

## 4. NON-MOTORIZED SYSTEM

The Non-Motorized System is made up of a continuous network of facilities that represents the principal commute, school, and recreational travel corridors. Information for the proposed system came from community input at the first workshop, the citizen inventories, and the knowledge of the Non-Motorized Steering Committee and City Departmental staff. The May 2001 workshop allowed the community to review the proposed system and provided an opportunity for comments.

Participants in the May workshop considered the physical form of the system each facility's use using the following criteria: topography, automobile traffic, safety, location, and connectivity to identify the appropriate non-motorized facility for each non-motorized system segment.

The System Plan provides minimum standards as a guide for decisions on non-motorized facility design. A higher standard of development for the non-motorized facilities may occur through the design and review process, specified in Chapter Six, or as required by the City Engineer for conformance with State and Federal requirements. While the Winslow area requires more urban standards (such as paved sidewalks) to accommodate the higher number of non-motorized users, the majority of the Island's needs can be met using less developed and less costly methods. For each type of facility below, a definition is provided along with a description of how and where the facility may be applied to the System Plan.

### **Facility Type Definitions**

**Sidewalks** (Urban) – Sidewalks are the principal pedestrian facilities found within urban areas. Where possible, sidewalks could meander, creating visual interest and a less “urban” feel, and minimizing the need for relocation or removal of existing trees and utilities. The accepted industry standard for sidewalks is 5 feet wide. In areas where there is a high-level pedestrian activity, the standard is increased to either 7 or 10 feet wide, depending on the expected level of pedestrian activity and the adjacent land uses.



**Bicycle Lanes** (Urban and Non-Urban) – Bicycle lanes are designated bicycle facilities that provide a separated travel lane for bicycles. For this Plan, all bicycle lanes will meet the AASHTO minimum width standard. In addition, an 8” wide stripe will be used to clearly identify the location of the bicycle

lanes.

**Bicycle Facilities** (Urban and Non-Urban) – Bicycle routes are roads designated for bicycle travel. Typically, bicycle routes will include widened travel lanes or a paved shoulder to allow vehicles to pass bicyclists.

**Bikeways** (Urban and Non-Urban) – Bikeways are designated routes leading to specific destinations utilizing existing roadways. Bikeways serve as connections to improved non-motorized facilities and public road ends at the shoreline. No specific improvements are planned for roads designated as bikeways.

**Separated Pathways** (Urban and Non-Urban) – Separated pathways are non-motorized facilities that are physically removed from the primary roadway. Pathways can be multi-use facilities, or be striped or use a physical separation between different non-motorized uses. Pathways differ from trails, because they perform primarily a transportation function rather than a recreation function. In this Plan, minimum standards are 4' wide for a one-way facility and 10' for a two-way pathway.

**Shoulder Facilities and Pedestrian Pathways** (Urban and Non-Urban) – A shoulder facility is a widened, paved or soft shoulder, that provides non-motorized users an option to traveling in vehicle lanes. This option provides for multi-use facilities with the minimum (multi-use) width being a 10-foot roadway and a 3-foot shoulder.



**School Overlay** (Urban and Non-Urban) – To be applied along major roads within one mile of all school sites this overlay is intended to provide for the safe travel of bicyclists and pedestrians, to and from school, and may include one or more of the above facilities as appropriate for the age and volume of students to be served. Specific design standards for each school overlay zone will be established utilizing the public involvement process outlined in chapter six.

**Shared-Use Path:** This design standard, is specified by WSDOT for regional trails like the Sound to Olympics Trail to provide for a wide variety of users (including bicyclists, walkers, runners, seniors, families with children, and people with disabilities who may use assistive devices such as wheelchairs, walkers, & canes--traveling both directions). The shared-use path standard calls for a paved surface 12' wide preferred, minimum 10' wide.

**Trails** (Urban and Non-Urban) – A trail is a shared facility that provides recreational travel for bicycle, pedestrians, equestrian and other users. While trails are primarily recreational in use, they often provide a secondary transportation network that supports the overall non-motorized system. Paved trails allow access to pedestrians with strollers, and wheelchair and other disabled users. Unpaved trails primarily serve pedestrians, but can also be used by equestrians and mountain bicycles when appropriately designed. For this plan, trails were identified as either formal (signed and maintained) or informal (those that develop as shortcuts between other facilities).

### **Design Standards**

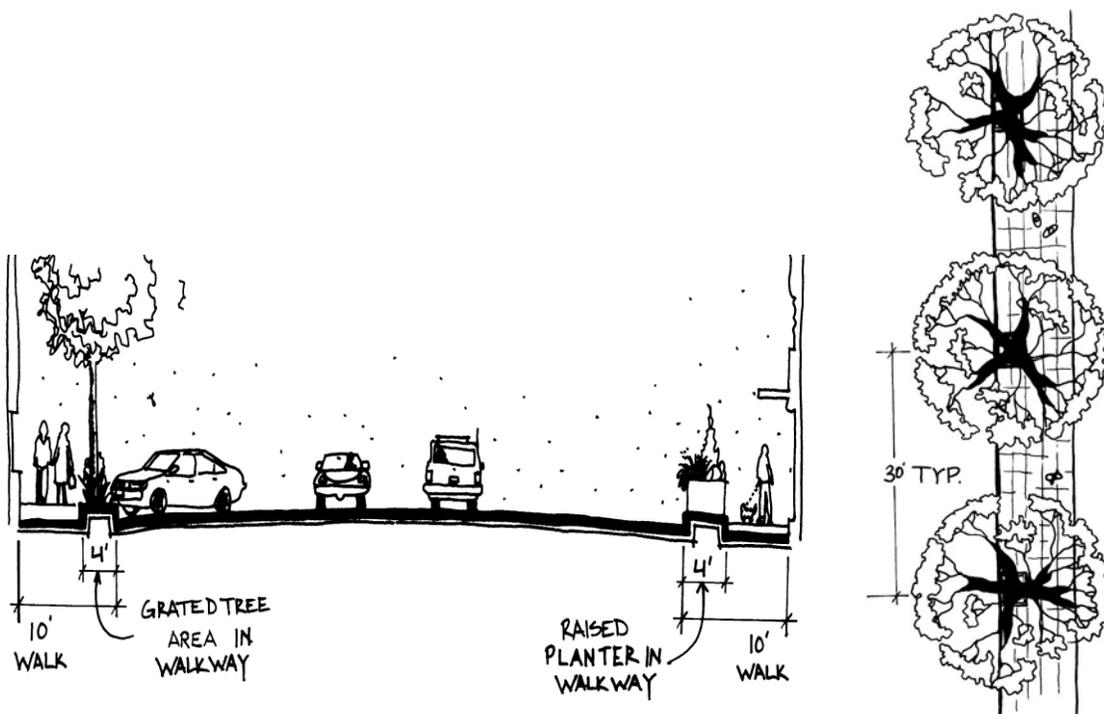
In developing this system plan, a process will be utilized to encourage the incorporation of neighborhood character into the design of non-motorized facilities (see policy six, chapter two and pg. 4, chapter six). Each route has been assigned minimum criteria, such as a bike lane. The final design for each route, segment or project area, will be developed with input from neighborhood residents, facility users and the larger community and approved by the City Engineer, to meet State and Federal requirements. The design standards illustrated below represent the minimum recommendations. If an increase is needed to meet State and Federal requirements, the City Engineer will establish the standard(s) for the project area during the design phase for each identified non-motorized project. Through the public involvement process the assigned standard can be increased or other enhancements can be recommended. For example, if a segment has been assigned a 3-foot gravel shoulder for bicycle and pedestrian use, the public can request that a 5-foot paved shoulder be installed. This is an important feature of the public and neighborhood-input process, intended to allow for the concerns, priorities and character of each neighborhood.

## Winslow Area

The Winslow area of Bainbridge Island is the most urban part of the Island. The concentration of uses and major transportation facilities requires specialized types of facilities. The following figures describe the recommended minimum non-motorized facilities for identified elements of the non-motorized network within the Winslow area.

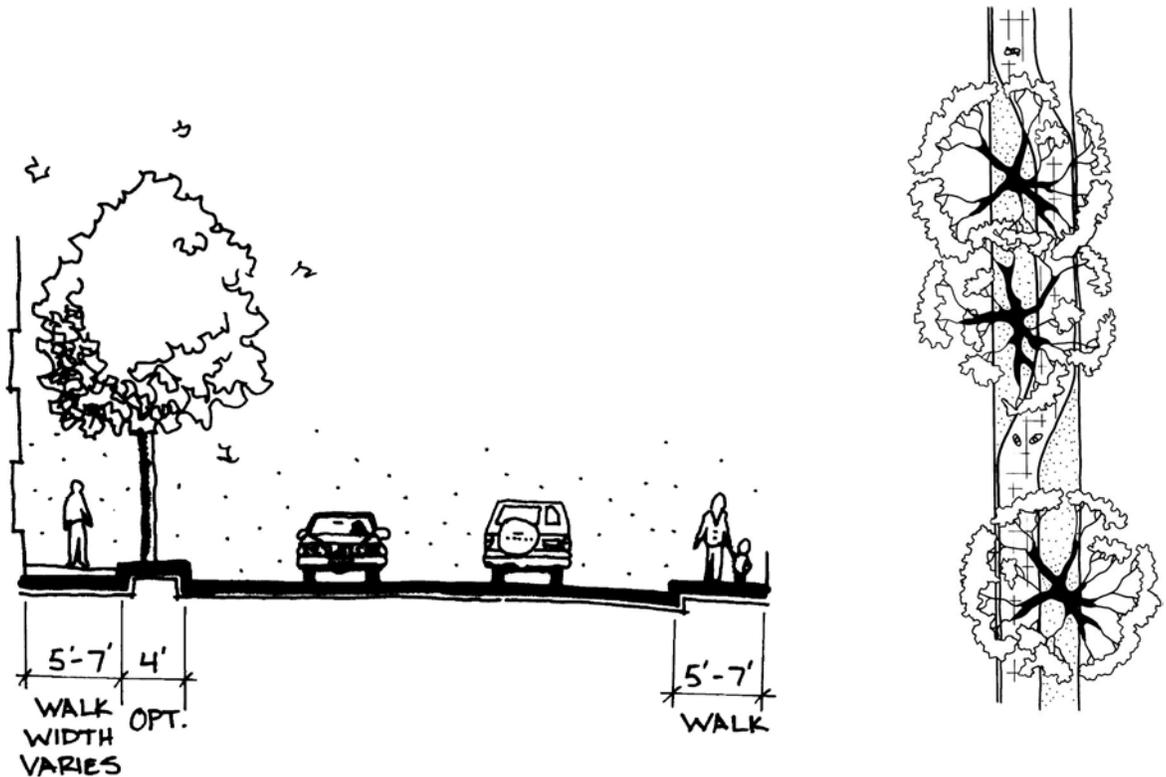
### *Winslow Area – Commercial Core, WS-1: 10 foot sidewalk*

- Used in areas with high pedestrian volumes.
- Sidewalks are 10-feet wide with landscaping in raised planters or 4 foot wide grated tree planing areas.
- Bicycles share roadway with motorists.



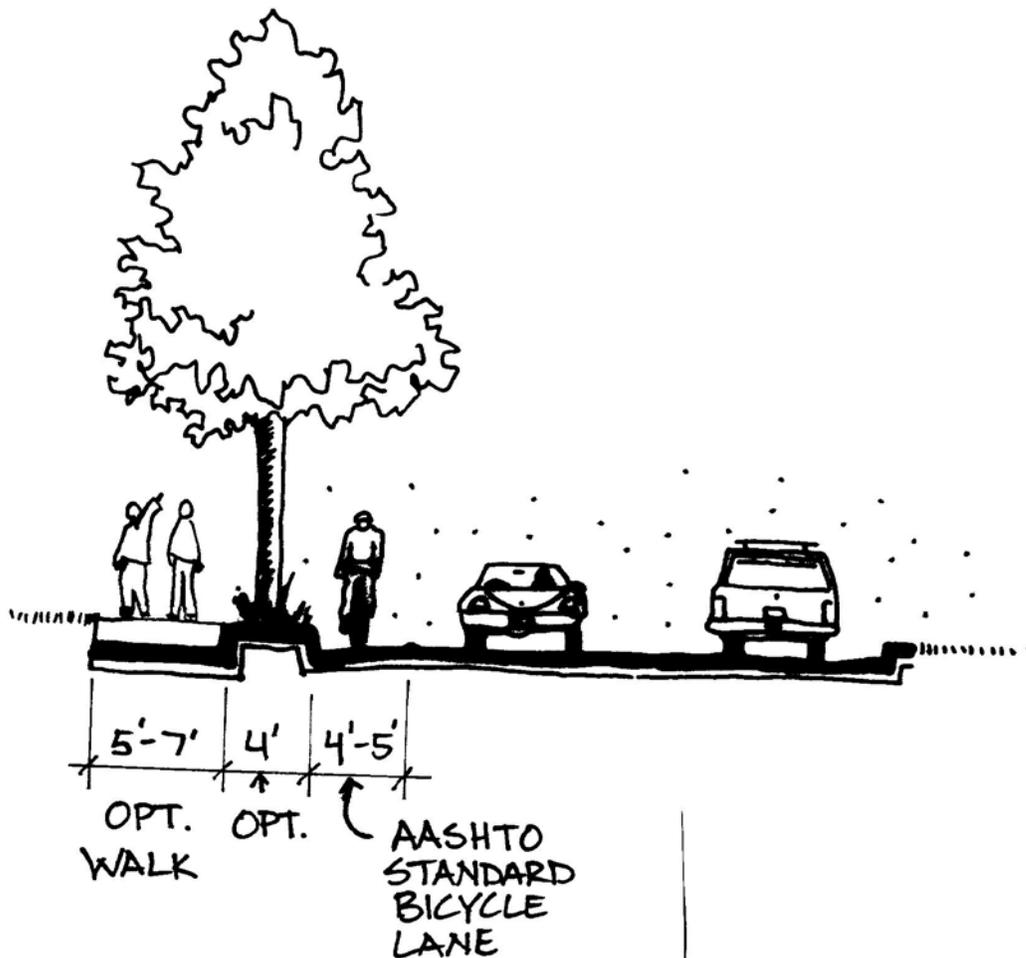
*Winslow Area – WS-2, 5 to 7 foot sidewalk with or without landscaping.*

- Sidewalks may include 4 foot landscaping in raised planters or grated plantings within walk area.
- Sidewalk may be a meandering path where appropriate, to increase visual interest.
- For use in areas where physical restraints exist or where low use is expected.
- Width determined by expected volume and accepted standards.
- Projects may be phased in over time.
- The minimum criteria for WS-2 is a 5 foot wide sidewalk.



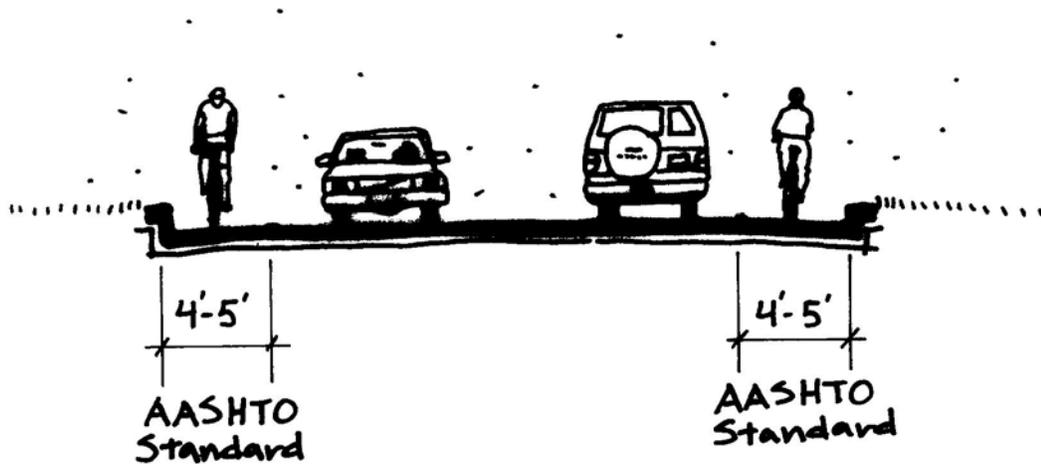
*Winslow Area –WB-1 Bicycle lanes with or without landscaping.*

- To accommodate commercial, recreational and commute non-motorized travel.
- Striped bicycle lanes that meet AASHTO standards used as the minimum standard throughout urban areas.
- May include sidewalks, please refer to WS-2.
- Optional landscape strip to provide for traffic calming and visual interest.



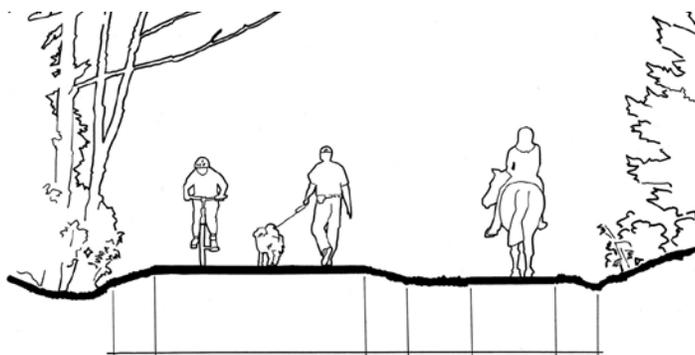
*WB-2 Bicycle lanes, with or without landscaping.*

- Used on Primary commuter routes.
- Bicycle Lanes that meet State and national standard are used as the minimum standard throughout urban areas.
- Projects may be phased to accommodate available funds and construction schedules.



## Island Areas

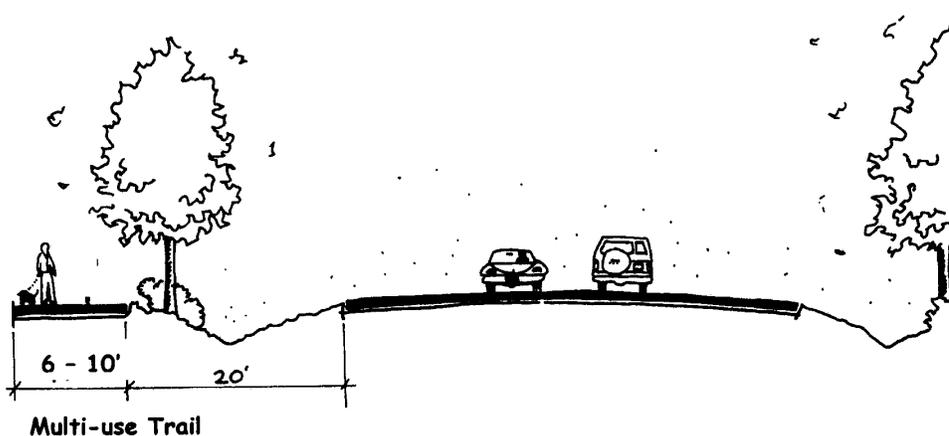
The following set of figures describes the minimum non-motorized facilities for each class of roadway. A facility code, and a description of the facility, the minimum right-of-way required, and the applicability to the non-motorized classification identify each facility type. Facility codes A and B and C describe bicycle facilities. Roadways with facilities coded C provide a shoulder that gives additional room for bicycles and pedestrians, without the construction of a more formal bicycle lane. Minimum shoulder widths on C-coded roadways will be designed and constructed to meet State and Federal requirements. Meeting State and Federal requirements (such as AASHTO) is important. When if the standards are is met, the project is recognized to meet minimum safety requirements and becomes eligible for certain types of funding. Alternative storm drainage details for the Island Areas are provided. Piped storm drainage is preferred over ditched storm drainage as a means of protecting existing roadside vegetation and neighborhood character.



Shared-Use Path Cross-Section, 10-12 feet wide

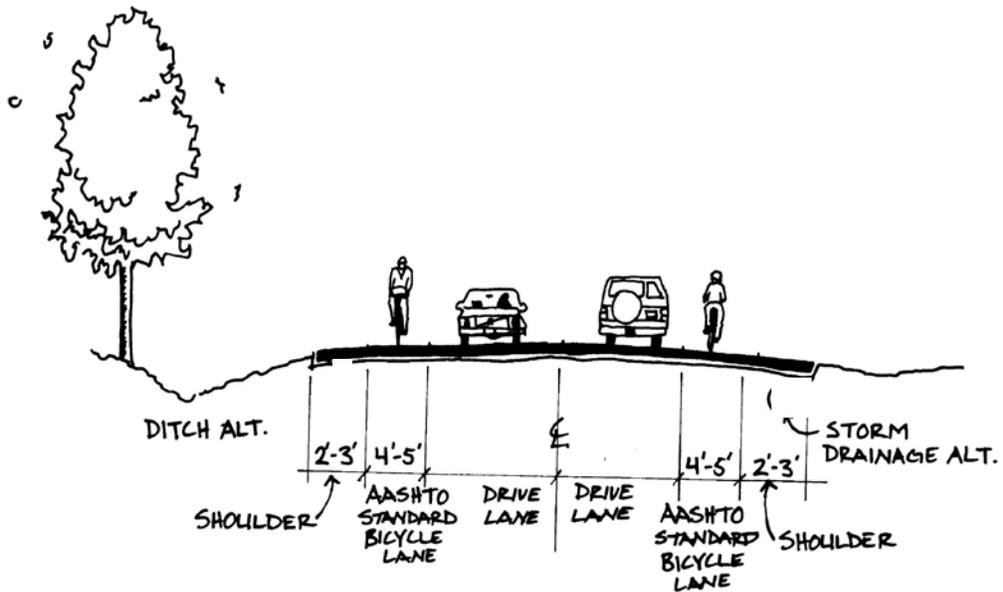
### *Type A: Multi-use, separated pathway*

- Used along corridors with high vehicle speeds or along dedicated non-motorized corridors.
- Creates a shared pathway separated from the roadway.
- The grade, surface, and width may vary between 6-10 feet to create a context sensitive design that considers topography and existing vegetation.



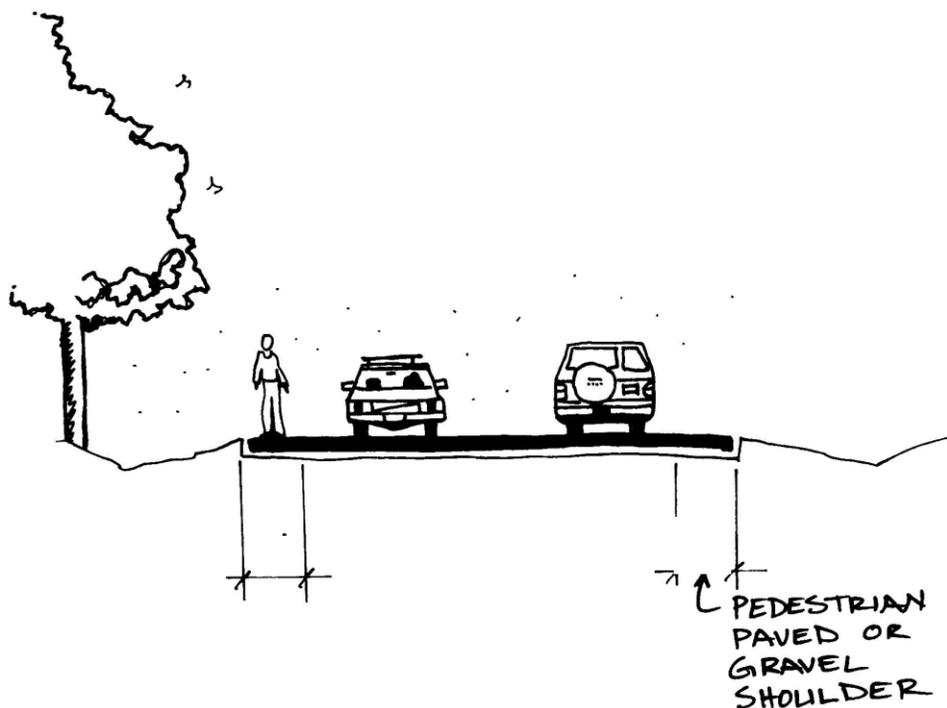
*Type B: bicycle facility and shoulder*

- Used on primary commute corridors where pedestrian travel is found.
- Walkway can be separated where right-of-way allows.
- There can be either a ditch along side the facility or a storm drain underneath. The storm drain is considered the minimum because a properly graded ditch often requires extensive removal of vegetation and this can be disruptive to neighborhood character.
- Bicycle facility and shoulder details will be designed to meet accepted safety standards as determine by City Engineer, for the volume and speed of the roadway.



*Type C: - 3'-5'-multi-use shoulder*

- Used on roadways with lower levels of bicycle and pedestrian travel.
- Walkway can be separated where right-of-way allows.
- Shoulder may be paved or gravel, depending on existing situation and expected use.
- Storm drain or ditch is provided, depending on existence of significant vegetation.



*School Access Overlay*

- Used near school areas where high pedestrian and bicycle volumes are encouraged.
- A concrete curb may separate the soft path walkway from the paved roadway.
- Walkway can be separated where right-of-way allows.

## **Proposed System Plan**

The proposed Non-Motorized System Plan shown in Maps D and E is the heart of the plan. The described system plan represents the “build-out” of the non-motorized system, with prioritization and phasing occurring as part of the implementation process. Generally, the lines indicate where improvements will be constructed, and the map legends refer to the recommended minimum facilities. Some segments propose phasing a non-motorized facility, constructing the facility on one side of the street, with the option to construct it along the other side at a later date. If there is public support, facilities standards may be increased from the minimum identified on the System Map. For example, if the map indicates a phased project on a street and the public input supports constructing a facility on both sides of a street at this time, the City Council may approve the design and construction of the facility on both sides as recommended through public involvement.

### **Features of the system**

*Sound to Olympics Trail (STO)* -- A regional trail, built to the shared-use path standard, within or along the SR 305 right of way from the WSF terminal in Winslow to the Agate Pass Bridge on Bainbridge. Subsequent design will need to include environmental and grade constraints\_and\_safe crossings at intersections with roadways along the route.

*Mandus-Olsen Pathway* – A two-way separated pathway will be constructed along the Mandus-Olsen corridor connecting the northern portion of SR 305 to the Head of the Bay.

*Puget Power Utility Corridor* – A two-way separated pathway is proposed within the Puget Power corridor to provide a safe connection for North Island residents to SR 305. The corridor may connect in the future to the Mandus-Olsen Corridor.

*SR 305 Pedestrian Crossings* – Pedestrian overpasses, or other design features or facilities to allow safe crossings, should be considered at Hidden Cove Road, Sportsman Club Road, and at Knetchel Way connecting to John Nelson Park. (LUC)

*School Routes* – Improvements near school sites, providing for pedestrian and bicyclist travel corridors along important roadways will be considered as part of a school route overlay system. Roadways that will have school routes considerations include portions of Day Road, N. Madison Avenue, New Brooklyn Road, Sportsmans Club Road, Bucklin Hill Road, Blakely Avenue, High School Road and Baker Hill Road. (see page 4-2 for school route overlay discussion).

*Island Bicycle Lanes* – A system of bicycle lanes will provide commute corridors including Miller Road, New Brooklyn Road, High School Road, Lynwood Center Road and Blakely Avenue.

*Widened Shoulders* – A secondary system of widened, paved shoulders will increase non-motorized mobility throughout the Island. Many roadways are proposed to have improved shoulders to provide a comfortable path. On many roadways these shoulder improvements will provide connections to other portions of the non-motorized system. Roadways slated for shoulder improvements include North Madison Avenue, Koura Road, portions of Fletcher Bay Road, Fort Ward Hill Road, Sunset Drive, Old Mill Road and Taylor Avenue.

*Trails* – Throughout the Island, trails are proposed to provide a secondary network of connections to destinations.

*Trail Connection Zone* – An area where the City seeks to complete its trail network.

*Pedestrian System* – Within Winslow, sidewalks and informal trails are used to create a network of connections to popular destinations.