

DeLUCA-HOFFMAN ASSOCIATES, INC. CONSULTING ENGINEERS 778 MAIN STREET SUITE 8 SOUTH PORTLAND, MAINE 04106 TEL. 207.775.1121 FAX 207.879.0896

SITE PLANNING AND DESIGN
ROADWAY DESIGN
ENVIRONMENTAL ENGINEERING
PERMITTING
DERMITTING

AIRPORT ENGINEERING
CONSTRUCTION ADMINIST

CONSTRUCTION ADMINISTRATIONLANDSCAPE PLANNING

March 26, 2013 *Revised April 23, 2013*

Mr. Frank Brancely City of Portland Department of Public Services 55 Portland Street Portland, Maine 04101-2991

Subject: Proposed Multi-Use Development 2282 Congress Street, Portland, Maine Wastewater Capacity Application

Dear Mr. Brancely:

Our office has been retained by CJ Developers, Inc., which has a Purchase and Sale Agreement for the property at 2282 Congress Street in Portland, to prepare site plans and assist with permitting for a new structure on the lot (Map 237, Block 'A' Lot 012). On behalf of the developer, we are requesting a letter affirming that the proposed project can be served by the municipal wastewater treatment system.

The project will consist of the construction of a new convenience store/fuel station and drive thru ATM machine. The building will have a total size of approximately 3,850 square feet. A copy of a 2013 Survey Plan has been attached to this letter for reference. The proposed convenience store will likely be served by an 8" private sewer extending northerly toward Hutchins Drive where it ties into a 10" public main as shown on the enclosed figure. It is anticipated that the site's service will extend off from the adjacent lot with a private service.

The projected water use using the Maine State Plumbing Code and vendor information are as follows:

Use	Demand (Chapter 5 – Maine Subsurface Waste Water Disposal Rules)	Design Flow
Gas/Service Station with Convenience Store	400 gpd/Water Closet @ 1 Water Closet 15 gpd/Employee @ 4 Employees 1 gpd/Parking Space @ 32 Spaces	492 GPD
	Total Mixed Use Water Usage Required:	492 GPD

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Based on this modest amount of flow, we trust that the existing wastewater collection and treatment system has adequate capacity to serve this project. Additionally, our office proposes a 1,000-gallon grease trap will be used for a small kitchen/food preparation area within the convenience store. We are in the process of completing the Site Plan Application for a submission to the City Planning Staff.

If you have any questions concerning this request, please contact me.

Sincerely,

DeLUCA-HOFFMAN ASSOCIATES, INC.

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Bo Kennedy, P.E. Project Engineer

BEK/smk

Enclosures: Survey Plan

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CITY OF PORTLAND WASTEWATER CAPACITY APPLICATION

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



Mr. Frank J. Brancely, Senior Engineering Technician, Phone #: (207) 874-8832, Fax #: (207) 874-8852, E-mail:fjb@portlandmaine.gov

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Date: 03-26-13

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

Site Address:	2282 Congress Street	
		Chart Block Lot Number: 237, A, 012
Proposed Use:	Mixed-Use Commercial	
Previous Use:	Undeveloped	Commercial (see part 4 below)
Existing Sanitar	y Flows:0GPD	Industrial (complete part 5 below)
Existing Proces	s Flows: GPD	B Governmental
Description and	location of City sewer that is to	\mathcal{O} Residential
receive the prop	osed building sewer lateral.	$\frac{3}{5}$ Other (<i>specify</i>)
The site does not	currently have a sewer service.	

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

2. Please, Submit Contact Information.

City Planner's Name: Jean Fraser	Phone: <u>207-874-8728</u>	
Owner/Developer Name:	CJ Developers, Inc.	
Owner/Developer Address:	35 Primrose Lane, Freeport, ME 04032	
Phone: 207-865-4323	Fax: E-mail: ddlatulip@aol.com	
Engineering Consultant Name:	Bo Kennedy, DeLuca-Hoffman Associates, Inc.	
Engineering Consultant Address:	778 Main Street, Suite 8, South Portland, ME 04106	
Phone: 207-775-1121	Fax: 207-879-0896 E-mail: bkennedy@delucahoffman.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: 492 GPD Peaking Factor/ Peak Times: Estimated to be 8 times daily flow and equal to 2.5 gal/min. Peak time is projected to be 11:00am-2:00pm (lunchtime) 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)* See attached letter dated March 26, 2013

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:	1,000 Gallons	
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 Flow	s Generated:	N/A	GPD
Do you currently hold Federal or State dischar	ge permits?	Yes	No
Is the process wastewater termed categorical under CFR 40?		Yes	No
OSHA Standard Industrial Code (SIC):		(http://www.osha.gov/os	shstats/sicser.html)
Peaking Factor/Peak Process Times:	N/A		

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.

Notes, Comments, or Calculations:

1. See attached plans for sanitary sewer layout, rim and invert elevation and details.

2. The average daily flow is estimated to be 25 gallons per day from the fixtures draining to the external grease trap. 1,000 gallons is considered the smallest permissible tank size for an external grease interceptor and will be more than sufficient for this development.



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This survey conforms to the current standards of practice set forth by the Maine State Board of



LEGEND	
	Monument – found
0	lron marker – found
	Iron marker — to be set (#5 rebar)
	Property line (locus)
	Property line (abutter)
	Lasement line
	Chain link tence
	Guara rail
	Edge of pavement
	Lage of graver
	Sign
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N N N N N N N N N N N N N N N N N N N	Guy wire Gas valve
w M	Water valve
ŭ	Fire bydrant
онw	Overhead utility line
W	Underground water line
	Underground gas line
UT	Underground telephone line
64	Contours (1ft)
65	Contours (5ft)
N/F	Now or formerly of
1234/567	Deed reference (Book/Page)
$\frown \frown $	Tree line
*	Coniferous tree
	Existing building

NOTES

1) Book and Page references are to the Cumberland County Registry of Deeds, unless otherwise noted.

2) Bearings are referenced to grid north, Maine State Plane Coordinate System, NAD83, West Zone.

3) Elevations are based on NGVD 1929. Benchmark is a flange bolt on a fire hydrant. Elev: 98.75'.

4) Utility information on this plan is approximate, based on location of visible features and information contained on plans and drawings provided by others. DigSafe and/or the appropriate utilities should be contacted prior to any construction.

5) Property lies within Zone X based on FIRM Community #230051 Panel #12-C, dated Dec. 8, 1998. It does not lie within a special flood hazard area.

6) Project area was covered by snow and ice at the time of the survey and some features may have been obscured and not shown on this plan.

PLAN REFERENCES

1) Maine Turnpike Authority plan of Section 1 — Kittery to Portland, Supplemental Sheet No. 2, made by Howard, Needles, Tammen & Bergendoff, dated August 1947.

2) Maine Turnpike Authority plan of Section 1 - Kittery to Portland, Congress Street Property Plan Supplemental Sheet No. 11, made by Howard, Needles, Tammen & Bergendoff, dated July 1954, recorded in Plan Book 41, Page 66.

3) Maine Turnpike Authority plan of Property and Right of Way Plans Section 1 — Kittery to Portland, Jetport Interchange Project drawing number ROW01, ROW02, ROW04 and ROW05, dated February 1997.

4) Maine Turnpike Authority plan of Property and Right of Way Plans Section 1 — Kittery to Portland, Jetport Interchange Project drawing number Supplemental 101 and Supplemental 102.

5) Standard Boundary & Topographic Survey made for Hutchcourt, L.L.C. by OEST Associates, Inc. dated March 1999 and revised through September 2, 1999, recorded in Plan Book 199, Page 412.

EASEMENTS OF RECORD

1) Sewer easement conveyed to Hutchcourt, L.L.C. by Robert E. Baldacci, Jr. in Book 15032, Page 299.

2) Sewer line easement reserved by Harry A. Harmon and George M. Hutchins in Book 3426, Page 278.

3) Utility easement conveyed to Northern Utilities, Inc. by Harry A. Harmon and George M. Hutchins.

OWNERS OF RECORD

FILE #9642

Hutchcourt, L.L.C. Book 15017, Page 281





