Justin Zeimetz & Sarah Gardent 47 Howard Street Portsmouth, NH 03801

January 12, 2023

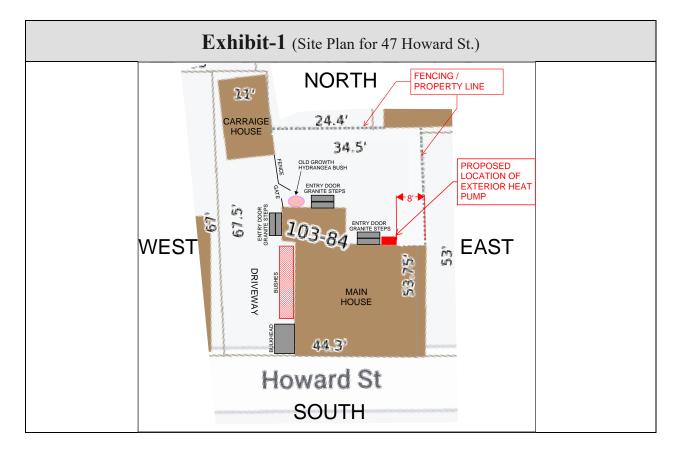
David Rheaume, Chairman Historic District Commission 1 Junkins Ave. Portsmouth, NH 03801

RE: Addendum to Land Use Application LU-22-242 for 47 Howard Street- (Map 103, Lot 84)

Dear Chairman Rheaume,

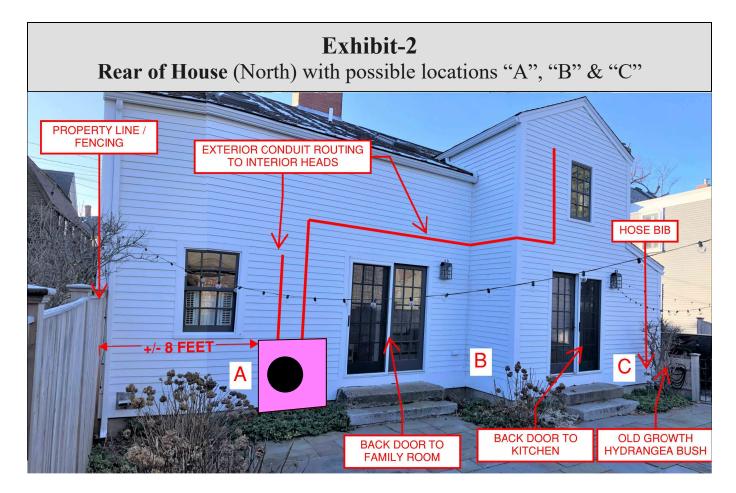
The purpose of this addendum is to identify the potential locations of the mechanical system heat pump ("Heat Pump" or "Unit"), and establish why the location requested in our application is the only feasible one.

As depicted in the site plan of our property at <u>Exhibit-1</u>, the <u>East</u> side of our house sits almost exactly on the property line. Installing the Heat Pump on that side of the house is obviously not an option, as would require placing it on our neighbor's property. Equally obvious is that installing the Unit at the front of our historic house, which faces Howard Street (<u>South</u>), is unfeasible. So, the only options are installing the Heat Pump either in our back yard, or on the driveway side of the house (West).



In all, we identified four <u>possible</u> locations for the Heat Pump. One location is on the driveway (West) side of the house, and the other three are at the rear of the house (North). We will first address the rear of the house.

The three possible locations at the back of the House. It is worth noting the following details about the back of the house, as depicted in the photo at <u>Exhibit-2</u>, below: The back yard is completely enclosed by a wooden fence, thus the Heat Pump would not be visible from the street, if placed here. The three <u>possible</u> locations of the Heat Pump we have identified in the backyard are depicted with the letters "A", "B" and "C," each of which we will address below, in turn. Next, note that there are two separate sets of double doors into the back of the house, each with its own set of granite steps, and each of which are regularly used by family members, guests and pets. To the far right of the photo is a gate in the fence, and a well-trafficked walkway that leads to both of the two sets of doors. Lastly, note the depicted a one-dimensional Heat Pump. This is the location we seek to place the heat pump, as discussed below. But first we address why locations "B" and "C," at the back of the house are <u>not</u> feasible locations for the Heat Pump.



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Why Location "B" is <u>not</u> feasible. The below photo in the <u>Exhibit-3</u> is of our young toddler son (with his face blocked out), standing at location "B," next to a rough, 3-D mockup of the Heat Pump that we built for demonstration purposes. The 3-D mockup approximates the dimensions of the Unit, which is 37-13/32" wide, 41-17/16" high, and 14-9/16" deep (the 3-D mockup depth is about 20" deep, to include some of the space required between the unit and the house). A schematic of the Heat Pump is included in our original application. The black circle and spokes in the 3-D mockup at <u>Exhibit-3</u> are meant to approximate the size and location of the Heat Pump exhaust fan on the Unit. We include the 3-D mockup of the Unit at location "B" to demonstrate how close the Unit would be to the stone steps leading up to the set of double doors. We include our toddler in the photo to demonstrate the impact that the fan exhaust would have upon people and pets walking by the Unit if it was located there. Location "B," is clearly <u>not</u> feasible.

Exhibit-3

3-D mockup of the Heat Pump at location "B" in the backyard



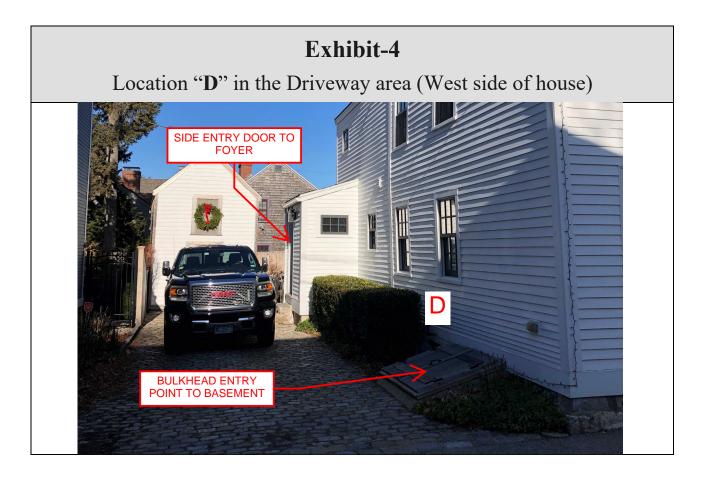
Why Location "C" is also <u>not</u> feasible. The same basic non-feasibility issues exist for locating the Heat Pump at Location "C", near the fence gate to far-right of the photo of the backyard in <u>Exhibit-2</u>, above. If installed against the house at location "C", the front face of the unit (and the exhaust fan) would be only about fifteen (15) inches from the walkway leading from the fence gate, past the Unit, to the two sets of double doors at the back of the house. The exhaust fan would blow hot air directly onto people and pets passing by on the walkway. Location "C", like location "B," would be too close to foot traffic of people and pets that regularly come and go through the back yard all year long. In addition (though less importantly), installing the unit at location "C" would require removal of an old-growth hydrangea, which provides privacy and beauty. Placement of the Heat Pump at location "C" would also conflict with an existing irrigation sillcock located on that back wall of the house, next to the hydrangea (see the sillcock (hose bib) location to the right of the photo in Exhibit-2.) Location "C" is also clearly not a feasible location for the Heat Pump.

Before turning to the issue of why backyard Location "A" is the best location is to install the Unit, we turn to why location "**D**" on the driveway side of the house (West) should be <u>rejected</u>.

Why Location "D" on the driveway side is <u>not</u> feasible. The photo below in <u>Exhibit-4</u> shows the West side of our house, looking down the driveway, towards the back yard. On the right, against the house, is a cellar-access bulkhead at the foot of the driveway. At the far end of house is a small bump-out where our side door entrance to the house is located. A row of mature shrubbery in located between the house bump-out and the bulkhead. We use this side-door entrance for our every-day comings and goings. As such, the driveway sees a lot of foot traffic along the side of the house between the parked vehicles and the shrubbery.

Locating the Heat Pump against the house in location "**D**" somewhere in between the side-door bump-out and the bulkhead would result in the front face of the Unit, and its exhaust fan, being about <u>two feet</u> from the edge of driveway where people and pets regularly walk to and from of the side door and back yard from the street and the driveway. The Unit's exhaust air would blow directly onto foot traffic passing by.

In addition, locating the Heat Pump against the house in location "**D**" would be an eye sore from the street. Our house at 47 Howard Street was built in 1794, and is located on the Historic District in Portsmouth. Along with the Heat Pump itself being unsightly, locating the Unit at location "**D**" would require installation of conduit on the driveway side of the house, all visible from the street. Together, the Heat Pump and the conduit would negatively impact the historical character of the house and the neighborhood in a substantial way. For these reasons, Location "**D**" in the driveway area is <u>not</u> a feasible location for the Heat Pump.



Why Location "A" at the back of the house, which we are requesting a variance for, is the only feasible location to install the Heat Pump. On December 14, 2022, the Historic District Commission ("HDC") approved placement of the Heat Pump at Location "A" at the back of the house (subject to getting the necessary variance from the Board of Adjustment, and to making the color of the conduit match the color of the house). In granting the approval, the HDC noted that the location is not visible from the street, and has the least impact on the historical character of the house.

A further review of the photo of our back yard in <u>Exhibit-1</u> above shows that if the Heat Pump is installed at Location "A", as requested, it is only there among the four possible locations identified in this Addendum that the exhaust fan of the Unit will <u>not</u> blow exhaust into the path of regular foot traffic on our property. Further, the reason that we are seeking a variance to locate the Heat Pump at Location "A" is the hardship created by the 229-year-old house being located on the property line. It is this hardship that requires that we locate the Heat Pump eight (8) feet from the lot line, instead of the required ten (10) feet.

Location "A" is clearly the most feasible of the four locations addressed in this addendum, and is strongly recommended by our experienced installer as the best place to locate the Unit on the property.

For the reasons stated above, and in our original Land Use Application LU-22-242, we respectfully request that the Board of Adjustment approve our application, and grant the necessary variance to place the Heat Pump at Location "A".

Respectfully submitted,

<u>/s/ Justin Zeimetz</u> <u>/s/ Sarah Gardent</u> 47 Howard Street