

11. UTILITIES

11.1 OVERVIEW

The proposed project will involve installation of new utility services to the building. All new utility services will be provided from the franchise utilities available within Brackett Street. The proposed locations of the new utility services are shown on the Utility Plan (Sheet C-5.0).

11.2 WATER SUPPLY

The proposed project will receive its water supply from the Portland Water District's (PWD) public water supply system. Separate 6" fire and 2" domestic services will be installed to the building from PWD's existing main in Brackett Street. PWD has indicated in a letter dated April 19, 2017 that the district will be able to serve the proposed project.

11.2.1 Total Project Water Usage

The total average daily water demand for the proposed project is estimated to be 1,440 gallons per day, based on design flows published in the State of Maine Subsurface Wastewater Disposal Rules.

$$12 \times 1 \text{ Bedroom Residential Units at } 120 \text{ gpd/unit} = 1,440 \text{ gpd}$$

11.3 WASTEWATER DISPOSAL

The proposed project will be connected to the Portland Water District's and City of Portland's wastewater collection and conveyance systems. The City of Portland Wastewater Capacity Application has been completed and forwarded to Mr. Brad Roland.

The overall project is anticipated to generate an average daily flow of approximately 1,440 gpd. Based on the existing sewer system in the area, there appears to be adequate capacity to handle these projected flow amounts.

11.4 ELECTRICITY SUPPLY

CMP currently maintains overhead and underground utilities in the area. The proposed building will be served by a new underground feed from a new riser pole, which will be set on the east side of Brackett Street.

11.5 ATTACHMENTS

Attachment 11-A – Correspondence with Utilities

ATTACHMENT 11-A

Correspondence with Utilities

March 30, 2017

MEANS
means@pwd.org
Portland Water District
225 Douglass Street
Portland, ME 04104

Request for Ability to Serve Letter
12-Unit Residential Development
1 Joy Place, Portland, Maine

Dear Sir or Madam:

Terradyn Consultants LLC has been retained by Renewal Housing Associates to assist with site design and permitting for a proposed 12-unit condominium development project located at 1 Joy Place in Portland, Maine. We are writing to request a letter confirming the Portland Water District's ability to serve the proposed development.

The 5,851 square foot parcel is identified as Block E, Lot 45 on the City of Portland Tax Map 49. The site is accessed off Bracket Street via Joy Place, a private right-of-way. An existing vacant house is located on the site. Water service for the house is located within the Joy Place right-of-way.

The proposed project includes the construction of a 2,600 square foot, 3-story building, including 12 condominium units. Joy Place will be reconstructed for vehicular and pedestrian access, and public water and sewer utilities will be installed to serve the project. It is anticipated that the existing water service will be retired, and a new parent/child service will be installed for fire protection and domestic water use for the new building.

Attached are a site location figure showing the property delineated on a USGS map and a preliminary site utility plan of the project, showing how the development may be served with water. A spreadsheet showing the total number of proposed plumbing fixtures is provided in a separate document.

Please provide our office with confirmation that the Portland Water District has the ability to serve the proposed development. As the design is refined, we will provide more detailed drawings of the project for your review.

If you have any questions or need more information to make your determination on ability to serve, please contact me at (207) 632-9010 or mtw@terradyconsultants.com.

Sincerely,

TERRADYN CONSULTANTS LLC

A handwritten signature in black ink that reads "Michael E. Tadema-Wielandt". The signature is written in a cursive, slightly stylized font.

Michael E. Tadema-Wielandt, P.E.
Vice President

cc: Todd Alexander, Renewall Housing Associates
David Lloyd, Archetype

Enc.



Portland Water District

FROM SEBAGO LAKE TO CASCO BAY

April 19, 2017

Michael Tadema-Wielandt
Teradyn Consultants LLC
565 Congress Street, Suite 310
Portland, ME 04101

Re: 1 Joy Place, PO
Ability to Serve with PWD Water

Dear Mr. Tadema-Wielandt:

The Portland Water District has received your request for an Ability to Serve Determination for the noted site submitted on March 30, 2017. Based on the information provided per plans dated 3/7/17, we can confirm that the District will be able to serve the proposed project as further described in this letter. **Please note that this letter does not constitute approval of this project from the District. Review and approval of final plans is required.**

Conditions of Service

The following conditions of service apply:

- A new 6-inch fire service with 2-inch domestic service tapped off from it may be installed from the water main in Brackett Street. The service should enter through the properties frontage on Brackett Street at least 10-feet from any side property lines. Please note that only one meter and one bill will be associated to each domestic service line. This one master meter would be located in a common space that all tenants could gain access to if necessary.
- The existing building is currently served with a ¾-inch domestic water service; the size of this service is undersized for the proposed use. This service must be terminated by shutting the corporation valve and cutting the pipe from the water main per PWD standards.
- If necessary, proper easement documentation must be obtained from any properties that the new service line will cross. The easement(s) should specifically cite the right to install and maintain utilities. A copy of the deed for each of the proposed parcels must be provided to the District prior to completing new service applications.
- Water District approval of water infrastructure plans will be required for the project prior to construction. As your project progresses, we advise that you submit any preliminary design plans to MEANS for review of the water main and water service line configuration. We will work with you to ensure that the design meets our current standards.
- Once the project is ready for construction, the owner or contractor will need to make an appointment to come in and complete a service application form and pay the necessary fees.



Existing Site Service

According to District records, the project site does currently have existing water service. A 3/4-inch diameter copper water service line provides water service to this site. Please refer to the "Conditions of Service" section of this letter for requirements related to the use of this service.

Water System Characteristics

According to District records, there is an 6-inch diameter cast iron water main in Brackett Street and a public fire hydrant located 150 feet from the site. Recent flow data is not available in this area. The most recent static pressure reading was 54 psi on January 27, 2016.

Public Fire Protection

The installation of new public hydrants to be accepted into the District water system will most likely not be required. It is your responsibility to contact the Portland Fire Department to ensure that this project is adequately served by existing and/or proposed hydrants.

Domestic Water Needs

The data noted above indicates there should be adequate pressure and volume of water to serve the domestic water needs of your proposed project.

Private Fire Protection Water Needs

You have indicated that this project will require water service to provide private fire protection to the site. Please note that the District does not guarantee any quantity of water or pressure through a fire protection service. Please share these results with your sprinkler system designer so that they can design the fire protection system to best fit the noted conditions. If the data is out of date or insufficient for their needs, please contact MEANS to request a hydrant flow test and we will work with you to get more complete data.

Should you disagree with this determination, you may request a review by the District's Internal Review Team. Your request for review must be in writing and state the reason for your disagreement with the determination. The request must be sent to MEANS@PWD.org or mailed to 225 Douglass Street, Portland Maine, 04104 c/o MEANS. The Internal Review Team will undertake review as requested within 2 weeks of receipt of a request for review.

If the District can be of further assistance in this matter, please let us know.

Sincerely,
Portland Water District

A handwritten signature in black ink, appearing to read "Gordon S. Johnson". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Gordon S. Johnson, P.E.
Engineering Services Manager

April 25, 2017

Bradley Roland, P.E.
Wastewater Resources Division
Department of Public Services
55 Portland Street
Portland, ME 04101

Onejoy Place Condominium
1 Joy Place, Portland, Maine
Wastewater Capacity Application

Dear Brad:

Terradyn Consultants LLC has been retained by Onejoy Place, LLC and Renewal Housing Associates to assist with site design and permitting for a proposed 12-unit condominium development project located at 1 Joy Place in Portland. We are writing to request confirmation that the City of Portland has the ability to provide sanitary sewer service for the proposed development.

The 5,851 square foot parcel is identified as Block E, Lots 48 & 49 on the City of Portland Tax Map 45. The site is accessed off Bracket Street via Joy Place, a private right-of-way. An existing vacant house is located on the site. Existing sewer service for the house is located within the Joy Place right-of-way.

The proposed project includes the construction of a 2,600 square foot, 3-story building, including 12 condominium units. Joy Place will be reconstructed for vehicular and pedestrian access, and public water and sewer utilities will be installed to serve the project. It is anticipated that the existing sewer service will be removed, and a new 6" service will be installed to serve the new building.

The project is expected to generate approximately 1,440 gallons of wastewater per day based on the Maine Subsurface Wastewater Disposal Rules.

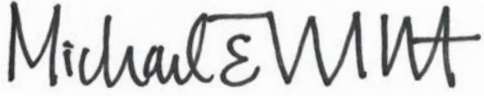
Attached are a site location figure showing the property delineated on a USGS map, preliminary site and utility plans of the project showing how the development may be served with sewer service, and a City of Portland Wastewater Capacity Application form.

Please provide our office with confirmation that the City of Portland has the ability to provide sanitary sewer service to the proposed development and any comments you may have on the attached drawing.

If you have any questions or need more information, please contact me at (207) 632-9010 or mtw@terradync consultants.com.

Sincerely,

TERRADYN CONSULTANTS LLC

A handwritten signature in black ink that reads "Michael E. Tadema-Wielandt". The signature is written in a cursive style with some capital letters.

Michael E. Tadema-Wielandt, P.E.
Vice President

cc: Todd Alexander, Renewal Housing Associates
David Lloyd, Archetype

Enc.



PROJECT SITE

SHEET DESCRIPTION
 JOY PLACE
 U.S.G.S. QUADRANGLE MAP
 PORTLAND WEST

PREPARED FOR
 RENEWAL HOUSING ASSOCIATES
 THREE CANAL PLAZA, SUITE 501
 PORTLAND, MAINE 04101



P.O. Box 339
 111 Elderberry Lane
 New Gloucester, ME 04260
 Office: (207) 926-5111
 Fax: (207) 221-1317
 www.terradyconsultants.com

Civil Engineering - Land Planning - Stormwater Design - Environmental Permitting

JOB NO.
 1704

DATE
 3/30/2017

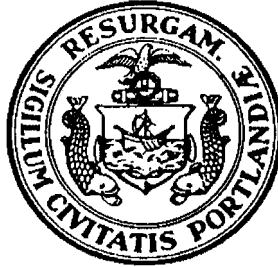
SCALE
 1"=2,000'

FIGURE
 1

OF
 2

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: 4/25/2017

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

Site Address: One Joy Place, Portland

Chart Block Lot Number: 45/E/48, 45/E/49

Proposed Use: Residential

Previous Use: Residential

Existing Sanitary Flows: N/A GPD

Existing Process Flows: N/A GPD

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

12" combined sewer in Brackett Street

| | | |
|---------------|---|-------------------------------------|
| 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 checked="" 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: Not assigned yet Phone: _____

Owner/Developer Name: Onejoy Place LLC, c/o Renewal Housing Associates, LLC

Owner/Developer Address: 2 Union Street, 5th Floor, Portland, ME 04101

Phone: 207 347-3018 Fax: _____ E-mail: talexander@renewalhousing.com

Engineering Consultant Name: Terradyn Consultants, LLC, Michael Tadema-Wielandt, P.E.

Engineering Consultant Address: 565 Congress Street, Suite 310, Portland, ME 04101

Phone: 207-632-9010 Fax: _____ E-mail: mtw@terradynconsultants.com

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: 1,440 GPD

Peaking Factor/ Peak Times: x6

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*) State of Maine Subsurface Wastewater Disposal Rules)

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.

$$12 \times 1 \text{ Bedroom Units} \times 120 \text{ GPD/Unit} = 1,440 \text{ GPD}$$

4. Please, Submit External Grease Interceptor Calculations.

Total Drainage Fixture Unit (DFU) Values: _____ N/A _____
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: _____ N/A _____ 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.
