A new form in skyscraper history has evolved in New York over the past decade: the super-slim, ultra-luxury residential tower.

PUTTING THINGS IN PROPORTION (1)
Tall and BIG are not the same thing. This chart places behind the line up of New York’s slender towers the silhouettes, to scale, of several of the world’s tallest and largest skyscrapers, all of which include residences or hotel spaces, except for New York’s One WTC. From left to right they are: Shanghai World Financial Center, CTF Finance Centre, One WTC, Lotte World Tower, Mecca Royal Clock Tower, Shanghai Tower, Burj Khalifa. The smallest total floor area (GFA) in any of these skyscrapers is Lotte World Tower with 304,081 m² / 3,273,101 ft² of GFA.

WHAT IS SLENDERNESS? (2)
“Slenderness” is an engineering definition. Structural engineers generally consider skyscrapers with a minimum 1:10 or 1:12 ratio (of the width of the building’s base to its height) to be “slender.” Slenderness is a proportion based on the width of the base to the height of the building.

The World Trade Center North Tower was the tallest building in the world on its completion in 1971. But at a height of 1,368 feet and with a big square floor plate, 209 feet on each side, the ratio of its base to height was less than 1:7. This image compares at the same scale the former 1 WTC and the residential tower 432 Park Avenue, now under construction. The base of the apartment building continued on page 3.
NORTH BROOKLYN INDUSTRY AND INNOVATION PLAN

On September 28, 2016, the Department of City Planning hosted its third Open House for the North Brooklyn Industry & Innovation Plan. Local business owners, workers and residents provided feedback on a land use framework revised based on community input. DCP also presented preliminary recommendations for land use policy tools and transportation improvements.

BACKGROUND
The Department of City Planning is leading the creation of a plan for the North Brooklyn Industrial Business Zone (IBZ) and adjoining areas as announced by Mayor de Blasio in the City’s Industrial Action Plan on November 4th, 2015. With input from the local community, the plan will identify strategies to promote job growth and economic activity, and ensure that core industrial areas – areas of the most intensive industrial activity – provide such businesses opportunities to thrive. The plan will explore new models for innovation districts to support 21st century businesses and jobs, with opportunities, as appropriate, for a mix of light industrial and commercial uses.

STUDY GOALS
Using zoning and other policy tools, the goals of the plan are to:

• Create a better business environment for all, by preserving and growing industrial jobs, as well as other compatible jobs in the creative and innovative sectors.
• Improve the quality of life for workers and residents within the area and nearby.
• Address the potential for conflicts between industrial and non-industrial uses.
• Identify improvements to transportation and infrastructure conditions that would support growth in economic activity.
• Address environmental and resiliency challenges.

DEADLINE FOR SUBMISSION TO THE PYLON
Deadline for submission to the Pylon is the second Wednesday of each month. Articles or notices may be submitted to the Editor by e-mail, fax or on disc. Material printed in the PYLON is for informational purposes only and should not be relied upon nor acted on as legal opinion or advice.

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NEW YORK'S SUPER-SLENDERS
PART 2

is 93 feet square, and the shaft will rise to 1,396 feet, making its slenderness ratio 1:15. To visualize a 1:12 ratio, we show a ruler 1-inch wide and set on end. The eighteen towers on our chart range from a ratio of 1:10 to an extraordinary 1:23 at 111 W. 57 Street.

HOW TALL? HOW BIG? (3)
Lining up the super-slenders by ascending height does not correlate to arranging them by their size in gross floor area (GFA). An extreme example is the difference in floor area of two tallest towers on the chart: Central Park Tower will comprise slightly more than 1 million sq. ft., while 111 West 57th Street will contain less than a third of that total. There is a more than five-fold range of size among the super-slenders: the two towers with the smallest floor areas—less than 200,000 sq. ft.—are 520 Park Avenue and One Madison.

NEW YORK'S HISTORY OF SLENDERNESS
NYC is the birthplace of the improbably slender tower. In the late 19th- and early 20th century, many tall shafts rose over every square foot of their narrow, high-priced lots. Indeed, it was the high value of the land and the potential offered by the technology of the elevator and steel-cage construction to pile many floors of rentable space onto a small lot that made it acity of towers.

There were three major stages and styles of slenderness in New York’s high-rise history. The first was a period of skyrocketing growth when, until the passage of the city’s first zoning law in 1916, no municipal regulations constrained height.

A second phase of vertical ambition and energy came in the 1920s. Shaped by the massing formula set by the 1916 zoning law, buildings with bulky pyramidal bases and slender soaring towers, covering no more than 25 percent of the lot area, became the new characteristic type of New York skyscrapers.

Because the 1916 zoning law applied to commercial buildings, including hotels, in the 1920s, the swank hotels that lined Fifth Avenue at the southeast corner of Central Park could sport tall and slender towers.

The 1961 law established the principle of “as-of-right,” which allows property owners to design and build whatever they wish without a public review process, so long as they follow zoning rules and do not exceed the maximum FAR allowed for that lot. It also created the concept of air rights, which said that if an existing building has not used all of the FAR allowed that lot, the unused “air rights” could be sold to the owner of an adjacent lot/s and used there. This mechanism, also known as “transferable development rights” (TDRs), lets developers join lots to increase the FAR that can be piled onto a single site. However, when the underbuilt area of a lot is sold and used on an adjacent site, that low-rise space will then remain open forever. FAR is finite: it can only be used once. TDRs are a cap-and-trade system.

All of the super-slender towers use this method of assembling lots and transferring air rights to consolidate and concentrate their collective FAR into one tall tower. Developers generally demolish the underbuilt structures to create a larger site for their project, even if the tower will cover only a portion. At 432 Park Avenue, for example, the mid-block tower is only 93 feet square and is set back 60 ft. from 56th Street and fronted by a plaza.

The Museum’s line-up of buildings in the chart are detailed, starting from Sky House, which is the both earliest and the shortest of the slender tower type and ending with the tallest, Central Park Tower, which is reported will rise to 1,569 feet.

- The Skyscraper Museum

Visit the TEN & TALLER Exhibit at the Skyscraper Museum till June 20, 2017.
<table>
<thead>
<tr>
<th>Building</th>
<th>Height</th>
<th>Highest Occupied Floor</th>
<th>Gross Floor Area</th>
<th>Stories*/Levels**</th>
<th>Residential Units/Condo/Hotel</th>
<th>Completion Date</th>
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<tbody>
<tr>
<td>Central Park Tower</td>
<td>1,569 ft</td>
<td>1,450 ft</td>
<td>1,015,000 ft²</td>
<td>99</td>
<td>183 / ?</td>
<td>2019</td>
</tr>
<tr>
<td></td>
<td>476 m</td>
<td>442 m</td>
<td>94,297 m²</td>
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<tr>
<td>III West 57th Street</td>
<td>1,438 ft</td>
<td>1,134 ft</td>
<td>315,996 ft²</td>
<td>80</td>
<td>60</td>
<td>2018</td>
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<td>438 m</td>
<td>345.5 m</td>
<td>29,367 m²</td>
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<td>432 Park Avenue</td>
<td>1,396 ft</td>
<td>1,287 ft</td>
<td>705,004 ft²</td>
<td>96/88</td>
<td>104</td>
<td>2015</td>
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<tr>
<td></td>
<td>426.5 m</td>
<td>392 m</td>
<td>66,487 m²</td>
<td></td>
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<tr>
<td>9 DeKalb</td>
<td>1,066 ft</td>
<td>950 ft</td>
<td>555,734 ft²</td>
<td>73</td>
<td>417</td>
<td>2019</td>
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<td></td>
<td>325 m</td>
<td>280 m</td>
<td>51,629 m²</td>
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<td>53W53</td>
<td>1,050 ft</td>
<td>902 ft</td>
<td>750,000 ft²</td>
<td>82/77</td>
<td>168</td>
<td>2018</td>
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<td>320 m</td>
<td>275 m</td>
<td>69,577 m²</td>
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<td>35 Hudson Yards</td>
<td>1,009 ft</td>
<td>926 ft</td>
<td>1,100,000 ft²</td>
<td>70</td>
<td>137 / 200</td>
<td>2019</td>
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<td></td>
<td>307.5 m</td>
<td>290 m</td>
<td>102,193 m²</td>
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<tr>
<td>One57</td>
<td>1,004 ft</td>
<td>902 ft</td>
<td>853,567 ft²</td>
<td>90/75</td>
<td>135 / 220</td>
<td>2014</td>
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<td></td>
<td>306 m</td>
<td>275 m</td>
<td>79,299 m²</td>
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<tr>
<td>220 Central Park South</td>
<td>950 ft</td>
<td>950 ft</td>
<td>414,346 ft²</td>
<td>79/66</td>
<td>83</td>
<td>2017</td>
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<tr>
<td></td>
<td>290 m</td>
<td>275 m</td>
<td>38,452 m²</td>
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<tr>
<td>30 Park Place</td>
<td>937 ft</td>
<td>990 ft</td>
<td>683,002 ft²</td>
<td>82/57</td>
<td>157 / 185</td>
<td>2016</td>
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<tr>
<td></td>
<td>286 m</td>
<td>271 m</td>
<td>63,453 m²</td>
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<tr>
<td>125 Greenwich Street</td>
<td>896 ft</td>
<td>896 ft</td>
<td>450,000 ft²</td>
<td>88</td>
<td>273</td>
<td>2018</td>
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<tr>
<td></td>
<td>273 m</td>
<td>273 m</td>
<td>41,806 m²</td>
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<tr>
<td>56 Leonard</td>
<td>821 ft</td>
<td>796 ft</td>
<td>480,364 ft²</td>
<td>60/57</td>
<td>146</td>
<td>2016</td>
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<td></td>
<td>250 m</td>
<td>242.6 m</td>
<td>146,414 m²</td>
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<td>III Murray Street</td>
<td>792 ft</td>
<td>732 ft</td>
<td>480,000 ft²</td>
<td>64/58</td>
<td>157</td>
<td>2018</td>
</tr>
<tr>
<td></td>
<td>241 m</td>
<td>223 m</td>
<td>38,900 m²</td>
<td></td>
<td></td>
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<tr>
<td>520 Park Avenue</td>
<td>781 ft</td>
<td>725 ft</td>
<td>178,003 ft²</td>
<td>54</td>
<td>33</td>
<td>2018</td>
</tr>
<tr>
<td></td>
<td>238 m</td>
<td>221 m</td>
<td>16,537 m²</td>
<td></td>
<td></td>
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<tr>
<td>50 West Street</td>
<td>778 ft</td>
<td>715 ft</td>
<td>579,992 ft²</td>
<td>64</td>
<td>191</td>
<td>2016</td>
</tr>
<tr>
<td></td>
<td>237 m</td>
<td>219 m</td>
<td>53,883 m²</td>
<td></td>
<td></td>
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<tr>
<td>45 E 22nd Street</td>
<td>777 ft</td>
<td>687 ft</td>
<td>372,001 ft²</td>
<td>63</td>
<td>83</td>
<td>2017</td>
</tr>
<tr>
<td></td>
<td>237 m</td>
<td>209 m</td>
<td>34,560 m²</td>
<td></td>
<td></td>
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<tr>
<td>100 E 53rd Street</td>
<td>711 ft</td>
<td>662 ft</td>
<td>315,996 ft²</td>
<td>61</td>
<td>94</td>
<td>2017</td>
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<tr>
<td></td>
<td>216.7 m</td>
<td>202 m</td>
<td>29,357 m²</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>One Madison</td>
<td>642 ft</td>
<td>579 ft</td>
<td>180,436 ft²</td>
<td>50</td>
<td>69</td>
<td>2010</td>
</tr>
<tr>
<td></td>
<td>196 m</td>
<td>175 m</td>
<td>16,783 m²</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Sky House</td>
<td>588 ft</td>
<td>544 ft</td>
<td>250,000 ft²</td>
<td>54</td>
<td>139</td>
<td>2008</td>
</tr>
<tr>
<td></td>
<td>179 m</td>
<td>168 m</td>
<td>24,154 m²</td>
<td></td>
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</tr>
</tbody>
</table>

* Floor count as described developers
**Floor count according to CTBUH Skyscraper Center
October 20, 2016

The October, 2016 meeting of the Department of Buildings (DOB) and design professionals took place on Thursday, October 20, 2016 in the office of Brooklyn Borough Commissioner Ira Gluckman, R.A., AIA. Representing the DOB at that meeting were Mr. Gluckman and Assistant Service Manager Recoldo Stevens.

AIA Question 1: DOB Inspector Overreaching Enforcement Duties

The first of the AIA questions was presented to Mr. Gluckman by one of the meeting attendees on behalf of a building owner as follows: A DOB inspector showed up outside a four-story building that was in the process of being painted and prepared for occupancy by new tenants. The inspector was told by one of the painters that he (the painter) was not the building owner and that he did not have permission to let him into the building. The inspector then attempted to push the front door open, and when that did not succeed he attempted to open one of the first floor windows. He went back to his vehicle for about thirty minutes. He then returned to the building, walked up the exterior steps to the stoop, and fastened a Violation Notice onto the front door. He proceeded to climb over the handrail at the top of the stoop and onto the window ledge of the first floor of the building in order to post a Stop-Work Order.

The inspector could not in fact have observed any of the work that he claimed to have seen taking place, and which he cited in the Violation. He stated in that document that he had observed work taking place on all four floors of the building, yet he did not have access to the interior of the building on any of its four floors. He was only able to observe painters at work while standing precariously on the exterior ledge of a first floor window and by looking through that window, yet he falsely stated that new partitions were being created and that plumbing and electrical work was in progress as part of a gut renovation. Any partitions he was able to see from outside the building were actually original to the building. The building is a brownstone with no modification of partitions. There was no construction plumbing or electrical work being done whatsoever.

Is this typical of the actions an inspector should engage in … including issuing a full Stop-Work Order under these circumstances? Did he have a right to climb over the railing at the top of the entry stairs in order to climb onto the ledge below one of the front first floor windows? If he wasn’t able to get into the building shouldn’t he have posted a notice instructing the homeowner to call the DOB for an inspection appointment? And if he never stepped foot into the building, how could he determine that construction, plumbing, and electrical work was being done throughout all four floors of the building?

Answer: The following answer was provided in writing prior to the date of the meeting by Borough Commissioner Gluckman:

Inspectors are trained to not force open doors or use any improper or unprofessional means to gain access. Inspectors are trained not to go inside a building without permission from the owner/occupants. Also, inspectors are trained to leave from the premises when the occupant/owner requests them to do so. Building owner/occupants should report any occurrence of inspector misconduct to Internal Audits and Discipline (IAD) at 212-393-2900.

1. Access denied – The inspector should not force his way into the building or even beyond the property line, but may observe and make his judgment based on conditions observable from the publicly accessible area. The inspector must make a corresponding notation in the Notice of Violation.
2. The inspector can attach an SWO to any structure first accessible and in this instance it can be the metal railing on front – the inspector went above and beyond to make sure that the SWO would be clearly visible.
3. The inspector shouldn’t climb over the handrail; front door posting is sufficient.
4. The inspector most likely observed ongoing activities and due to denial of access posted the SWO and the LS4 for inspection.

AIA Question 2: Waivers for Permit Renewals

Question: How can a waiver be obtained on a permit renewal for an old application in which the BIS system indicates that a signature for the superintendent is required when there is only minor interior finishing work left to be done?

Answer: The following answer was provided in writing prior to the date of the meeting by Borough Commissioner Gluckman:

There is no longer a waiver function that can be performed in the borough office. All waiver requests for Site Safety and construction superintendents should be forwarded to the BEST Squad using the following two email addresses:

• Waiver of Site Safety Manager (SSM) or Site Safety Coordinator (SSC): bsspwaiver@buildings.nyc.gov
• Waiver of construction superintendent: Csuper@buildings.nyc.gov

AIA Question 3: Calculation of the Valuation of a Building

Question: Can we get some explanation/interpretation of this section? When do we apply for the calculation of 30%, and when do we use the 60%? In addition, how do we calculate the value of the building? (Department of Finance records, or can we provide an official appraisal?)

Answer: The following answer was provided in writing prior to the date of the meeting by Borough Commissioner Gluckman:

• Per SECTION BC 102.1, pertaining to APPLICABILITY (General) where there is a conflict between a general requirement and a specific requirement, the specific requirement shall govern. Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern.
• Therefore, BC901.9.4, pertaining to the additional requirements based on value of alterations, may be used when there is no change to the occupancy, or the use of the space (BC 901.9.2), or enlargements where this chapter would require such systems in new construction for a space or building (BC 901.9.3).
• An example of a change of the use of the space: change from an...
office (UG-5 / Occupancy Group – B) to a restaurant under 75 persons (UG-6/B) or dry cleaning and laundries (UG-6/B).

• The value of the building may be calculated per Dept. of Finance records, or per an official appraisal – minus the value of the land."

Discussion: The main question concerning the attendees was whether the 30% value of the building applies, or the 60% value of the building. This is with respect to whether a sprinkler system requirement is triggered by the job. Mr. Gluckman said that this was a complicated question which requires further study.

Additional Questions (from Attendees)
Several additional issues were brought up during the course of the meeting by attendees, in addition to the three original questions discussed above.

Additional Question 1: Drawings for Jobs in Flood Zones
Question: What are some of the considerations which must be addressed on our drawings for jobs in flood zones?

Answer: Mr. Gluckman stated that we have to include applicable Flood Zone Maps in order to see whether or not the subject property is located within a Flood Zone. Also, we must provide calculations of the value and extent of the proposed job.

Additional Question 2: Flood Zone Designations
Question: What if there is a difference between the FEMA and New York City Flood Zone Designations?

Answer: Mr. Gluckman stated that the FEMA designations would govern. Their maps are generally more restrictive than the City’s.

Additional Question 3: Sprinkler Requirement
Question: In a Multiple Dwelling there is only one (1) sprinkler head, and it is located in the kitchen of one of the apartments. There are no Sprinkler jobs on file for the building. The apartment is to be renovated. Does the existing sprinkler head have to be replaced?

Answer: Mr. Gluckman said that that one sprinkler head would not have to be replaced if the required fire protection ratings for floors, ceilings and walls are being met. It’s likely that those fire-rated materials were not available at the time the old sprinkler head was installed many decades ago.

Additional Question 4: Zoning Use Groups
Question: How can we determine the Zoning Use Groups for uses which are not clearly defined in the Zoning Resolution? Some examples might be after-school training programs, assisted-care for as few as four people where the total occupancy is under 75.

Answer: Mr. Gluckman stated that the applicant should prepare a ZD-1 form and submit it to him. He will then take it up with the five Borough Commissioners for interpretation at their monthly technical meeting.

Additional Question 5: Required Width of Corridors
Question: How wide must corridors be in a school? 66 inches?

Answer: When classrooms open into a corridor that corridor must be at least 66 inches wide. Otherwise, in most cases it’s 44 inches. Mr. Gluckman stated that he would have to see the plans in order to be certain which standard applies.

Additional Question 6: Support of Excavation (SOE) Jobs
Question: What kind of application do we have to file for an SOE job?

Answer: An ALT Type 2.

Additional Question 7: Enclosure Requirement for Gas Meters
Question: A NB job is being filed for a 2-family house. Two (2) gas meters will be installed in the Cellar. Do these gas meters have to be enclosed?

Answer: No, not for a 2-family house.

- Jerry Goldstein, AIA

THE QUOTES CORNER

“Architecture which enters into a symbiosis with light does not merely create form in light, by day and at night, but allow light to become form.”

- Richard Meier
architect

More and more, so it seems to me, light is the beautifier of the building.

- Frank Lloyd Wright
architect

I like to think of decorative lighting as architectural bling.

- Randall Whitehead
residential lighting designer
LOOKING AHEAD

REGULARLY SCHEDULED CHAPTER MEETINGS

Unless otherwise noted, all meetings are scheduled at:
Committee Meetings: 5:30 PM
Dinner: 6:00 PM
Program: 7:00 PM

General Meeting
Thursday, Wednesday, October 19, 2016
Sponsored by Window Fix

Brooklyn Borough Hall
Community Room, 1st floor
Joralemon Street, Brooklyn, NY 11201

Executive Meeting
Wednesday, October 5, 2016

AIA learning unit credit and certificates towards NYS mandatory continuing education will be given for each program.

THE AIA BROOKLYN CHAPTER MEMBERS ARE FOREVER CHANGING

Welcome to our new members!

Beth O’Neill, AIA
Oscar Boyko, AIA
Cemre Durusoy, AIA
Christopher Zardoya, AIA
Jaewoong Yi, AIA
Claudine Williams, AIA
Irene Urmeneta, AIA
Zachary Colbert, AIA
Thomas McMahon, AIAA
Burt Goncalves, Assoc. AIA
Murat Salcigil, Assoc. AIA

Angela Ngo, Assoc. AIA
Mirna Romhen, Assoc. AIA
Elyse Handelman, Assoc. AIA
Michael Licht, Assoc. AIA
Maximilian Waldman, Assoc. AIA
Ana Ivascu, Assoc. AIA
Alanna Lauter, Assoc. AIA
Lauren Miyata, Assoc. AIA
John Doria, Assoc. AIA
Kristina Koon, Assoc. AIA
Rong Zhao, Assoc. AIA
Tanyaporn Anantrungroj, Assoc. AIA
Abigail Hancock, Assoc. AIA

LAST PRESENTER MONTH

Many thanks to last month’s presenter …

Thank you to our sponsor Window Fix.
Their presentation was “Passive House Concepts by the Trade” and thank you Katrin Klingenberg from Passive House Institute US for the wonderful presentation. http://windowfix.com

Thank you to Illya Azaroff, AIA and Jessica Sheridan, AIA (AIANYS Regional Representatives to the AIA Strategic Council, AIANY and Design Collective) for speaking to our members about the current role of AIA’s Strategic Council and member’s overall professional concerns.
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Window-Fix Obtains LPC Permits for Historical Restoration Projects

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Joseph J. Smerina, AIA

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