

CITY OF PORTLAND WASTEWATER CAPACITY APPLICATION

Department of Public Services,
55 Portland Street,
Portland, Maine 04101-2991



Bradley Roland, P.E.
Water Resources Division

Date: _____

1. Please, Submit Utility, Site, and Locus Plans.

Site Address: _____ Chart Block Lot Number: _____

Proposed Use: _____

Previous Use: _____

Existing Sanitary Flows: _____ GPD

Existing Process Flows: _____ GPD

Description and location of City sewer that is to receive the proposed building sewer lateral.

Site Category	Commercial (<i>see part 4 below</i>)	<input type="checkbox"/>
	Industrial (<i>complete part 5 below</i>)	<input type="checkbox"/>
	Governmental	<input type="checkbox"/>
	Residential	<input type="checkbox"/>
	Other (<i>specify</i>)	<input type="checkbox"/>

Clearly, indicate the proposed connections, on the submitted plans.

2. Please, Submit Contact Information.

City Planner's Name: _____ Phone: _____

Owner/Developer Name: _____

Owner/Developer Address: _____

Phone: _____ Fax: _____ E-mail: _____

Engineering Consultant Name: _____

Engineering Consultant Address: _____

Phone: _____ Fax: _____ E-mail: _____

Note: Consultants and Developers should allow +/- 15 days, for capacity status, prior to Planning Board Review.

3. Please, Submit Domestic Wastewater Design Flow Calculations.

Estimated Domestic Wastewater Flow Generated: _____ GPD

Peaking Factor/ Peak Times: _____

Specify the source of design guidelines: (*i.e.* __ "Handbook of Subsurface Wastewater Disposal in Maine," __ "Plumbers and Pipe Fitters Calculation Manual," __ Portland Water District Records, Other (*specify*) _____)

Note: Please submit calculations showing the derivation of your design flows, either on the following page, in the space provided, or attached, as a separate sheet.

4. Please, Submit External Grease Interceptor Calculations.

Total Drainage Fixture Unit (DFU) Values: _____
Size of External Grease Interceptor: _____
Retention Time: _____
Peaking Factor/ Peak Times: _____

Note: In determining your restaurant process water flows, and the size of your external grease interceptor, please use The Uniform Plumbing Code. Note: In determining the retention time, sixty (60) minutes is the minimum retention time. Note: Please submit detailed calculations showing the derivation of your restaurant process water design flows, and please submit detailed calculations showing the derivation of the size of your external grease interceptor, either in the space provided below, or attached, as a separate sheet.

5. Please, Submit Industrial Process Wastewater Flow Calculations

Estimated Industrial Process Wastewater Flows Generated: _____ GPD
Do you currently hold Federal or State discharge permits? Yes _____ No _____
Is the process wastewater termed categorical under CFR 40? Yes _____ No _____
OSHA Standard Industrial Code (SIC): _____ (<http://www.osha.gov/oshstats/sicser.html>)
Peaking Factor/Peak Process Times: _____

Note: On the submitted plans, please show where the building's domestic sanitary sewer laterals, as well as the building's industrial-commercial process wastewater sewer laterals exits the facility. Also, show where these building sewer laterals enter the city's sewer. Finally, show the location of the wet wells, control manholes, or other access points; and, the locations of filters, strainers, or grease traps.

Note: Please submit detailed calculations showing the derivation of your design flows, either in the space provided, or attached, as a separate sheet.

Wastewater Design Flow Calculations

Single Family House with Guest House

7 Diamond Pass

Peaks Island

Portland, Maine

Proposed conditions:

- Single family house with guest house
 - House: 5 bedrooms
 - Guest House: 1 bedroom

Design flows from Maine Subsurface Wastewater Disposal Rules, Tables 4A & 4C

- 450 GPD/5 bedroom dwelling + 20 GPD/bunk house bed

Average Daily Flow $Q_{ave} = 450 \text{ GP} + 20 \text{ GPD} = \mathbf{470 \text{ GPD}}$

Peaking Factor = 2.2

Per TR-16 Guides for the Design of Wastewater Treatment Works, Figure 1, pop. = 70,000

Maximum Daily Flow $Q_{max} = 470 \text{ GPD} (2.2) = \mathbf{1,034 \text{ GPD}}$