

2 Launch a Design Competition for Raised Homes

I. Summary

Issue:

New York City has 71,000 buildings located in the new 100-year flood zone. New buildings in these areas will have to build above the flood line, and other homeowners may decide to voluntarily raise their homes. This will impact the city's architecture, streetscapes, and accessibility.

Recommendation:

Launch a competition to design a streetscape of attractive raised homes that fit the character and aesthetic of existing neighborhoods and remain accessible to people with disabilities. The competition should address both detached and attached homes.

II. Proposed Legislation, Rule or Study

The city should launch a Design Challenge that incorporates the items described below. Because each neighborhood has its own character, design solutions will vary for each neighborhood. Building designs should include detached, semi-attached, and attached, and both single-family homes and townhouses.

Street Wall Character

It is unlikely that all homes will be raised simultaneously, therefore leaving some homes below the Design Flood Elevation (DFE), and others above. This will result in inconsistent exterior facades and street walls that are out of character with New York City's historical streetscape. The Design Challenge should:

1. Implement standards for consistent exterior design of buildings.
2. Address exterior façade materials.

Enclosures Below the First Floor

Basement and/or cellars will be removed, causing a significant loss of habitable and/or storage space. The Design Challenge should examine the affected areas below the DFE that will be exposed and consider design solutions for:

1. Screened walls that allow for privacy but maintain transparency to ensure that these spaces do not become habitable. Vegetated screen walls should be considered.
2. Allow for the use of these areas as protected outdoor storage with specific limitations on what is stored and methods/materials to use as storage. (This may require the first floor to be raised higher than the DFE.)
3. Safe, effective lighting.
4. Rodent and pest control.

Street Access to Homes

Raising the first floor of homes will require changes to entrance stairs. NYC currently has architectural precedent for building a raised first floor - the English style townhouse. The Design Challenge should:

1. Explore solutions for installing stairs for homes:
 - a. With front yard setbacks, which provide space for the installation.
 - b. With no setback to the street wall, which are not suitable for the installation.
 - c. Where stairs must be installed within the home, requiring an entrance below the DFE.
2. Incorporate solutions addressing the sidewalk, which may need to be redesigned to accommodate the entrance stairs.
 - a. Address new setback requirements (zoning) that may be required to allow for stoop style staircases.
3. Consider street wall character impacted by the aesthetics of exterior stairs.
4. Consider ADA accommodation.

Storefront Street Access

Mixed-use low-rise buildings with commercial spaces will lose their street front access if they are elevated above the street. The Design Challenge should consider the relationship between streetscape and storefront, including:

1. Access for ADA compliant design, which necessitates ramps in addition to stairs.
2. Sidewalks that must be redesigned to accommodate access if ramps within the property line cannot be accommodated.
3. Review of precedents such as Tribeca, where manufacturing building loading docks have been transformed to commercial access.

Rear Landscape Connection

As interior floor elevations will no longer meet rear yard elevations, the Design Challenge should address how the rear yard can be accessed in a sustainable and innovative manner.

III. Supporting Information

Expanded Issues & Benefits:

The manner in which buildings address public streets is among the most critical and defining elements of urban form and contributes dramatically to the character of a given neighborhood. Consider the difference between a sidewalk adjacent to a series of Brooklyn stoops and a sidewalk alongside the windowless brick wall of a parking garage. The former is intimate in scale, visually interesting, provides opportunities to sit and relax, and encourages chatting with your neighbors. The latter is inhumane in scale and encourages only that you pass it as quickly as possible. The public street is the element that stitches together a city and enables the creation of a community rather than a densely populated mass of separate individuals. As we consider how homes in the flood zone might be elevated, it is critical that it be done in a manner that is consistent with the values of New York City urbanism established over several centuries while

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directly addressing and responding to our current requirements of universal access and sustainability. A design competition will bring the knowledge and training of the architecture and engineering communities to bear on this important issue and should ensure that myriad perspectives are considered, including those of local communities and laypersons.

Although the difficulty of the challenge should not be underestimated, the experience of New Orleans following Hurricanes Katrina and Ruth offer successful examples of carefully organized design competitions that provided highly regarded, cost-effective, sustainable solutions to similar problems.

Implementation:

Create a committee to organize the Design Challenge, whose duties will include preparing a detailed description of the program, determining the specific areas in the neighborhoods for design, organizing a panel of judges and establishing a timeline. The city could partner with the AIA New York City Chapter, an organization with substantial experience launching innovative design competitions. The AIA's Design For Risk and Reconstruction (DFRR) committee is particularly knowledgeable on this subject matter.

Cost:

The city may undertake a design competition with or without cash prizes in conjunction with relevant professional associations. No cost estimation was performed for this proposal.

Sources:

1. Designing the Future of New Orleans: Prototype House Competition
<http://archrecord.construction.com/news/katrina/competition.asp>
2. Design by Many: Passive House New Orleans
<http://www.designbymany.com/challenge/passive-house-new-orleans>
3. USGBC 2012 Natural Talent Design Competition
<http://openarchitecturenetwork.org/competitions/naturaltalent/2010>
4. GreeNOLA: Global Green USA Sustainable Design Competition for New Orleans
<http://www.globalgreen.org/articles/global/82>
5. Make It Right: New Orleans
<http://makeitright.org/see/new-orleans/>