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 Fore 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 4" domestic services will be installed to the building from PWD's existing main in Fore Street. PWD has indicated in a letter dated December 6, 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 7,098 gallons per day, based on design flows published in the State of Maine Subsurface Wastewater Disposal Rules.

13 x 1 Bedroom Residential Units at 120 gpd/unit= 1,560 gpd11 x 2 Bedroom Residential Units at 180 gpd/unit= 1,980 gpd13 x 3 Bedroom Residential Units at 270 gpd/unit= 3,510 gpd2 x Retail Unit with 2 Employees at 12 gpd/employee= 48 gpdTotal = 7,098 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 7,098 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 an existing utility pole located on the west side of India Street, east of the project site. The existing overhead utilities along the project's Fore Street frontage will be re-located underground.

11.5 ATTACHMENTS

Attachment 11-A – Correspondence with Utilities

ATTACHMENT 11-A

Correspondence with Utilities



Civil Engineering - Land Planning - Stormwater Design - Environmental Permitting

1719

November 16, 2017

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

Request for Ability to Serve Letter 37-Unit Residential Development with First Floor Retail Space 208 Fore Street, Portland, Maine

Dear Sir or Madam:

Terradyn Consultants LLC has been retained by Ted Hovivian, 56 Bogart Street, LLC, to assist with site design and permitting for a proposed 37-unit condominium development project located at 208 Fore Street in Portland, Maine. We are writing to request a letter confirming the Portland Water District's ability to serve the proposed development.

The 9,257 square foot parcel is identified as Block N, Lot 8 on the City of Portland Tax Map 29. The site is located on the southeasterly side of Fore Street south of the Fore Street and India Street Intersection. One existing non-residential structure is located on the site with an existing 1" water service.

The proposed project includes the construction of an 8,370 square foot, 7-story building, including 37 residential units and first floor retail space. Parking will also be provided below the building at the basement level. A utility room is also proposed at the basement level along the Fore Street frontage. Public water and sewer utilities will be installed to serve the project. It is anticipated that a new 6" fire protection water service and a new 2" domestic water service will be installed for the new building.

Attached are a site location figure showing the property delineated on a USGS map, an aerial photograph figure of the site, 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) 322-1223 or adrienne@terradynconsultants.com.

Sincerely,

TERRADYN CONSULTANTS LLC

alline the

Adrienne Fine, P.E. Design Engineer

cc: Ted Hovivian, 56 Bogart Street, LLC David Lloyd, Archetype

Enc.







FROM SEBAGO LAKE TO CASCO BAY

December 6, 2017

Adrienne Fine Terradyn Consultants, LLC 565 Congress Street Suite 310 Portland, ME 04101

Re: 208 Fore Street, PO Ability to Serve with PWD Water

Dear Ms.Fine :

The Portland Water District has received your request for an Ability to Serve Determination for the noted site submitted on November 16, 2017. Based on the information provided per plans dated September 12, 2017, 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 constitutes approval of the water system as currently designed. Any changes affecting the approved water system will require further review and approval by PWD.

Conditions of Service

The following conditions of service apply:

- A new 6-inch fire service and 4-inch domestic service may be installed from the water main in Fore Street. The service should enter through the properties frontage on Fore Street at least 10-feet from any side property lines.
- It is the District's understanding that the existing property will be converted into a 37 unit residential complex. The property is currently served with a 1-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 as part of the project.
- 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.

Prior to construction, the owner or contractor will need to make an appointment to complete a service application form and pay all necessary fees. The appointment shall be requested through <u>MEANS@pwd.org</u> or by calling 207-774-5961 ext. 3199. Please allow (3) business days to process the service application paperwork. PWD will guide the applicant through the new development process during the appointment.

Existing Site Service

According to District records, the project site does currently have existing water service. A 1-inch diameter copper domestic service line provides water service to the 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 8-inch diameter ductile iron water main in Fore Street and a public fire hydrant located approximately 360 feet from the site. The most recent static pressure reading was 105 psi on August 15, 2017.

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. Based on the high water pressure in this area, we recommend that you consider the installation of pressure reducing devices that comply with state plumbing codes.

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

Bhega Sho

Robert A. Bartels, P.E. Senior Project Engineer