CHAPTER 8
ROADSIDE FEATURES

8.01 General

Miscellaneous features included herein shall be developed and constructed to encourage the uniform development and use of roadside features wherever possible.

8.02 Design Standards

The design and placement of roadside features noted in this Chapter shall adhere to the specific requirements as listed for each feature, and, where applicable, to the appropriate standards as set forth in Sections 1.02 and 1.06.

8.03 Staking

All surveying and staking shall be performed by the design engineer or a licensed surveyor capable of performing such work. The engineer or surveyor directing such work shall be licensed by the State of Washington. Staking shall be maintained throughout construction.

A pre-construction meeting shall be held with the City prior to commencing staking. All construction shall be inspected by the City prior to construction.

8.04 Testing

Testing shall be required at the developer's/contractor's expense on all materials and construction as specified in the WSDOT/APWA Specifications and with a frequency as specified in the WSDOT Construction Manual and in these Guidelines.

8.05 Survey Monuments

8.05.1 All existing survey control monuments which are disturbed, lost, or destroyed during surveying or construction shall be replaced with the proper monument as outlined below by a land surveyor registered in the State of Washington at the expense of the responsible developer/contractor.

8.05.2 The monument installation shall be as shown on the standard drawings.

8.05.3 Required monument locations: Appropriate monuments shall be placed:

At all street intersections;

At the PC and PT's of all horizontal curves;

At PI of all horizontal curves of streets where the PI lies within the limits of the traveled roadway;

At all corners, control points and angle points around the perimeter of subdivisions as required by the City.

At all corners, quarter corners, and sixteenth corners that fall within the right-of-way.

8.05.4 The monument case shall be installed after the final course of surfacing has been placed.

8.06 Bus Shelters

Bus shelter installation is encouraged by the City throughout its service area. Details and placement shall be the developer's responsibility to work out with Twin Transit, which shall own and maintain the shelters. The City shall be included in the review process, particularly where there are traffic and right-of-way issues.

8.07 Mailboxes

During construction, existing mailboxes shall be accessible for the delivery of mail or, if necessary, moved to a temporary location. Temporary location shall be coordinated with the U.S. Postal Service. The mailboxes shall be reinstalled at the original location or, if construction has made it impossible, to a location as outlined below and approved by the U.S. Postal Service.

Location of mailboxes shall be as follows:

Bottom or base of box shall be 36 to 42 inches above the road surface.

Front of mailbox 18 inches behind vertical curb face or outside edge of shoulder.

New developments: clustered mailboxes are required. Contact the U.S. Postal Service for details.

Mailboxes shall be set on posts strong enough to give firm support but not to exceed 4 x 4-inch wood or one 1.5-inch diameter pipe, or material and design with comparable breakaway characteristics.

8.08 Guard Rails and Bollards

For purposes of design and location, all guard rails along roadways and bollards shall conform to the criteria of the current edition of the WSDOT Design Manual, WSDOT Construction Manual, and WSDOT Standard Details.

8.09 Retaining Walls

8.09.1 Rock walls may be used for erosion protection of cut or fill embankments up to a maximum height of 8 feet in stable soil conditions, which will result in no significant foundation settlement or outward thrust upon the walls. For heights over 4 feet or when soil is unstable, a structural wall of acceptable design stamped by a licensed engineer shall be used.

Any rock wall over 30 inches high in a fill section shall require an engineered design by a licensed engineer. The engineer shall continuously inspect the installation of the wall as it progresses and shall submit to the City inspection reports, including compaction test results and photographs taken during the construction, documenting the techniques used and the degree of conformance to the structural engineer's design.

The engineered wall detail must be submitted to the City Engineering Department for approval prior to installation.

8.09.2 The rock material shall be as nearly rectangular as possible. No stone shall be used which does not extend through the wall. The rock material shall be hard, sound, durable, and free from weathered portions, seams, cracks, and other defects. The rock density shall be a minimum of 160 pounds per cubic foot.

8.09.3 The rock wall shall be started by excavating a trench having a depth below subgrade of one-half the base course or one foot, whichever is greater.

8.09.4 Rock selection and placement shall be such that there will be minimum voids and, in the exposed face, no open voids over 6 inches across in any direction. The final course shall have a continuous appearance and shall be placed to minimize erosion of the backfill material. The larger rocks shall be placed at the base of the rockery so that the wall will be stable and have a stable appearance. The rocks shall be placed

in a manner such that the longitudinal axis of the rock shall be at right angles or perpendicular to the rockery face. The rocks shall have all inclining faces sloping to the back of the rockery. Each course of rocks shall be seated as tightly and evenly as possible on the course beneath. After setting each course of rock, all voids between the rocks shall be chinked on the back with quarry rock to eliminate any void sufficient to pass a 2-inch square probe.

8.09.5 The wall backfill shall consist of quarry spalls with a maximum size of 6 inches and a minimum size of 4 inches or as specified by the licensed engineer. This material shall be placed to a 12-inch minimum thickness between the entire wall and the cut or fill material. The backfill material shall be placed in lifts to an elevation approximately 6 inches below the top of each course of rocks as they are placed, until the uppermost course is placed. Any backfill material on the bearing surface of one rock course shall be removed before setting the next course.

8.09.6 Perforated drainage pipe and filter fabric shall be installed at the back of the wall. This pipe requirement may be waived by the City Engineer upon demonstration by the developer that no subsurface water problem exists.

8.10 Parking Lots

A parking lot construction permit is required prior to surfacing any unsurfaced designated parking area.

Storm water retention/detention shall be provided and shall follow the criteria as set forth in Chapter 9 of these Guidelines.

Four sets of plans and specifications shall be required to be submitted for review and approval by the City with respect to storm drainage discharge and on site retention or detention, matching street and/or sidewalk grades, access locations, parking layout, and to check for future street improvement conformity and City zoning regulations.

Parking lot surfacing materials shall satisfy the requirement for a permanent all-weather surface. Asphalt concrete pavement and cement concrete pavement satisfy this requirement as well as pervious pavement (pervious asphalt, porous concrete, paver blocks or other Ecology-approved surfacing) materials and are approved materials. Gravel surfaces are not acceptable or approved surface material types. Combination geogrid grass/paving systems are approved surface material types. However, their use requires submittal of an overall parking lot paving plan showing the limits of the geogrid system and a description of how the systems will be irrigated and maintained. If the City determines the pervious paving system is not appropriate for the specific application, alternate approved surfacing materials shall be used.

Minimum requirements for parking lot capacity shall be determined by the City Zoning Ordinance.

8.11 Bikeways

Bikeway or Urban Trail construction is required in conjunction with any new development or redevelopment where the estimated cost of improvements on such properties exceeds 25 percent of the value of the existing structures, or plat or short plat approval, when the need for such a bikeway is indicated in the Centralia Comprehensive Plan and/or Centralia Parks and Recreation Master Plan.

8.11.1 Design Standards

The design of bicycle paths shall depend upon their type and usage. Bikeway surfacing shall be as described in Section 4.16. All minimum design standards as set forth in Section 1.06 shall apply.

The minimum design standards for bikeways shall be as defined in the WSDOT Design Manual, Section 1020, Facilities for Non-motorized Transportation.

Normally, bikeways are shared with other transportation modes, although they may be provided exclusively for bicycle use. Bikeways are categorizes as follows:

Class I, Bike Path: A separate facility for use principally by bicyclists, but may be shared with pedestrians. These facilities are separated from motor vehicle roadways.

Class II, Bike Lane: A portion of the motor vehicle roadway that is designated by signs and pavement markings for bicycle use. These facilities are adjacent to the motor vehicle roadway.

Class III, Bike Route: A street that is designated with signs as a bicycle route, where bicycle usage is shared with motor vehicles on the street or, less desirably, with pedestrians on a sidewalk or walkway. Where bicycle usage is shared with motor vehicles, the curb lane width will be increased to 14 feet and "Share the Lane" signs and pavement markings are required.

Class IV, Shared Roadway: An unsigned facility within commercial and high-density urban centers where sidewalk bicycle facilities are not permitted. No special designations or design criteria are directed toward bicycle use.

Class I, II, III, or IV Bikeways, as appropriate, shall be provided:

Wherever called for in the Centralia Comprehensive Plan and/or the Centralia Parks and Recreation Master Plan, or

When traffic analysis or traffic planning indicates bicycle usage which would benefit from a designated bicycle facility as determined by the City, except where noted herein.

8.12 Roadside Planting

Roadside planting shall adhere to the Centralia Municipal Code as required as part of Site Plan Review and/or SEPA. Landscape plans that include roadside planting shall be submitted for review and approval. Irrigation of the roadside planting area(s) is required.

8.13 Staking and Testing

Staking and testing shall be completed in accordance with street staking and testing as outlined in Sections 4.19 and 4.20.