APPENDIX D.4 PRESUMPTIVE APPROACH SUBMITTAL GUIDE

When the Presumptive Approach is used to design stormwater facilities, the minimum submittal requirements are as follows.

1. **Scaled Site Plans** including (at a minimum):

   - Minimum scale of 1 inch to 10 feet
   - North arrow
   - Elevations and topography
   - Property lines
   - Lot area and setbacks
   - Footprints of structures
   - Easements and driveways
   - Wells and septic systems
   - Utility lines
   - Width of right-of-way and curb height
   - Impervious areas
   - Type, location and size of stormwater facility
   - Existing and proposed surface drainage
   - Proposed discharge point

   See Bureau of Development Services site plan checklist www.portlandonline.com/bds

2. **Cross Section and Details** of the proposed facility must be included with the plan set. Where sites are topographically varied, it may be imperative to show elevations of inlets, outlets, and discharge points on the cross-section to show how gravity drainage will be met.

3. A **Stormwater Management Report** must be submitted. An outline is provided on the next page to identify report requirements.

4. The **O&M Form** (see **Appendix D.6**) must be recorded with the appropriate county and submitted to BES Document Services at 1900 SW 4th Ave. Portland, OR 97201.

5. An **O&M Plan** (see **Appendix D.6**) must be developed and submitted to BES Document Services at 1900 SW 4th Ave. Portland, OR 97201.

6. **Landscaping plans** are required (see **Section 2.3.2 and Appendix D.1**).

Stormwater Management Report Outline

The Stormwater Management Report is required for every site improvement where the Presumptive or Performance Approach is used. All reports shall be paginated and securely fastened (including maps and exhibits).

1) Cover Sheet
   - Project name and owner
   - Site address
   - Associated permit numbers
   - Submittal date
   - Engineer
   - Firm
   - Address
   - Contact information

2) Designer's Certification and Statement

   "I hereby certify that this Stormwater Management Report for _____ (name of project) has been prepared by me or under my supervision and meets minimum standards of the City of Portland and normal standards of engineering practice. I hereby acknowledge and agree that the jurisdiction does not and will not assume liability for the sufficiency, suitability, or performance of drainage facilities designed by me."

   Design Professional's Oregon registration stamp

3) Table of Contents

4) Project Overview and Description
   - Size and location of project site (vicinity map)
   - Property zoning
   - Type of development/proposed improvements
   - Watershed description
   - Permits required (local, state, federal)
   - Existing vs. post-construction conditions

5) Methodology
   - Drainage at existing site
     - Potential impacts on the proposed site from existing conditions
     - Potential impacts from the proposed site on existing drainage
     - Techniques for mitigating potential conflicts or problems
   - Infiltration testing results
   - Narrative that defines the proposed stormwater management techniques, including discharge point(s) for runoff from private and public impervious areas
   - Stormwater hierarchy category justification

6) Analysis
   - Design Assumptions
     - Design storms used
     - Computation methods
     - Software used
     - Safety factors, curve numbers, and design coefficients
     - Clarify variations from the norm
   - PAC narrative form and printouts
   - Conveyance requirements and design

- Table of impervious area treated (differentiates public vs. private and roof vs. pavement). See example table 1 below ("Catchment and Facility Table").
- Comparison table of the flow rates for pre and post construction. Table must show that the project meets the flow control requirements set forth in **Section 1.3.2**. See example Table 2 below ("Pre vs. Post Construction Flow Rates").
- Determination of the escape route or inundation level for the 24-hour 100-year event

Example Table 1

Catchment and Facility Table *(shows each catchment on proposed site as well as proposed facility)*

Catchment/ Facility ID	Source (roof/road/other)	Impervious Area (sf/ac)	Ownership (private/public)	Facility Type	Facility Size (sf/ac)	Curve #
AA						
BB						

Example Table 2

Pre vs. Post Construction Flow Rates

Facility ID	Peak Flow Rate (cfs)								ToC (min)	
	2 yr		5 yr		10 yr		25 yr			
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Project Site										
AA										
BB										

7) Engineering Conclusions
- Based on compliance with Stormwater Management Manual
- How water quality, flow control, and discharge requirements are satisfied
- Post-construction peak flow=½ pre-development peak flow (2-yr 24-hr events)

8) Stormwater Facility Details/Exhibits
- Contour maps of pre and post development
  - Impervious area identification
  - Existing and new drainageways
  - Watershed delineation
  - Point(s) of discharge
- Delineation of each catchment (area treated by one facility)
- Landscape plans (see **Appendix D.1**)

9) Operations and Maintenance Plan and O&M Form 3 (See **Chapter 3.2**)
- Must include entity responsible for long-term fiscal responsibilities of O&M

10) Additional Forms
- Source Control Special Circumstances Installations (if applicable)
- Special Circumstances (if applicable)

11) Associated Reports Submitted

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