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1120.01 General

This chapter provides information specific to preservation project types.

This chapter identifies those elements and features to be evaluated and potentially addressed during the course of a preservation project. The elements listed here may be in addition to the project need identified in the Project Summary or Basis of Design (see [1120.03\(8\)](#)). Preservation projects may also provide opportunities for project partnering and retrofit options involving additional elements (for example see [1231.06](#)).

Preservation projects are funded in three sub-program areas:

- **Roadway Preservation (P1) projects** preserve pavement structure, extend pavement service life, and restore the roadway for reasonably safe operations of the travel modes accommodated by the facility.
- **Structures Preservation (P2) projects** preserve the state's bridge network through cost-effective actions. There are numerous types of bridge preservation actions including: deck rehabilitation, seismic retrofit, painting steel bridges, scour repair, and others.
- **Other Facilities (P3) projects** preserve the function of guardrail and signing, major drainage, major electrical, unstable slopes and other assets.

For more information on these programs see the Planning & Programming – Scoping website:
<http://wwwi.wsdot.wa.gov/Planning/CPDMO/PlanProgScoping.htm>

1120.02 Structures Preservation (P2) and Other Facilities (P3)

For Structures Preservation (P2) and Other Facilities (P3) projects see the scoping instructions specific to the sub-program and type of work to determine the likely design elements to be addressed by the project.

See [Chapter 300](#) for documentation requirements. If the project changes a geometric design element, replaces an existing bridge or installs a new bridge additional documentation may be required; contact your ASDE to discuss appropriate documentation.

1120.03 Roadway Preservation (P1)

This section applies to features and design elements to be addressed on Roadway Preservation (P1) projects. See [1120.03\(8\)](#) for instructions on using the Basis of Design to document design elements that are changed by the project.

1120.03(1) Adjust existing features

- Adjust existing features such as monuments, catch basins, and access covers that are affected by resurfacing.
- Evaluate drainage grates and gutter pans, and adjust or replace as needed to address bicycle safety (see Drainage Grates and Manhole Covers in [Chapter 1520](#)).
- For guidance on existing curb see [Chapter 1239](#).
- Replace rumble strips if they are removed through project actions, or if their average depth is less than 3/8", unless there is a documented justification for their removal (see [Chapter 1600](#)).

1120.03(2) ADA requirements

- Address ADA requirements according to WSDOT policy (see [Chapter 1510](#) and any active project delivery memorandums or design memorandums).

1120.03(3) Cross slope lane

- Rebuild the cross slope to a minimum 1.5% when the existing cross slope is flatter than 1.5% and the steeper slope is needed to provide adequate highway runoff. See [Chapter 1250](#) for more information about cross slope.

1120.03(4) Cross slope shoulder

- When rebuilding the lane cross slope, evaluate shoulder cross slope in accordance with [Chapter 1250](#).

1120.03(5) Vertical clearance

- Paving projects, and seismic retrofit projects, may impact vertical clearances (see [Chapter 720](#) for bridge clearances and [Chapter 1020](#) for overhead sign assemblies.)
- If vertical clearance will be changed by the project, evaluate this in accordance with [Chapter 720](#). Include this design element and any other affected geometrics in the Basis of Design, the Design Parameters sheets and the Design Documentation Package.
- Contact the Commercial Vehicle Services Office when changes to vertical clearance are planned.

1120.03(6) Delineation

- Install and replace delineation in accordance with [Chapter 1030](#) (this includes pavement markings, guideposts, and barrier delineation).

1120.03(7) Barriers and terminals

- When the project will affect the elevation of the pavement adjacent to a guardrail, terminal, and transition, measure the height of those systems within the project limit and adjacent to pavement edges, curbs, or sidewalks prior to construction. Measure the height to the top of the rail element from the outside paved shoulder edge when no curb is present, from the gutter line when guardrail is set above a curb, or from the

sidewalk elevation if set behind a sidewalk. Note that for purposes of this guidance, chip seal applications have been determined to not affect barrier height.

- When the height of Type 1 guardrail, terminals, and/or transitions is found to be between 26.5" and 30" prior to construction, and that height is changed such that it is outside of that range following construction, either adjust to a height of 28" minimum to 30" maximum, or replace with a Type 31 system.
- When the height of Type 31 guardrail, terminals, and/or transitions is found to be between 28" and 32" prior to construction, and that height is changed such that it is outside of that range following construction, then adjust the height to 31".
- When guardrail height measurements fall outside the ranges provided in the previous two bullets prior to construction, contact region Program Management for instructions.
- Replace both Breakaway Cable Terminals (BCT) and Type 1 anchors with crashworthy terminals in the following situations: 1) when they are on the upstream end with respect to the closest travel lane and located inside the Design Clear Zone for that closest travel lane, or 2) when they are on the downstream end with respect to the closest travel lane and located inside the Design Clear Zone for the opposing traffic direction.
- Evaluate the guardrail length of need in accordance with [Chapter 1610](#) for runs that need to be raised. Do not exceed 250 feet of additional run length within each guardrail run in Pavement Preservation (P1) projects.
- Note that removal is an option if guardrail is no longer needed based on the guidance in Chapters [1600](#) and [1610](#). Document the location of removal and the reasoning for removal in the Design Documentation Package.
- When adjusting terminals that are equipped with CRT posts, the top-drilled holes in the posts need to be at the surface of the ground.
- Pre-cast concrete barrier sections (either New Jersey or "F" shape) are normally installed at a 32" height, which includes provision for up to a 3" overlay. A 29" minimum height for this type of barrier must be maintained following an overlay.
- Single slope concrete barrier may be pre-cast or cast in place, and is installed new at a height of 42", 48", or 54". A 30" minimum height must be maintained for this type of barrier following an overlay.

1120.03(8) Documentation

For Roadway Preservation (P1) projects, use the Basis of Design to document decisions when the project changes any design elements that are not listed in [1120.03\(1\)](#) through [1120.03\(7\)](#). Document any changes to dimensions on the Design Parameter Sheets.

