95 Trailhead.** Located at the intersection of State Highway 95 and 199<sup>th</sup> Street, this rest stop could serve people coming from the south who are interested in visiting the Village Center, especially since it is already a commercial area with an established parking lot.

**Swedish Settler's Trailhead.** Located near the Lion's Park at Hay Lake and the Hay Lake School Museum, this site offers historical interest and provides a rest stop halfway between Big Marine Park Reserve and the Village Center.

**Swenson's Estates Trailhead.** Located on Oren Road North, this rest stop could serve equestrians between the Scandia Rider's Club and Bone Lake Park. This site is also located between Wind in the Pines Park/ Falls SNA and Bone Lake.

**Wind in the Pines Trailhead.** Located near the intersection of State Highway 95 and Pilar Road, this trailhead would serve Wind in the Pines Park and the Falls Creek Scientific Nature Area and connect to the proposed Pilar Road bicycle route.

### **TRAIL FUNDING SOURCES**

There are many government and private sources for funding trail development. The Township should contact the Minnesota Department of Natural Resources, Trails and Waterways Unit for a detailed list of funding sources (see Chapter 8: Implementation, for a partial list of funding sources.) However, obtaining grants has become very competitive. Therefore, the Township should also explore ways that it can fund trail development on its own. The Township can require trail dedication as part of the subdivision process. The Township can also include trail construction in its road improvement budget. The Township may even want to consider funding trails through a Township bond. In short, the Township should work closely with trail organizations, regional governments, and adjacent communities to coordinate trail development efforts.

### **UPDATE OF THE TRAIL SYSTEM PLAN**

New Scandia Township should periodically review and update the recommendations regularly as conditions warrant. The Township should completely update the Trails System Plan by the year 2025, given its anticipated rate of growth.

### **THE WASHINGTON COUNTY LINEAR PARK SYSTEM MASTER PLAN**

The following section recommends specific improvements for proposed trails within New Scandia Township as recommended by the *Washington County Linear Park System Master Plan; A Policy Guide to the Year 2015*. The Township should collaborate with Washington County to further develop these plans while consulting with neighboring residents and the community-at-large.