Isle of Wight County
Pedestrian and Bicycle Master Plan

Construction Specifications Manual

Adopted August 20, 2009

Introduction

The Isle of Wight County Pedestrian and Bicycle Facilities Master Plan was prepared in July 2006 and adopted by the Board of Supervisors in October 2006. The Master Plan was adopted by reference as Appendix B to the County's Comprehensive Plan in 2008. The Master Plan was developed by the Toole Design Group, LLC, in conjunction with the Isle of Wight County Pedestrian and Bicycle Facilities Committee through a public input process.

The final vision developed with the plan was that Isle of Wight will become a place:

- Where people have the convenient and safe option of traveling on foot and by bicycle throughout the County for transportation and recreation, and;
- Where pedestrian and bicycle activity is promoted for the health of residents, preservation of community character and the environment, and economic vitality of the County.

The Master Plan identified five main goals for achieving this vision, including: connectivity, economic benefits, preservation of community character and integrity, recreation and health, and safety. The Plan also recommended specific short term, medium term, and long term facility improvements and policy changes for the County to pursue in achieving this vision.

Purpose

The purpose of these specifications is to provide for connectivity and continuity in the design of bicycle and pedestrian facilities in the County. They are meant to ensure the safety of users, provide reasonable accessibility for all user groups, and maintain the existing rural character in our transportation corridors. This manual is also meant to provide landowners and future applicants and/or project developers with specific construction and design criteria for providing multi-modal facilities in their projects as outlined in the Pedestrian and Bicycle Facilities Master Plan and other policy documents approved by the County.

Where there are standards imposed by this document which are more restrictive than other standards which may be applied to the project, the more restrictive standards shall apply. In the case of an unresolved hardship on the part of the applicant in meeting these standards, the applicant may request a waiver of these specifications from the County's Development Review Committee (DRC).

Map

The trail types identified in this specifications manual relate directly to the trail types identified on the *Bike and Pedestrian Trail Types* map. Specific parcels or areas in question should be located on the map to determine the trail type or types required for that parcel or area. Typical construction specifications for each applicable trail type are found on pages 3-6 of this document.

Bike and Pedestrian Trail Types

Multi-Use Path

The multi-use path is expected to be a completely separate, off-road facility meant to serve a wide variety of non-motorized users, including: bicyclists, runners, walkers, in-line skaters and wheelchair users. This trail type is expected to be provided along major transportation corridors, particularly within higher density areas such as the County's Development Service Districts (DSDs) and connecting specific community points of interest such as recreational facilities and schools. Certain areas of the County may also benefit from multi-use paths which are designed to accommodate equine users. These types of multi-use paths/equine trails are detailed further in this section.

Multi-use paths shall be located parallel to existing roadways, within a dedicated easement on private property and shall be constructed a minimum of five (5) feet outside of any existing Virginia Department of Transportation (VDOT) right-of-ways or a minimum of five (5) feet from any existing roadside drainage ditches—whichever is greater.

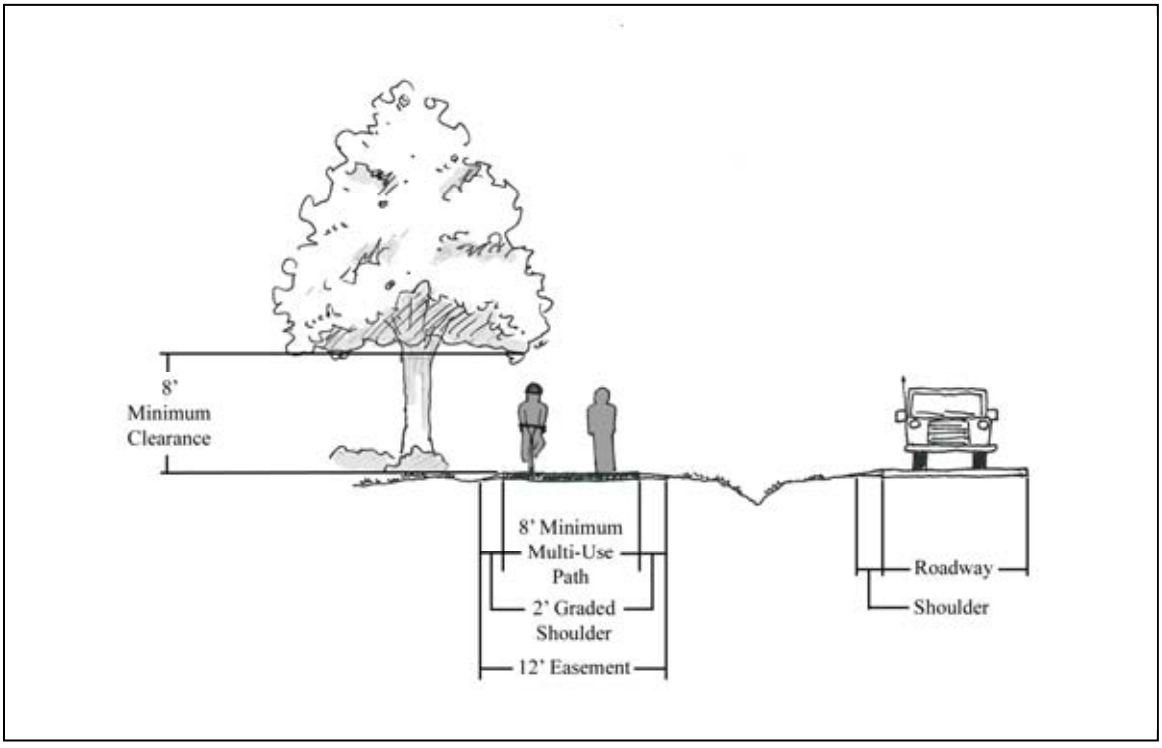


Figure MU-1, Mutli-Use Path, roadway typical.

Multi-use paths shall be a minimum of eight (8) feet wide and surfaced in asphalt. The path shall be located within a dedicated easement not less than twelve (12) feet wide and containing at least two (2) feet of graded area maintained as grass on each side of the hard surface trail. Eight (8) feet of vertical clearance shall be maintained over the trail surface.

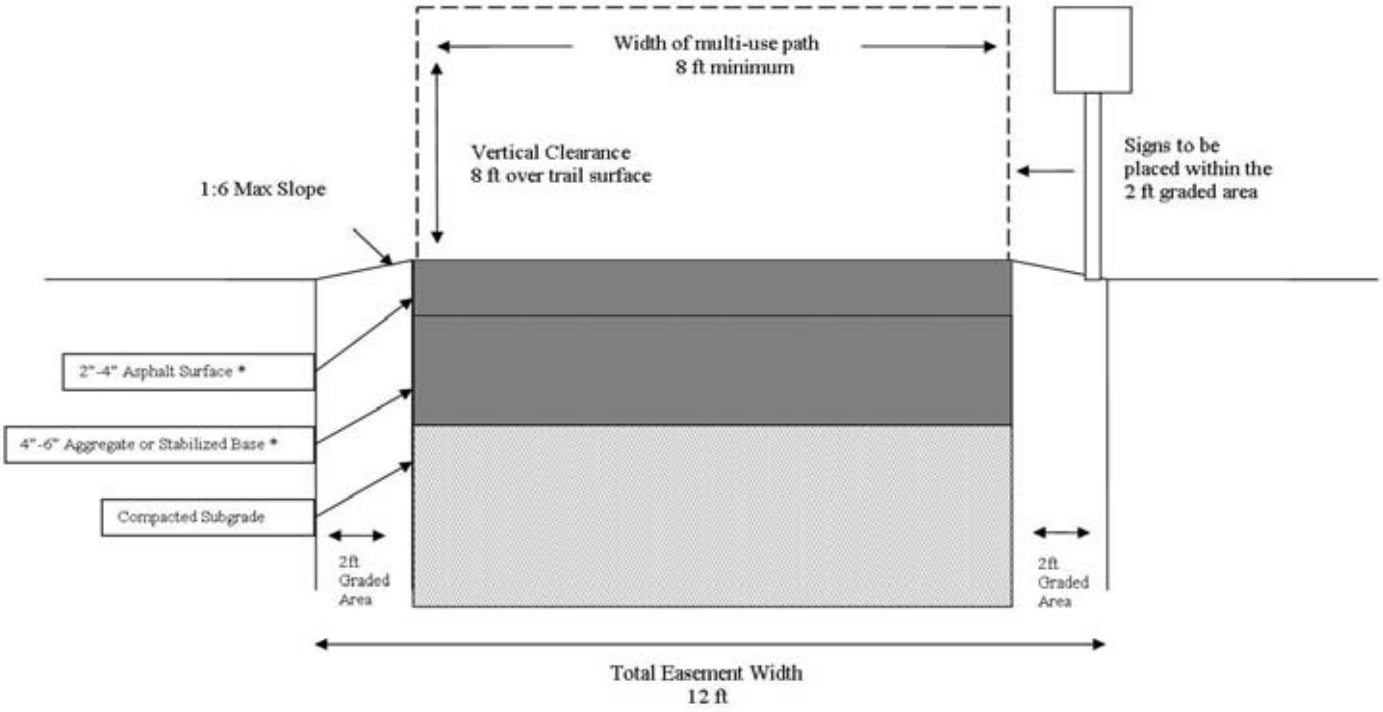


Figure MU-2, Multi-Use Path, construction typical

In the case of a public project which is required to be located within a state or municipal right-of-way, construction shall meet the minimum national standards, as defined by the American Association of State Highway Transportation Officials (AASHTO), the American with Disabilities Act, Designing Sidewalks and Trails for Access (by US Department of Transportation), and the Manual on Uniform Traffic Control Devices (MUTCD).

Locations may be identified in the future to serve as multi-use path/equine trails. These shall include a minimum easement of sixteen (16) feet. Construction shall include six (6) feet of asphalt surfaced pathway with at least two (2) feet of graded area on the side nearest to vehicular traffic and a board fence a minimum of 48 inches tall and a maximum of 54 inches tall on the far side of the path with at least six (6) feet of compacted aggregate with fines (such as moon dust, stone dust or screenings) on the other side with at least two (2) feet of graded area on the far side. Multi-use path/equine trails shall require at least fourteen (14) feet of vertical clearance over the easement area. Large aggregate material such as crush and run shall not be used.

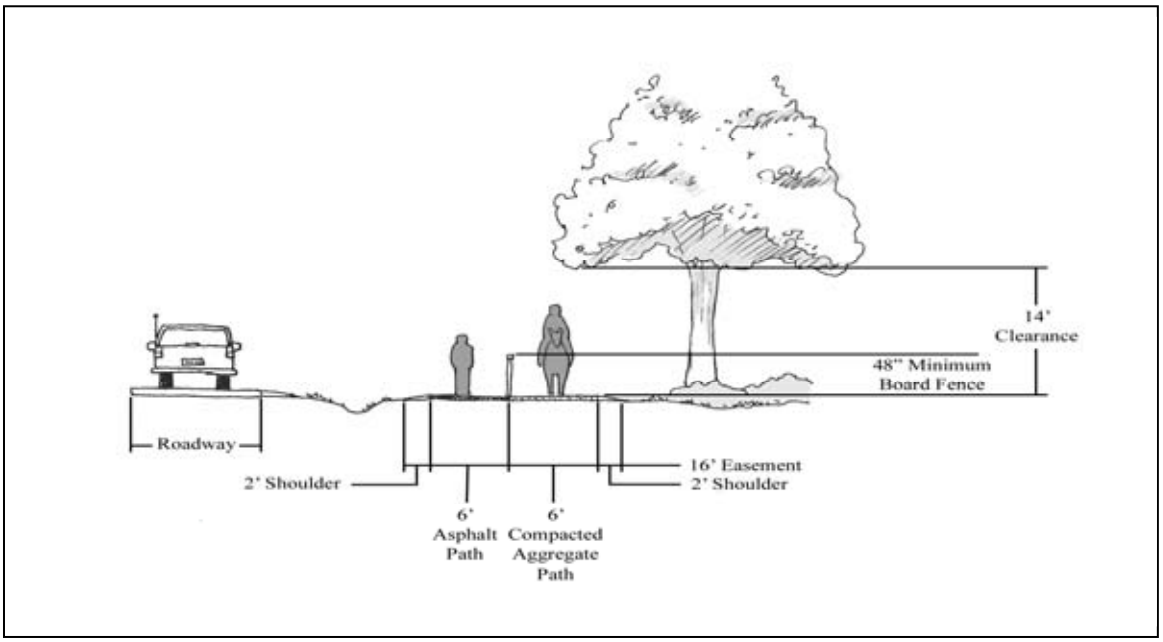


Figure MU-3, Multi-Use Path/Equine Trails, roadway typical.

Landscaping is encouraged along the path, particularly in the area between the pathway and the roadway. Root barrier shall be installed along any segments of the path which include landscaping (existing or new) within three (3) feet of the asphalt surface. All landscaping between the path and the roadway shall be either less than thirty-six (36) inches in height or greater than twenty (20) feet in height at maturity. Vertical clearance above the trail surface shall be maintained as noted for each trail type.

Dedicated Bicycle Lanes

A dedicated bicycle lane is a portion of the roadway that has been designated by striping, signing, and pavement markings for the preferential or exclusive use of bicyclists. Dedicated bicycle lanes are always located on both sides of the road (except one way streets), and carry bicyclists in the same direction as adjacent motor vehicle traffic. The Pedestrian and Bicycle Master Plan has recommended dedicated bicycle lanes along roadways which are proposed as a component of a regional trail system or are major connections for existing routes which have been found to be heavily utilized in and through the County.

Bike lanes shall be paved surface, six (6) feet wide, with a solid six (6) inch white stripe between the bike lane and the vehicle travel lane. These facilities will be located within VDOT right-of-ways.

In individual cases where 6 feet is not available within the existing right-of-way and additional right-of-way can not be acquired, a minimum of four (4) feet of paved width can be utilized. However, due to the numerous documented and expected user groups based on the County's proposed regional trail connections, facilities less than six (6) feet wide are strongly discouraged.

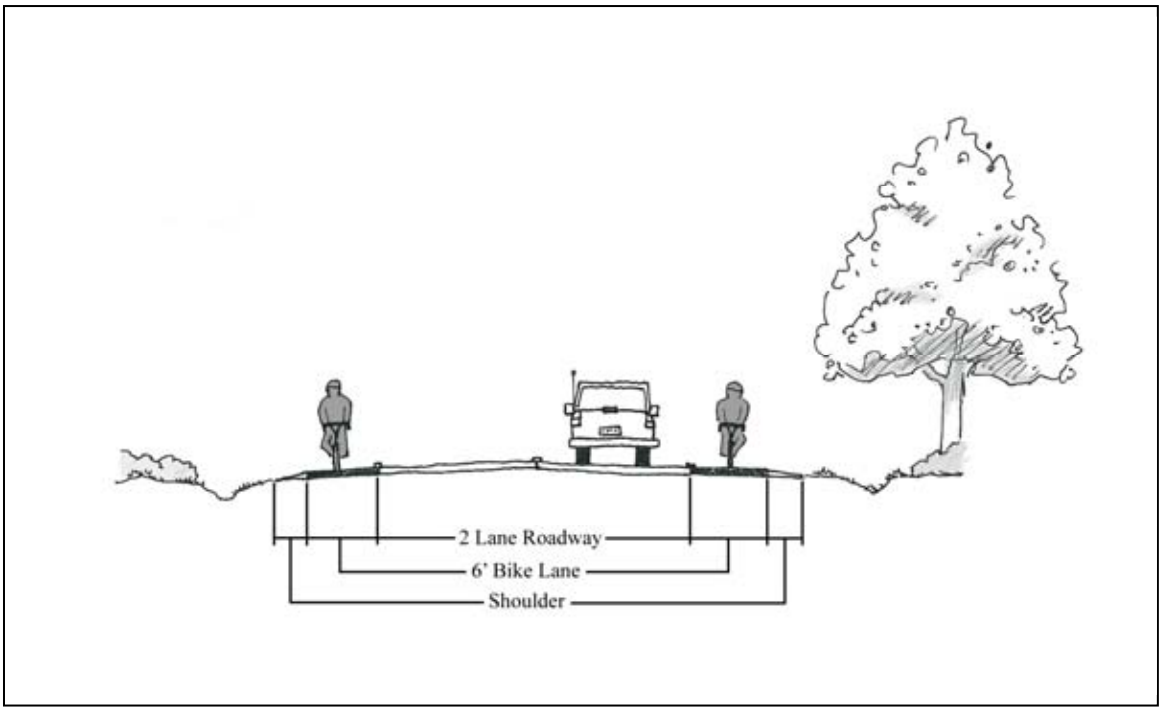


Figure BL-1, Dedicated Bicycle Lanes, roadway typical.

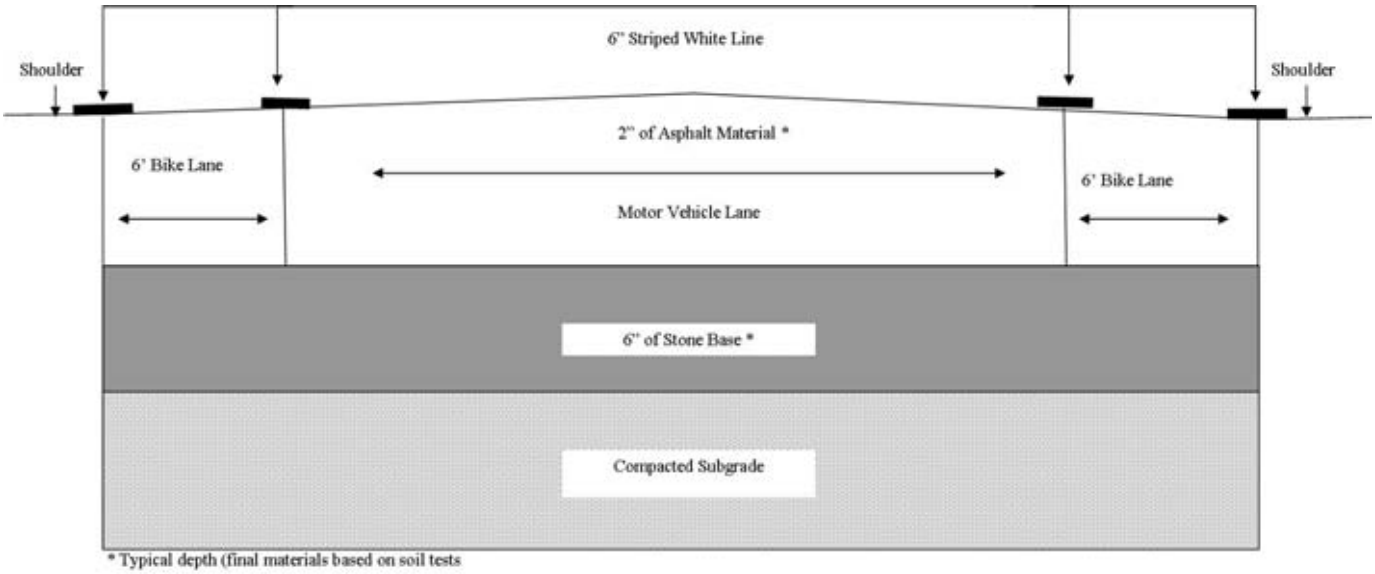


Figure BL-2, Dedicated Bicycle Lanes, construction typical.

Non-dedicated Bicycle Routes (Paved Shoulders)

Non-dedicated bike routes are roadways which have been identified as heavily used cycling routes by recreational bicyclists and clubs or which have been identified by the County as significant points of interest or connectivity in the greater, County-wide transportation network. These routes are proposed to incorporate paved shoulders and targeted signage to increase safety and functionality for cyclists of all skill levels. Paved shoulders are not designated or restricted specifically to bicyclists and have the added benefit of improving roadway safety and functionality for all users, including vehicular and pedestrian traffic.

Roadways identified as non-dedicated bicycle routes should be improved to include a minimum of six (6) feet wide shoulders with a six (6) inch edge stripe between the facility and the vehicle travel lane. These facilities will be located within the VDOT right-of-ways. In individual cases where 6 feet is not available and the designated roadway speed is less than forty (40) miles per hour, a minimum of four (4) feet of paved width can be utilized.

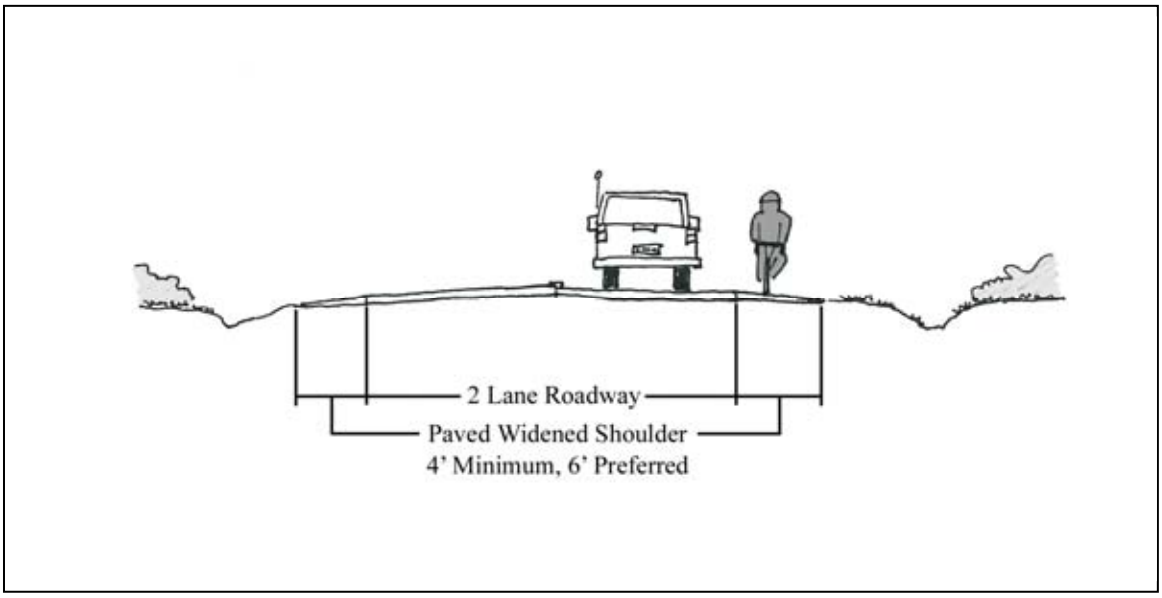


Figure BR-1, Non-dedicated Bicycle Routes, roadway typical.

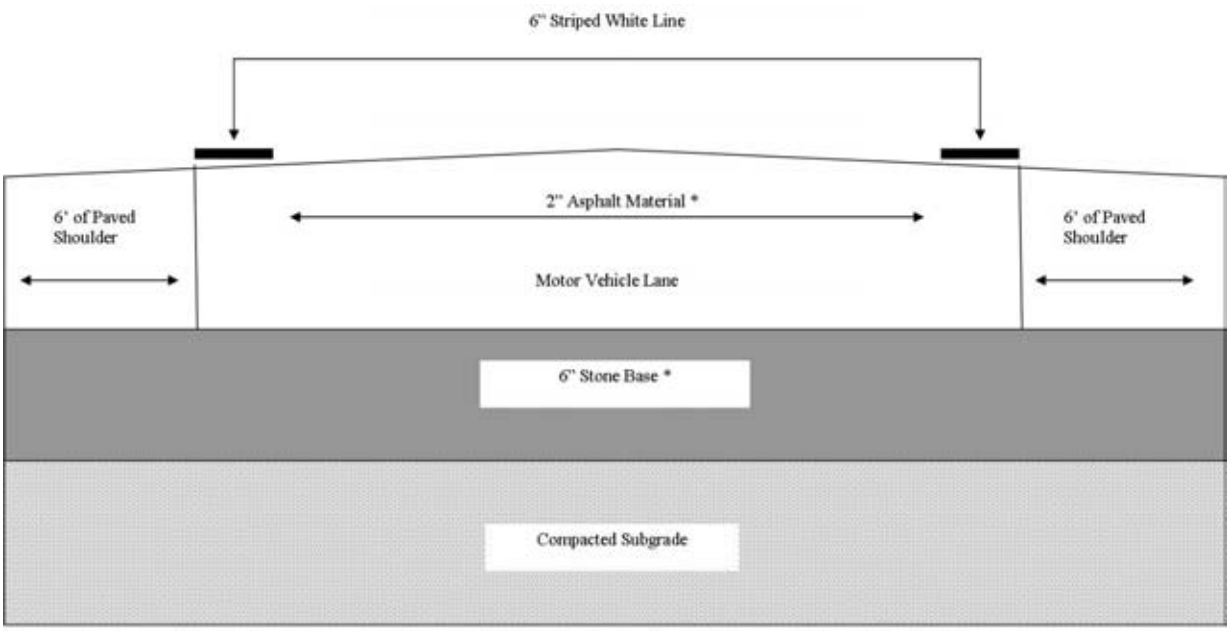


Figure BR-2, Non-dedicated Bicycle Routes, construction typical.

Summary Table

Trail Type	Pavement width	Easement width	Vertical Clearance	Ownership/Maintenance
Multi-Use Path	8’	12’	8’	Private/County
Multi-Use Path/Equine Trail	6’ paved 6’ compacted aggregate	16’	14’	Private/County
Dedicated Bike Lanes	4’ min 6’ max	N/A	8’	VDOT/VDOT
Non-dedicated Bike Routes-Paved Shoulders	4’ min 6’ preferred	N/A	8’	VDOT/VDOT

References

- *Guide to the Development of Bicycle Facilities.* Updated in 1999 by the American Association of State Highway Transportation Officials (AASHTO). Available from FHWA or AASHTO. www.aashto.org/bookstore/abs.html

- *Manual on Uniform Traffic Control Devices* (MUTCD). Published by the U. S. Department of Transportation, Washington,DC, 2001

- *Americans with Disabilities Act Accessibility Guidelines.* U.S. Department of Justice, United States Access Board. Guidelines are available at http://www.access-board.gov/adaag/html/adaag.htm

- *Designing Sidewalks and Trails for Access: Part Two - Best Practices Design Guide*. Published by U.S. Department of Transportation, Washington, DC, 2001

- *Greenways: A Guide to Planning, Design and Development.* Published by Island Press, 1993. Authors: Charles A. Flink and Robert Searns. www.greenways.com

- *Trails for the Twenty-First Century.* Published by Island Press, 2001. Authors: Charles A. Flink, Robert Searns, and Kristine Olka. www.greenways.com

Other useful web sites for information include:

- Rails-to-Trails Conservancy - www.railtrails.org
- National Park Service - www.nps.org
- U.S. Department of Transportation - www.walkinginfo.org and www.bicyclinginfo.org
- Trails and Greenways Clearinghouse - www.trailsandgreenways.org
- National Bicycle and Pedestrian Clearinghouse - www.bikefed.org/clear.htm