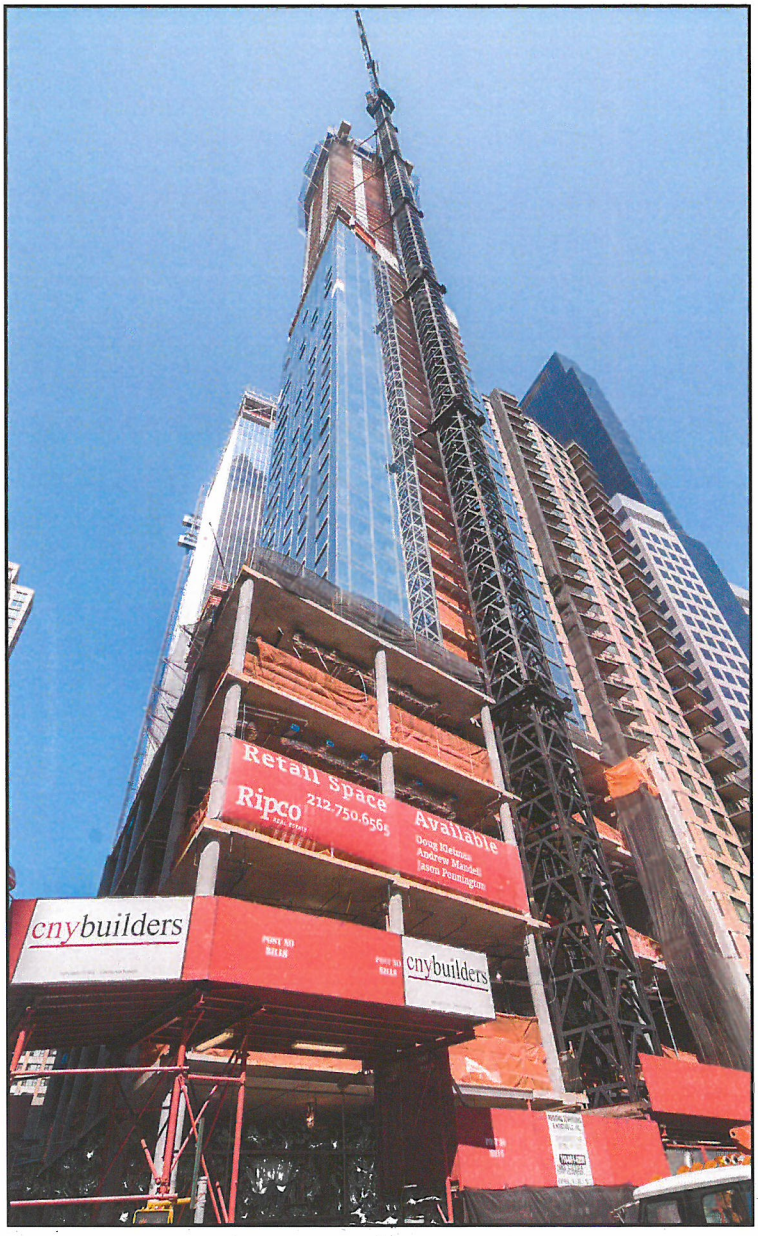
CENTRAL PARK MARRIOTT

1717 BROADWAY

New York, NY



Southeast Elevation as of August 31, 2012

Current Progress as of March 29, 2013

View from the 66th Floor Looking North over Central Park

View from the 66th Floor Looking South over Midtown

Central Park Marriott
1717 Broadway, New York, NY

November 12, 2013

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Tallest Hotel in Western Hemisphere Tops Out,
Announces CNY Builders

Marriott on Broadway Sets New F.A.R. Record for N.Y.C.

NEW YORK CITY, August 22 – The 70-story, 371,000-square-foot Marriott, located at 1717 Broadway at 54th Street, topped out announced Ken Colao, president of CNY Builders, the project's construction manager.

The $200-million project, being developed by Granite Broadway Development LLC, is over 753 feet in height and has a floor-to-area ratio (FAR) of 30:1, the highest ever achieved for any building in the history of New York City. That ratio was derived by using the Daylight Evaluation Method, a compliance method applicable exclusively in the midtown special district, according to Nobutaka Ashihara, principal of Nobutaka Ashihara Architects, which designed the building. "It is the tallest stand alone hotel in the Western Hemisphere and tallest Marriott in the world "Mr. Colao noted.

Two stacked Marriott "select service" hotels will be housed within the structure and will become flagships for their brands – a 378-key Courtyard by Marriott on the lower floors, and a 261-key extended-stay Residence Inn on the upper floors. Areas shared by the two hotels include public space and lobbies, fitness club, lounges, bar area and restaurants, retail store, a business center, a conference center and outdoor terraces.

The actual Topping Out ceremony saluted the 255 men and women involved in building the superstructure, and included the presentation of an American flag, folded military style by four Army, Marine and Air Force veterans who were part of the construction team, and then presented to Harold Jantz, also a veteran and the senior project superintendent on the project. Mr. Jantz then presented the flag to Harry Gross, chairman of Granite Broadway Development, owner of the building.

"This project is complex because it required some unusual approach's to construction and a very tight budget", noted Mr. Colao. Most significant of all has been the site's extraordinary logistical challenges, having three major buildings constructed simultaneously on one block. This 70-story concrete building is sandwiched between and directly abuts a concrete high rise hotel being built at the west property line and a subway and Broadway at the eastern line. With three buildings under construction on West 54th Street between Broadway and Eighth Avenue, this block has the highest concentration of construction in New York City outside of the World Trade Center downtown.

The New York City BEST Squad which closely monitors and regularly inspects the project – requested CNY figure out a way for all the neighbors to cooperate and play nicely in the sandbox together. CNY quickly presented a plan to the western neighbor and NYC Best Squad which was subsequently adapted. "Through an intricate series of leap frogging the overhead protection we were both able to work. Since we were first to mobilize and gained position well ahead of the neighboring General Contractor from the onset we were permitted to work days and they were forced to work nights because they couldn't demolish over our crews and

had to provide overhead protections while we were in demolition and foundation stages ".noted Dennis Prude CNY's Director of Field Operations. However this was later reversed as CNY soared past them – and then had to provide the protection over them. Then the neighbor's general contractor had to provide overhead protection over CNY setbacks when they eventually reached sixth floor of the Marriott.

The over-riding concern for worker and public safety led to CNY's decision to construct a cocoon protection system that rose up with the building even though there is currently no requirement by the New York City Department of Buildings regulations for this system. This protection system completely encloses the stripping floor, formwork and above deck, and provides protection for the workers and against any objects from falling off the side of the building.

The second complication pointed out by Mr. Colao is the building's slender structure – 753 feet on a footprint that is a mere 10,000 square feet, and that sets back to 6,500 square feet on the sixth floor and to 4,800 square feet on the 36th floor. To dampen movement and acceleration in high winds a mass tuning damper was designed by C, Silvian Marcus of Cantor Seinuk working with the Boundary Layer Tunnel Laboratory in Ontario Canada who conducted extensive wind tunnel tests. The tuning damper was constructed on the roof and comprises two stacked concrete tanks holding approximately 100,000 gallons of water which will be held and released in controlled flow to counter swaying movement and acceleration during high winds.

Further complication was the high end glass curtainwall system on a high-rise concrete superstructure, since typically a glass curtainwall is on steel superstructures.

"Unlike Structural Steel which is prefabricated to exact dimension, concrete is poured as a fluid into wooden temporary formwork. This means we must work within extraordinarily tight tolerance that takes into account movement and shifting of formwork, shrinkage, creeping, and deflection. To pour the concrete plumb and true, the temporary formwork construction requires constant monitoring, surveying and recalibrating, three to four times a day to maintain true and plumbness", Mr. Prude pointed out. "To address the issue of tolerances between the façade and superstructure, special connections that allow for additional movement and concrete encroachment and attach to the façade were engineered and developed" added Mr. Colao. Designed as a unitized CTW system the panels crated on skids were brought to the floors by a custom built hoist car that allowed for the story high panels.

Despite these challenges, the project has already achieved notable successes, one of which has been its remarkably speedy construction. Construction of a double cellar cut into sharply sloped rock, started on March 3, 2011 and the superstructure was topped out in 231 days which entailed roughly pouring five tower floors every ten days. We are right on schedule after 17 months of construction, noted Mr. Prude.

Even though the building is only at approximately 65% completion and the top of the building is still under construction, it already has permanent electric power. CNY took over the management of the Con Ed process and received early rulings permitting them to construct the vaults with the foundation

"This is a union project with a project-labor agreement developed in conjunction with the Greater New York Building & Construction Trades Council under the leadership of Gary LaBarbera, the president of the Council's executive

board," stated Mr. Colao while adding "And it reflects union efficiency. We're already at the roof of the 66th floor. By contrast, the non-union project next door, which started at the same time, was at the 20th floor. Despite the differences, labor harmony has been maintained."

Notable aspects of the project include;

- FAR of 30:1 was achieved utilizing Daylight Evaluation Method
- Tallest stand-alone Hotel in Western Hemisphere
- Tallest Marriott in the World
- Two separate and distinct service brand hotels are stacked atop each other; 261 room Residence Inn by Marriott atop 378 room Courtyard by Marriott.
- Upgraded select service brands receive high-end curtainwall façade and full height marble baths and finishes.
- Final anticipated construction costs of $418/GSF achieved through early constructability reviews, value engineering, design assist contracts, PLA , extensive sourcing, and tough negotiating, CNY yielded a 16% reduction from the original budget.
- Project Labor Agreement (PLA) netted approximately 4% savings.
- Globally sourced materials including façade, stone, tile, FF&E, and various pieces of equipment from Europe and Asia have led to a cost savings in certain cases equating to as much as 30% under market price. The façade glass comes from Shanghai, the stainless steel grilles from Tokyo, and the louvers from Mexico and aluminum members fabricated

and assembled into unitized glazed panels in Thailand, then shipped to New York via Port Elizabeth.

- A cocoon protection system at a cost of over $500,000 was in place from the eighth floor until the superstructure was topped out.
- Con Ed vaults were constructed with foundation permitting the building to receive permanent power before the top of the building was constructed.
- Embedded, coated cable reduced electrical costs by eliminating all conduits in the slabs.
- Mechanical and electrical trades were design assist contracts allowing CNY to redesign the job to more of a performance based model.
- Excess water in slosh tanks utilized as reserve for sprinkler system

Project partners include **Nobutaka Ashihara Associates, NAA** (architect), Cantor Seinuk (structural engineer) Edwards & Zuck (engineer) and Bill Rooney Studio Inc. (interior designer) IBA Israel Berger Associates (façade consultants).

"This hotel is the latest in a long line of successful hotels we have constructed for Granite, the owner," Mr. Colao noted. "We're delighted to add this very exciting project to that list."

CNY Builders an expert in Hotel and complex Construction is a Manhattan-based construction and development services organization dedicated to delivering client satisfaction. CNY provides its services to a core, select client base in hospitality, institutional and commercial markets having completed 43 Hotel projects to-date.