John McCoach
Construction Management
Dr. Edward Gannon
Hoffman One Building
2461 Eisenhower Ave Alexandria, VA
Friday, August 30, 13
Building Statistics

Part 1

General Building Data:

Building Name	*Hoffman One Building*
Location	*2461 Eisenhower Ave Alexandria, VA 22331*
Building Occupant	*Tenant is Unsecured*
Occupancy Type	*Office Building*
Size	*348,000 GSF*
Number of Stories Above Grade	*14 Stories Plus Penthouse*
Building Construction Duration	*November 5th, 2012-January 9th, 2014*
Overall Project Cost	*$20M*
Project Delivery Method	*GMP*

(Photo Courtesy of Noritake Associates)

Project Team:

Owner | *Hoffman Company* | www.hoffmantowncenter.com
Construction Manager | *Balfour Beatty Construction* | www.balfourbeattyus.com
Architect | *Noritake Associates* | www.noritakeassociates.com
Mechanical & Electrical Engineer | *Allen & Shariff* | www.allenshariff.com
Civil Engineer | *Christopher Consultants* | www.christopherconsultants.com
Landscape Architect | *Studio 39 Landscape Architecture, PC* | www.studio39.com
Structural Engineer | *Fernandez & Associates Structural Engineers, P.C.* | www.fernandez-assoc.com

Architecture:

The Hoffman One Building located at 2461 Eisenhower Ave Alexandria, VA
Photo Courtesy of Noritake Associates

The Hoffman One Building is a 4 Phased Renovation project based on a tenant fit out. Currently the project has only been awarded Phase 1. The existing scope of work for Phase 1 includes the construction of a new façade, roof, main lobby and the

renovation of elevators, core interior spaces and new penthouse equipment. Phase 2 will consist of completion of the 2nd floor restrooms. Phase 3 and 4 will be contingent on securing a tenant, and will be performed under a separate contract. The building is encased with precast architectural concrete panels, window glazing, and decorative CMU block walls at the buildings entrance and second floor.
The location of the Hoffman One Building is a unique area due to its close proximity to Old Town Alexandria in Virginia. Old Town Alexandria has a historical value and authenticity within its municipality, allowing the Architectural integrity to be mandated within this region. Having said that, due to the location of the building the renovation was not affected by the historical requirement. The Hoffman One Building was carefully designed in regards to the surrounding town and areas existing conditions. Moreover, although Old Town Alexandria contains historical value, the Hoffman One was not directly dependent on the same principles.

Code:

The proposed type of construction for this governmental office building is classified as Type 1B with Non-Separated Mixed Uses, Fully Sprinklered. Type 1 B refers to the fire resistive, non-combustible ratings for exterior walls, structural frame, ceiling/floor separation, and ceiling/roof assembly. This classification is based on mid-rise office and group R buildings similar to the Hoffman One Renovation Project. There is no change in occupancy due to the renovation of the Hoffman One Building being a tenant fit out renovation. Maximum number of occupants per floor from levels 3-14 is equivalent to 246 occupants or less per floor. Minimum requirement for stair towers is 2 with 123 occupants per stair. The building height is 14 stories at 149'-6", including roof level parapet. Main roof high point from average grade is set at 146'-0".

The following national code models were utilized to inform the Hoffman One Building design:

- 2009 Virginia Uniform Statewide Building Code

- 2009 Virginia Rehabilitation Code
- 2009 Virginia Statewide Fire Prevention Code
- 2009 International Building Code (with ANSI A117.1-2003 for accessibility)
- 2009 International Energy Conservation Code (with ASHRAE 90.1-2007)
- 2009 International Mechanical Code
- 2009 International Plumbing Code
- 2008 National Electric Code
- 2009 International Fire Code
- 2003 ICC/ ANSI A 117.1

Zoning:

The zoning code in affect for this project is in regards to the City of Alexandria zoning ordinance, which is CDD-2. Coordinated Development District designed a common vision for the future of the community based on planning process. The City Council policy initiatives and actions affecting land use, zoning, capital improvements and programs in the Potomac Yard / Potomac Greens area. The zoning ordinance contains the minimum lot size, frontage, setbacks, open space, and various other qualities. The CDD is a zone established for large areas that will have significant development related impacts on the city and to promote development consistent with the master plan. Properties that develop using the CDD zoning must apply for a Development Special Use Permit (DSUP) [alexandriava.gov].

Historical Requirements:

There are no historical requirements for this building.

Building Enclosure:

The project is located adjacent to a retail building, and shares a loading dock area with Hoffman 2 office building. The connection of these buildings is through an area, called the Annex, which is used for material storage during construction and renovation. Both of these existing buildings will be in operation during construction.

With the surrounding buildings, the Hoffman One Building has a variety of façade features and conditions that encompass the perimeter of the building.

North Elevation:

The North façade of the building includes precast architectural concrete panels in 25-foot lengths with exterior wall performances required for the building envelope. These were assembled by hoisting the panels into place using a crane, then anchored and set with the assistance of the connecting crew.

Southwest Elevation of the Hoffman One Building
Photo Courtesy of John McCoach

East Elevation:

On the East façade of the building, which differs from the remaining elevations, is captivated with metal spandrel panels. These panels are a unique feature and were designed because of the surrounding retail stores within the Hoffman Town center. The reason for this was because of crane coordination and construction sequencing. To perform any picks or lifts over an existing, occupied structure, the entire area must be cleared. This was not an ideal process for scheduling; therefore it was in the owner and the architect's best interest to design a light gauge metal spandrel system to be installed from inside the building structure.

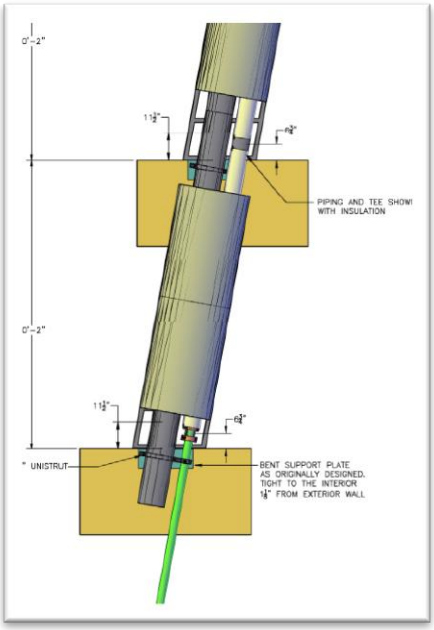
South Elevation:

As for the South elevation, which will serve as the main entrance to the building, displays a glass curtain wall system designed with extruded aluminum member frames. Additionally there is vestibule that is encased in glass, which rests on a slight 25-degree angle to the accompanying occupants and visitors as they approach the building from the south elevation. The reason for this design was to act as if the

building was drawing the visitors in, creating an inviting sensation from the main entrance of the building.

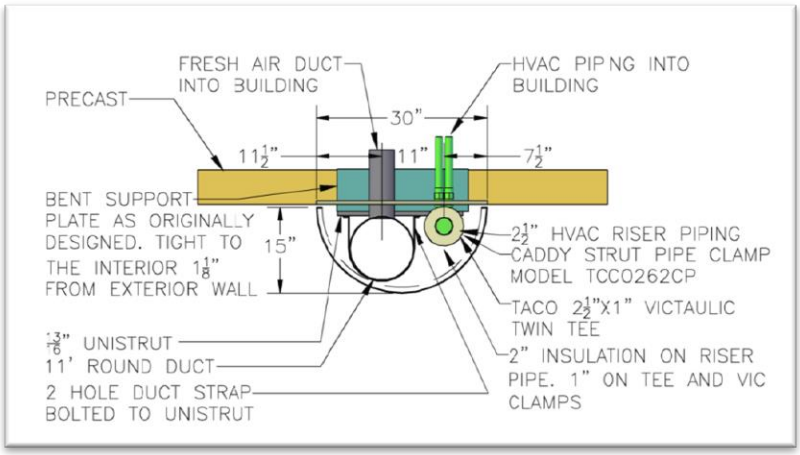
Roofing/Penthouse Level:

One of the most unique features when visually analyzing the facade of the building is the mechanical risers that scale the exterior of the structure. These are the "V" shaped objects, that appear to be structural bracing for wind loads, but in fact are not. Surprisingly, these are the mechanical risers that complement the building and are an architecturally pleasing ascetic. Each mechanical riser contains a chilled water supply and split tee system encased in the chases. Designing these mechanical risers was a crucial feature to the project, due to the request for 9-foot ceilings. When designing a system for an existing structure, the renovation process can be quite straining. However, the result to ensure the availability and space from within the core, a portion of the mechanical system was required to reside on the building envelope, thus resulting in the mechanical risers. There will be a new roofing system over the existing concrete deck, along with concrete surface leveling at the penthouse roof level.



Mechanical Riser Detail

Photos Courtesy of Submittal Details from Kirlin (Mechanical Contractor)



Mechanical Riser Detail

Sustainability Features:

The project will be constructed to achieve a US Green Building Council (USGBC) LEED SILVER rating in the CS (Core & Shell) category under the requirements of Version 2009; which is contingent upon the owner securing a tenant. With that said, there is still LEED tracking and documentation to ensure that all necessary details are recorded. This will warrant the Owner to receive high efficiency gains in return once a tenant is secured. Throughout the tracking and documentation process there are a variety of LEED categories. These classifications include public transportation, recycled materials, site location, and energy consumption. One of the most popular LEED categories utilized on this project is the transportation of construction materials. Based on the location of the product and the construction site, LEED points can be attained by ensuring that distance is less than 500 miles. Another example is the location in respect to the metro station. When projects seeking LEED accreditation utilize and record the public transportation aspect additional points can be earned. Categories are based on the building's performance in regards to the sustainable system upgrades and construction process within the renovation sequence.