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# MEMORANDUM

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**TO:** Jared Eigerman, Chair  
Ad Hoc Committee on Waterfront West

**FROM:** Rick Taintor *RT.*

**DATE:** 26 November 2018

**RE:** Waterfront West Overlay District –  
Building Heights, Setbacks, Commercial Area, Accessibility and Uses

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This memo is to follow up on the discussion at the November 20 Ad Hoc Committee meeting. I begin below with a review of issues relating to the approach to height regulation proposed in my November 19 memo. This is followed by new material addressing the relationships of building height to setbacks from the street and from adjacent buildings (pp. 3-5); the appropriate amount of retail and restaurant floor area (p. 5); providing accessibility to storefronts that have to be raised above grade due to floodplain regulations (p. 6); and the implications of physical and design issues on the location of uses, specifically a hotel (p. 7).

## **Review of Proposed Approach to Height Regulation in the WWOD**

I want to begin by clarifying some aspects of my proposal for several height sub-zones within the Waterfront West Overlay District that may have been misunderstood. First, the proposed approach (shown in the graphic on the next page) is not based solely on the view from the rail trail bridge. While I used that view as the starting point for my analysis, it was clear in my November 19 memo that scaling of building mass down from Merrimac Street to the river was an equally important consideration. As a reminder, here are the elements of my proposed approach as listed in the memo:

1. Establish maximum elevations above which building elements may not protrude, rather than setting maximum building heights (in either stories or feet) as is the case elsewhere in the Zoning Ordinance. These maximum elevations (NAVD88) would not be dependent on the elevation of the existing or finished grade.
2. Preserve existing river views from the rail trail toward the mouth of the river by reducing building heights in portions of the overlay district.
3. Protect Horton's Landing owners by maintaining the existing regulatory 35-foot building height between Horton's Landing and the river.
4. Maintain the existing low scale of development along the water by limiting buildings to one story (like Windward Yacht and Plum Island Coffee Roasters).

5. Allow taller buildings (greater elevations) close to Merrimac Street and Route 1 to compensate for the lower building heights that would be available elsewhere on the site.

These multiple objectives were summarized in the graphic's caption:

Conceptual height zones to preserve open waterfront, preserve views and protect Horton's Landing



Second, the suggested elevations shown within each sub-zone in this image are not meant to be definitive. My memo concluded with the following statement:

These concepts are presented for discussion purposes, and to suggest a way for height to be regulated in an unambiguous manner in this very sensitive and complex area. More analysis would be required to determine the exact elevations that would be appropriate within each subzone of the WWOD.

Third, and very important to understand, my suggestion is to establish maximum elevations above which no element of a building could protrude, and not the maximum building height above finished grade. In the graphic above, the corresponding approximate height above grade

is shown in parentheses for reference but is not intended to correspond to the current definition of building height in the zoning ordinance.

This proposed approach is different from current zoning, which (a) establishes a uniform maximum height in relation to finished grade, (b) defines various points that must comply with this maximum height (e.g., top of flat roofed, midpoint of a pitched roof, etc.), and (c) permits mechanicals and other rooftop appurtenances (elevator overruns, stair towers, etc.) to exceed the nominal height limit, provided that such structures do not exceed 10 percent of the ground floor area of a building. These exempted structures can be up to (and in some cases, more than) 10 feet above the highest point on the building, which in the case of a pitched roof could be 15 feet above the maximum height limit in the zoning ordinance. While enclosing these in an architectural wall softens the impact on aesthetics, it does not affect height-related impacts such as obstruction of light or views.

### **Building Heights and Setbacks 1**

The relationship between building height and setback is important to the experience of pedestrians on public and private ways, to abutters, and to the occupants of the building to be developed. As Andy Port illustrates with the examples attached to his November 19 email, the visual impact of a tall building can be mitigated by stepping back upper stories so that they are less visible to a person on the adjacent sidewalk or property.

The following images of the RiverPlace district along the Willamette River in Portland, Oregon, show how even a slight stepping back of the upper stories from the ground floor can help to make the building frontage comfortable for pedestrians. The development shown in these photos consists of three stories of residential above one story of retail and restaurant uses, with no setback from the walkway. The site does not feel oppressive to pedestrians because the primary experience is of a one-story storefront, and also because one side of the walkway is open to the river. These two features—an upper-story stepback and an open riverfront—create a pedestrian experience that is vastly different from the experience of a street with tall buildings facing each other and with no upper-story stepbacks.

RiverPlace, Portland, OR



It is also noteworthy that the images above show a continuous walkway that is elevated well above the level of the river. This feature is relevant to Newburyport's Waterfront West area,



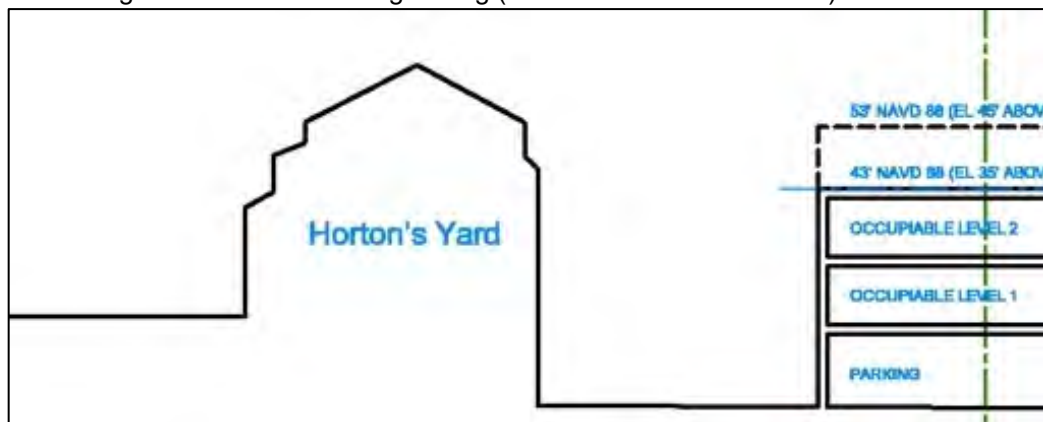
where storefronts must be raised at least 6 feet above the existing grade just to comply with current FEMA regulations—and where additional elevation may be advisable in light of projected sea level rise and increasing storm frequency and intensity.

## Building Heights and Setbacks 2

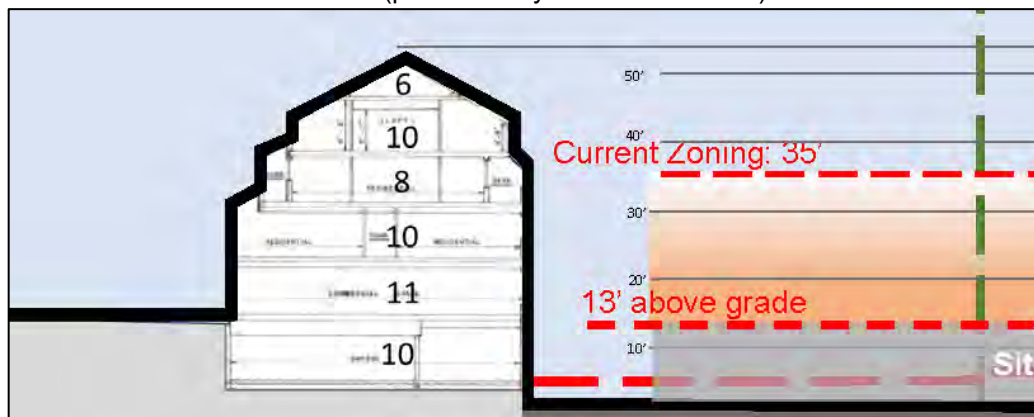
Rishi Nandi's illustrations of building heights are helpful for understanding existing and potential zoning heights for the Waterfront West district relative to the abutting Horton's Yard building. It is important to note that these illustrations are only focused on building heights and were not intended to represent the horizontal relationship between NED's proposed buildings and Horton's Yard. Unfortunately, if taken out of context these schematic illustrations may suggest a relationship between height and setback that has not been proposed by the developer.

While Rishi's illustrations could be interpreted as showing a horizontal separation between the two buildings of around 45 feet (based on the vertical scale), the site constraints illustration that NED presented at the Ad Hoc Committee's November 15 meeting shows a separation of only 18 feet. This difference may be seen by comparing the following excerpts from the two illustrations:

Nandi height illustration – existing zoning (from Port email of 11/19/18)



NED site constraints illustration (presented by NED on 11/15/18)



The site constraints illustration is consistent with NED's August 2018 site plan (see below). That site plan shows a building with no setback from the property line, as is permitted by the existing WWOD zoning, so that the separation from Horton's Yard is as little as 18 feet.

Portions of NED August 2018 site plan and perspective view, showing area of site next to Horton's Yard



Certainly, what might be acceptable with a 45-foot separation would have much more impact on the abutting property if the separation were reduced to less than half that distance. This reinforces Andy's point about stepping back buildings in proportion to their distance from property lines, and the same argument also applies to stepbacks along side and rear property lines.

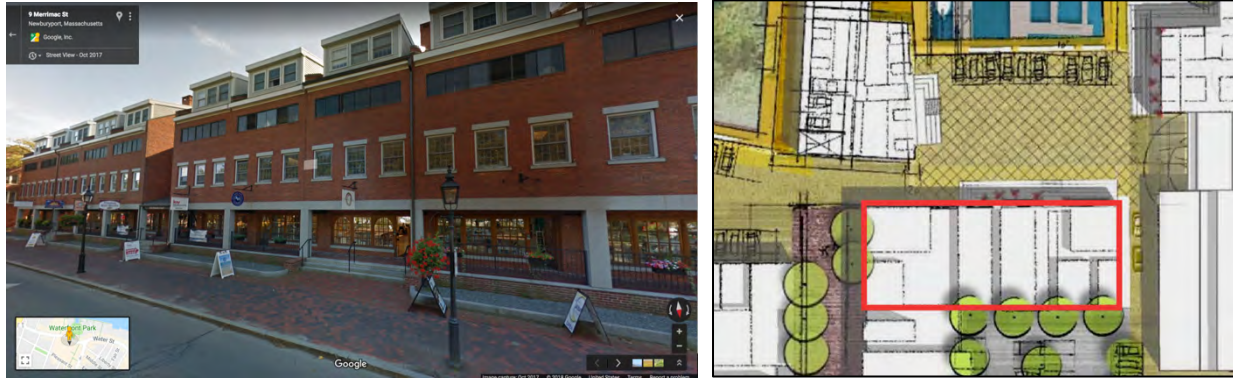
### **Amount of Commercial Space**

To provide a public benefit, this development has to include fully active street frontages in two parts of the site: along the existing walking route between the Route 1 underpass and the central waterfront, and along Merrimac Street. The numbers that are being talked about for commercial floor area are very low: 5,000 sq. ft. is surely too little retail space for this area (it is 30% less than the combined floor area of Richdale, Angie's and Annie's), and 10,000 sq. ft. is not too much. This is another case where the abstract metrics are meaningless in the absence of good design and attention to function

Merrimac Landing (1 Merrimac Street) is the type and scale of development that would be perfectly appropriate for Waterfront West's "main street", facing the river (shown in the 2003 Strategic Plan as "Wharf Street"). The building is about 200 feet wide by 50 feet deep, or a footprint of roughly 10,000 sq. ft. The building has 10 storefronts plus a center lobby area that is about half the width of a storefront, so each storefront is about 19 feet wide. The individual ground-floor units each contain about 835 sq. ft. of floor area, except for the end units that are 370 sq. ft. (due to the parking garage entries at the rear of the building), for a total of about 7,420 sq. ft. of usable commercial floor space.

On NED's August 2018 plan, the principal commercial frontage facing the water (see image below right) appears to be about 140 feet wide by 55 feet deep, for a building footprint of 7,700 sq. ft. It could thus accommodate 7 storefronts similar to those at Merrimac Landing (along with a lobby for the upper floor residential units)

Merrimac Landing (Google StreetView) and commercial frontage from August 2018 NED site plan



### **Accessible Commercial Space and Active Street Frontage**

As shown in the above photo, the Merrimac Landing storefronts are raised above the sidewalk by about two feet, or one-third of the height that the Waterfront West storefronts would need to be elevated. The requirement to raise these storefronts at least six feet above existing grade creates two related challenges: first, ensuring that there will be easy access so that pedestrians will walk along the storefronts and ensure long-term viability of the stores and restaurants (“active frontage”); and second, providing equal access to those who cannot navigate the six feet of stairs, including those with mobility challenges, bicyclists, and families with strollers.

Ensuring the viability of active storefronts will require providing an elevated public walkway along the building frontage. The following example from Bristol, RI, shows a walkway raised to about three feet above the sidewalk level on a site that slopes from back to front (the site is about 500 feet from Bristol Harbor) and from right to left.

Raised walkway to accommodate grade change, Hope St., Bristol RI





In Bristol, the accessible routes only need to achieve a height difference of about three feet, so that the transition from street level is made at each end of the block over a fairly short distance. In contrast, providing ADA-compliant accessibility to a walkway that is six feet above grade will likely require integrating ramp structures diagonally across the “step terraces”. The following photos show examples of how this has been done, on a larger scale, in other places.

Examples of ramps integrated into stairs and seating



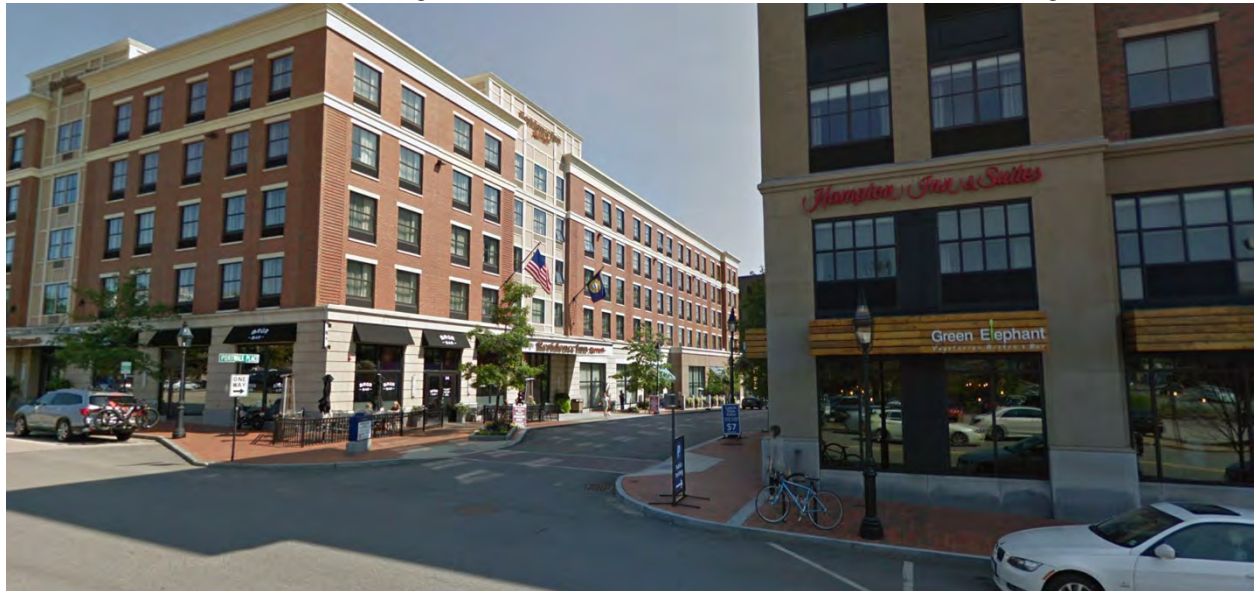
## Hotel Siting

The recommendation to concentrate building height and mass on the southwest portion of the Waterfront West district, next to Merrimac Street and Route 1, has implications for where uses should be placed. In particular, the larger structure that is needed to accommodate a hotel would be difficult to site on or close to the river because of environmental and visual concerns, and instead would be best located along Merrimac Street. With the gradation of building heights from Merrimac Street down to the water, hotel rooms could have excellent river views. In addition, traffic noise from Route 1 would be less of a negative impact for a hotel than for residences.

An important side effect of placing a hotel on Merrimac Street is that it would automatically result in activation of the street frontage. Hotels typically have public-oriented spaces at street level, including restaurants, coffee shops, convenience stores and meeting facilities. An excellent example can be seen on Portwalk Place in downtown Portsmouth, where the Residence Inn and

Hampton Inn each have ground floor restaurants as well as hotel lobbies and other facilities as shown in the image below.

Downtown Portsmouth hotels with ground-floor restaurants and other active street frontage uses



Because of the multiple benefits that would be offered by placing a hotel along the gateway to the downtown from Route 1, as well as the environmental, physical and visual obstacles to siting a hotel on or close to the waterfront, the City should consider designating the southwest corner of the site for a primarily nonresidential use and strongly promote this area for a hotel.