
14. UTILITY CAPACITY TO SERVE

All utility services for the proposed building will be routed through the adjacent 3 Canal Plaza Building. The final usage requirements will be dependent on the tenant of the building. Water and sewer usage requirements have been estimated conservatively considering a café use of the space. A letter requesting confirmation of capacity to serve the proposed building has been submitted to the Portland Water District and is attached. A sewer capacity request will be submitted and will be forwarded separately.

14.1 ATTACHMENTS

- Water Capacity Request



June 22, 2016

MEANS Group
Portland Water District
225 Douglass Street
Portland, ME 04104

Re: Water Service/Modification Request – Canal Plaza, Portland, Maine

To Whom It May Concern:

This letter serves as written request for availability to serve water for the proposed Zero Canal Plaza Development project located in Canal Plaza in Portland, Maine. Woodard & Curran is serving as an agent to the applicant Cow Plaza 1 LLC.

The project parcel, MBLU 032 1007, is an area of approximately 18,232 square-feet bound by Middle Street, Union Street, Exchange Street and Canal Plaza. The proposed project includes significant enhancements to the plaza and the construction of a new stand-alone, single story structure with a floor area of approximately 1,300 square feet, located within the plaza area. The building will be accessory to the plaza, and a final tenant has not been selected. For the purposes of estimating approximate water usage, a conservative assumption was made that the space will be used as a restaurant.

The intent for this project is to provide all utility services for the new building via connections to existing services internal to the adjacent Canal 3 Building. Enclosed with this application is a utility plan that shows the proposed building location within the plaza as well as the proposed utility connections. A 1-1/2" water service between 3 Canal Plaza and the new building is proposed for domestic water. A fire service will not be required.

A restaurant use has been assumed for the building, but a specific tenant has not been identified, so the nature of the establishment is not yet known. A detailed analysis of equipment typically anticipated for a restaurant has been completed. Based on this analysis, a calculation of "Water Supply Fixture Units" was completed. The restaurant could conservatively require a total WSFU of 117.5. This same analysis was completed for the existing 3 Canal Plaza Building, and it was determined that a restaurant would result in an approximately 8% increase in water usage for the existing service to 3 Canal Plaza. The total demand for the service would equate to approximately 290 GPM. A copy of the preliminary calculations is attached.

We would like to verify that the Portland Water District has the infrastructure in the vicinity to service this site, and we would also like to understand what if any easements exist or will be required for the site. We would also like to verify the main size in Middle Street and fire hydrant pressures in the vicinity of the project (as available) to assist with the evaluation of the area for fire protection. Please let us know if any additional information is required to evaluate the service capacity for the site. We are happy to meet to discuss the project further as necessary.

We appreciate your assistance. If you have any questions or require any additional information, please do not hesitate to contact me at (207) 558-3763 or by email lswett@woodardcurran.com.

Sincerely,

WOODARD & CURRAN INC.

A handwritten signature in blue ink that reads "Lauren Swett".

Lauren Swett, P.E.
Project Manager

229311

Enclosures – Utility Plan; Preliminary Utility Calculations

0 CANAL PLAZA PRELIMINARY UTILITY EVALUATION

0 CANAL PLAZA - RESTAURANT TENANT ESTIMATE

QUANTITY	DESCRIPTION	UPC 2009 DESCRIPTION	COLD WSFU (PER	HOT WSFU (PER	TOTAL WSFU (PER	WSFU (TOTAL)	DFU (PER FIXTURE)	DFU (TOTAL)	GREASE DRAIN	HOT WATER (GPH)	TOTAL HOT
			FIXTURE)	FIXTURE)	FIXTURE)						WATER (GPH)
1	DRINKING FOUNTAIN	DRINKING FOUNTAIN OR WATER COOLER	0.5	0	0.5	0.5	0.5	0.5	0	0	0
2	HOSE BIBB	HOSE BIBB	2.5	0	2.5	5	0	0	0	0	0
2	LAVATORY	LAVATORY	0.75	0.75	1	2	1	2	0	5	10
1	KITCHEN - CLEAN PREP SINK	SINK, SERVICE	2.25	2.25	3	3	3	3	0	10	10
1	KITCHEN - DIRTY WASH	SINK, COMMERCIAL WITH FOOD WASTE	2.25	2.25	3	3	3	3	1	105	105
2	BAR SINKS	SINK, BAR	1.5	1.5	2	4	2	4	0	18	36
1	PRE-WASH RINSE SINK	SINK, SERVICE	2.25	2.25	3	3	3	3	1	(ACCOUNTED FOR ABOVE)	0
2	HAND SINK	SINK, WASH-UP	1.5	1.5	2	4	2	4	0	5	10
1	URINAL	URINAL, 1.0 GPF FLUSHOMETER VALVE	20	0	20	20	2	2	0	0	0
2	WATER CLOSET	WATER CLOSET, 1.6 GPF FLUSHOMETER VALVE	35	0	35	70	4	8	0	0	0
1	GARBAGE DISPOSAL	FOOD WASTE GRINDER, COMMERCIAL	-	-	-	-	3	3	1	0	0
2	FLOOR DRAIN	FLOOR DRAIN, EMERGENCY	-	-	-	-	0	0	0	0	0
1	FLOOR DRAIN	FLOOR DRAIN	-	-	-	-	2	2	0	0	0
1	MOP SINK	SINK, SERVICE OR MOP BASIN	2.25	2.25	3	3	3	3	0	15	15
TOTAL WSFU:						117.5	TOTAL DFU:	37.5			
DCW SUPPLY:						1.5"	DRAIN SIZE:	4"			
(SUPPLY >60 PSI)											
									TOTAL HOT WATER (GPH):	186	
									SAFETY FACTOR (%):	0.5	
									WATER HEATER BTUH:	209250	
									NATURAL GAS PIPE MAX LENGTH (F):	300	
									NATURAL GAS PIPE SIZE:	1"	

3 CANAL PLAZA - EXISTING CONDITIONS

QUANTITY	DESCRIPTION	UPC 2009 DESCRIPTION	COLD WSFU (PER	HOT WSFU (PER	TOTAL WSFU (PER	WSFU (TOTAL)	DFU (PER FIXTURE)	DFU (TOTAL)			
			FIXTURE)	FIXTURE)	FIXTURE)						
36	WC	WATER CLOSET, 1.6 GPF FLUSHOMETER VALVE	35	0	35	1260	4	144			
42	LAV	LAVATORY	0.75	0.75	1	42	1	42			
7	URINAL	URINAL, 1.0 GPF FLUSHOMETER VALVE	20	0	20	140	2	14			
7	SERVICE/MO	SINK, SERVICE OR MOP BASIN	2.25	2.25	3	21	3	21			
TOTAL WSFU:						1463	TOTAL DFU:	221			
EXISTING DCW SUPPLY:						3"	EXISTING DRAIN SIZE:	10"			

COMBINED BUILDING TOTALS

TOTAL WSFU:						1580.5	TOTAL DFU:	258.5			
TOTAL DEMAND (GPM):						290					
TOTAL INCREASE:						8%	TOTAL INCREASE:	17%			