



August 28, 2017

Chairman Jay Sheers  
and Members of the Planning Board  
City of Beacon  
1 Municipal Plaza  
Beacon, NY 12508

**Re: 475 Main Street – Shadow Impacts**

Dear Chairman Sheers and Members of the Board,

In response to issues raised during the public hearing on this application, the following documentation is provided.

1. The project architect has revised the proposed building addition. As can be seen from the attached rendering (Figure 1), the upper story of the southeast corner of the proposed building addition has been chamfered, which not only provides a unique and distinctive architectural feature, but also minimizes the mass of the top of the building, thereby reducing the associated shadow impacts. Also, the upper story “bridge” section of the new addition at the southern end of the existing building includes an angled mansard roof, which again affords a distinguishing architectural element, which also helps to diminish shadow impacts.
2. Figures 2, 3, 4 and 5 display the range of shadow impacts on the courtyard between 475 Main Street and the Howland Center during the course of the Summer Solstice (June 21). As can be seen from Figure 2, at 9:00 AM the Howland Center building itself creates the shadows that encompass the courtyard. At Noon (Figure 3) the courtyard receives direct sun light, but the shadows cast by the new building addition only affect a small portion of the rear of the courtyard. At 2:30, the sun is moving to the west, and the bulk of the existing 475 Main Street building is beginning to cast its shadow across the courtyard. At this point, the building addition is creating a slightly larger shadow at the southern end of the courtyard. By 5:00 PM, as the sun has moved far to the west, the courtyard is entirely in shadow created by the 475 Main Street building.

As documented in greater detail in the July 11, 2017 Shadow Study submitted by this office, the Howland Center building and 475 Main Street currently

create the shadows that principally impact the courtyard between the two building. The new addition, as revised, will create a negligible additional impact.

We trust the revision to the building, and this additional explanatory documentation address the concerns expressed by the Board.

Sincerely,

Patrick Cleary, AICP, CEP, PP, LEED AP  
Cleary Consulting

cc: Jeff Mear, The Mear Group  
Taylor Palmer, Cuddy & Feder



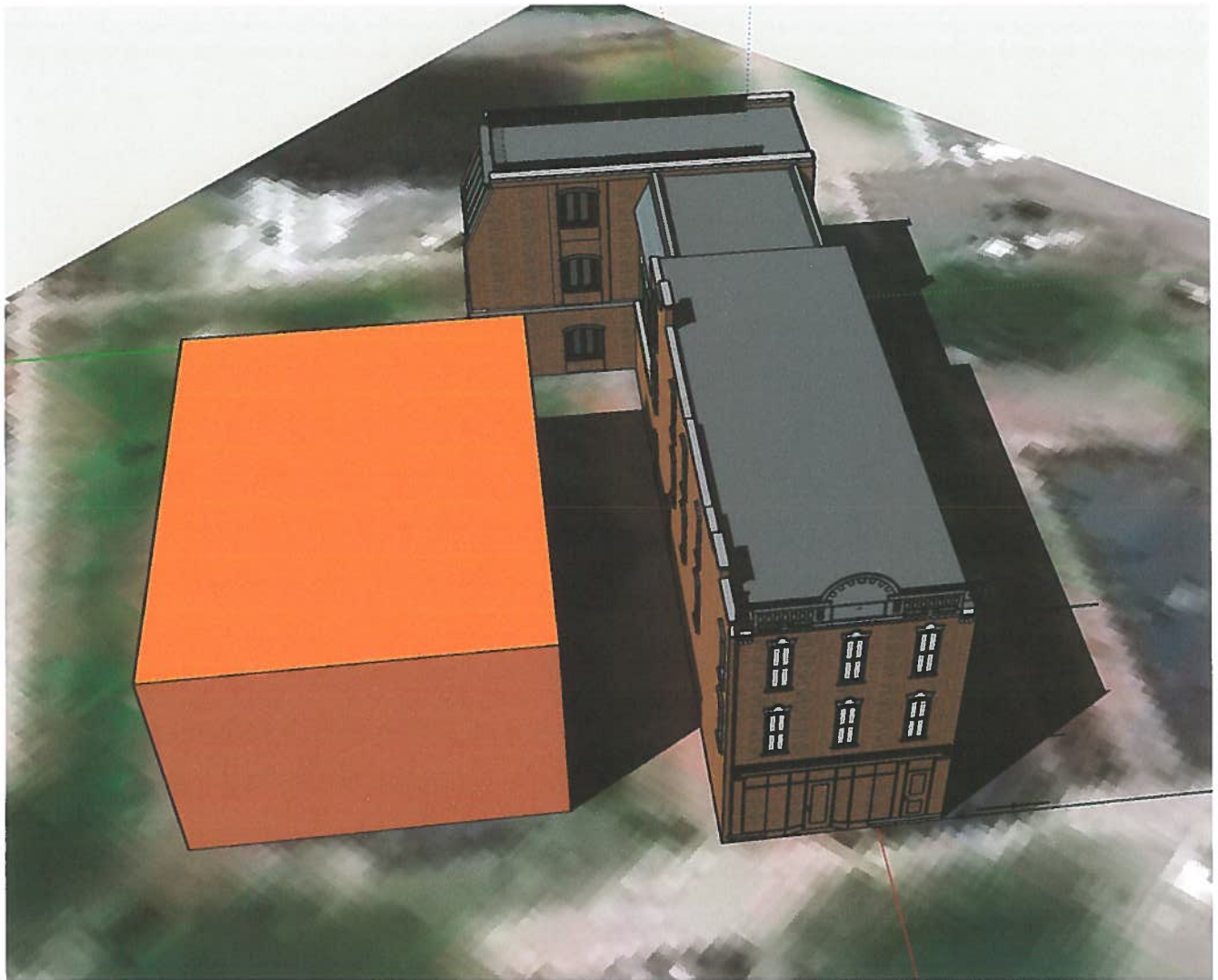
Source: Aryeh Siegel Architect

Scale: N.T.S.



Figure 1  
Building Elevation Rendering



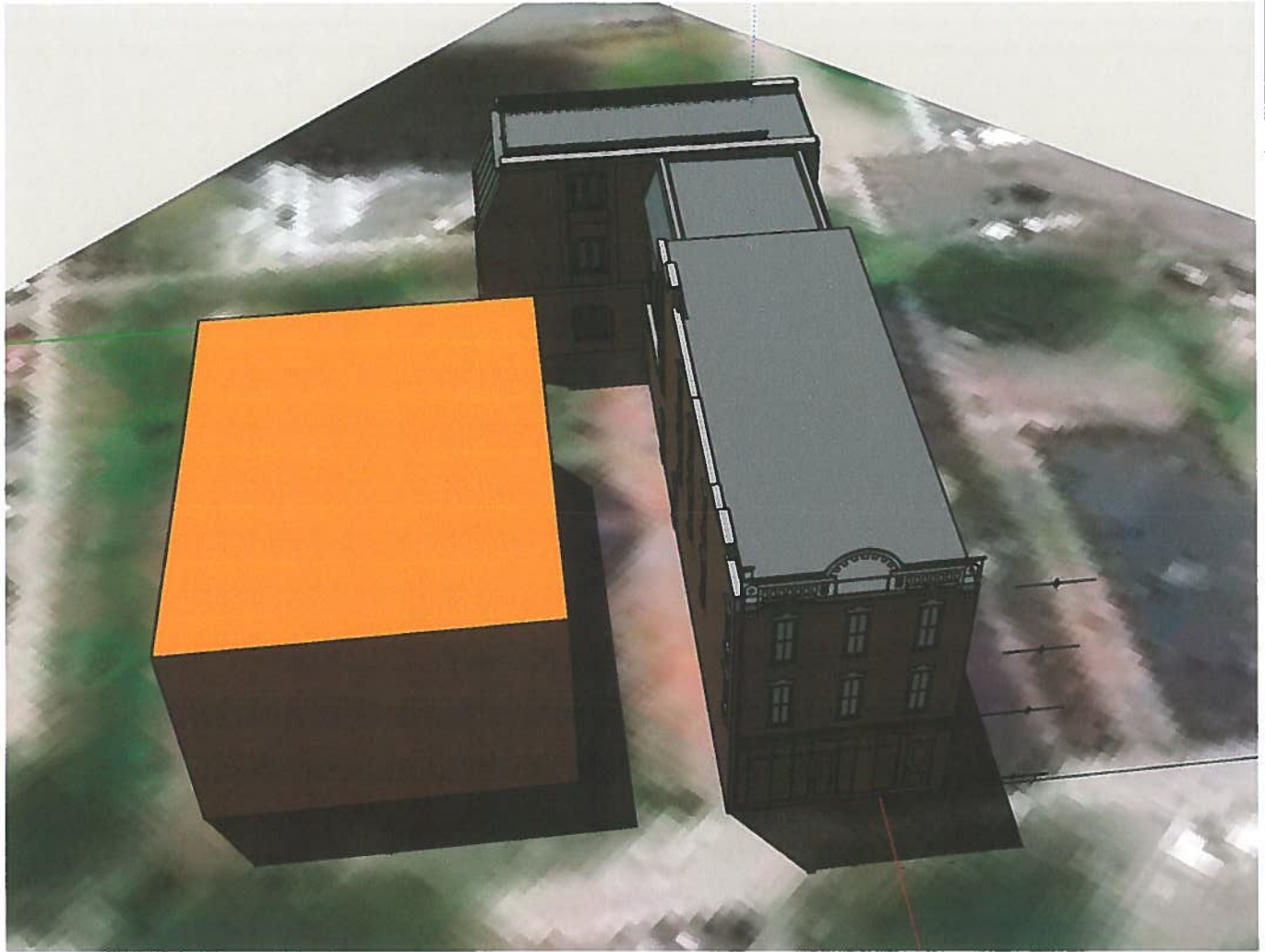


Scale: N.T.S.



**Figure 2**  
**Shadows – June 21 – 9:00 AM**





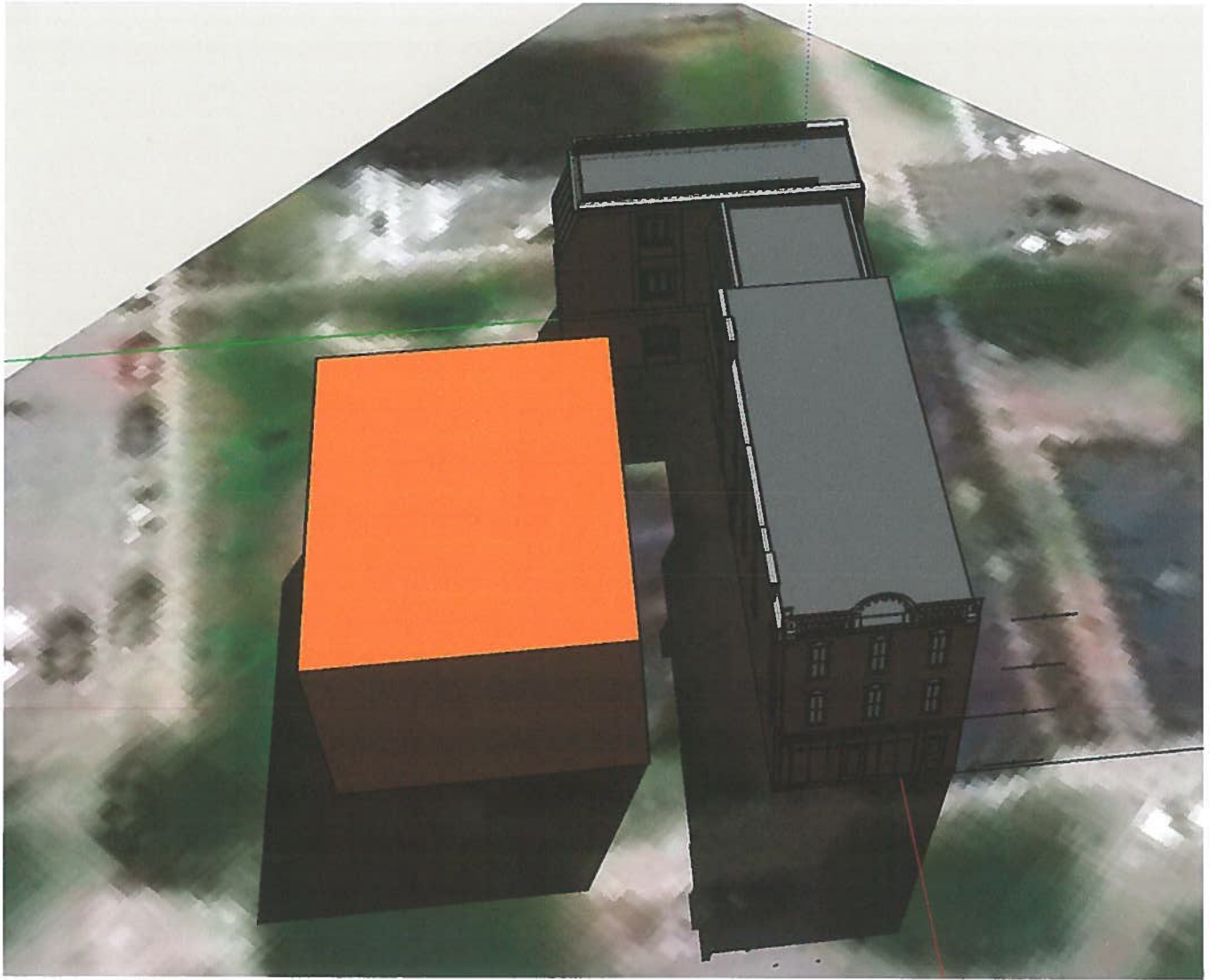
Scale: N.T.S.



**Figure 3**  
**Shadows – June 21 – Noon**





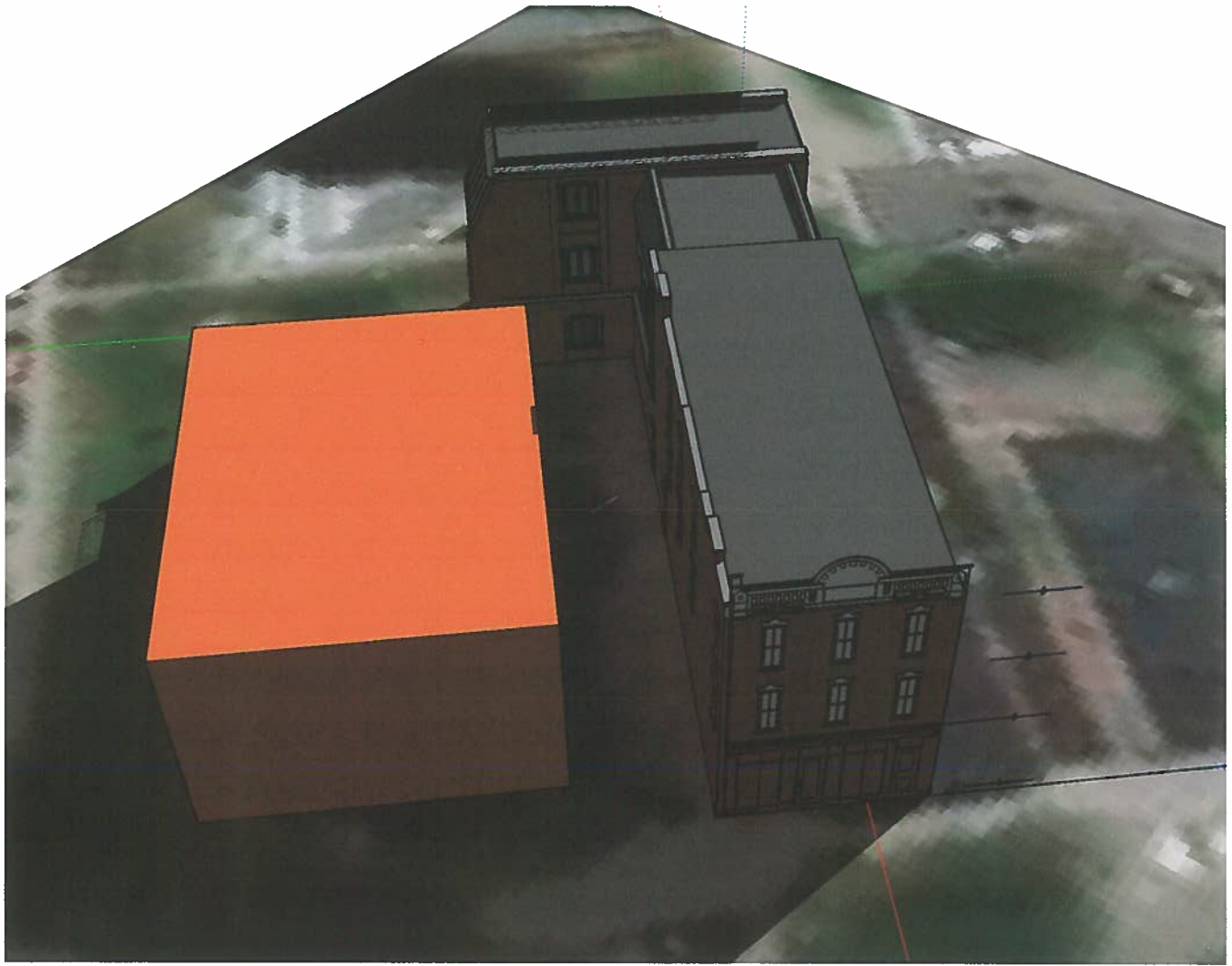


Scale: N.T.S.



**Figure 5**  
**Shadows – June 21 – 2:30 PM**





Scale: N.T.S.



**Figure 5**  
**Shadows – June 21 – 5:00 PM**

