

WestEnd25

WestEnd25

1229-1231 25St. NW

Charles Miller – Construction Management

Consultant – Dr. Riley

Draft Presentation Outline



WestEnd25

Charles Miller ■ Architectural Engineering ■ Construction Management

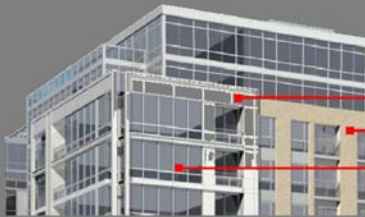


■ Project Overview

Owner: Vornado-Charles E. Smith
Location: 1229-31 25th St. NW
Washington D.C. 20037
Total Square Feet: 323,380 sq. ft.

General Contractor :
James G. Davis Construction Corp.
Project Delivery: Negotiated GMP
Project Cost : \$76 million

■ Architecture



Exterior Façade:

- Metal Panels
- Brick Facade
- Curtain Wall

Architects: Shalom Baranes Associates Architects

The architectural design of WestEnd25 developed from the two existing office buildings. The footprint of WestEnd25 resembles a U shape facing the adjacent NW 25th Street. West End 25 stands ten stories tall and contains 283 luxury apartments. The two prime landscaping features of WestEnd25 are the entrance courtyard and the roof top. The courtyard features an entrance colonnade and a water fountain. The roof features a pool, terraces and vegetation.

■ Structural



Structural Concrete Slabs:

- Added Levels: 6" Post-Tensioned
- Connection: 7.5" Post-Tensioned
- Existing: 7.5" Conventionally Reinforced

Structural Engineer: Tadjer Cohen Edelson Assoc.

WestEnd25 is supported by spread footings. The existing superstructure of WestEnd25 consists of conventionally reinforced concrete with a 20' by 20' column grid. The 1229 and 1231 buildings are connected by a 7" post-tensioned concrete slab. The additional floors maintain the 20' by 20' column grid and primarily have a post-tensioned concrete slab thickness of 6".

■ Mechanical, Electrical and Lighting

MEP Engineers : GHT Limited



The apartments of WestEnd25 are conditioned by water cooled heat pump unit. To increase efficiency for the public conditioning system, two enthalpy wheels transfer heat between exhaust air and outdoor air. Power will enter WestEnd25 from two locations. The high power, 3 phase 460 Volt, will enter the 1231 building and the low power, 3 phase 240 volt, will enter 1229 building. Apartment lighting utilizes track lighting for kitchens and living areas and recessed fluorescent lighting for bedrooms, bathrooms and walk-in closets.



Note: Pictures and rendering were created by Shalom Baranes Associates and have been provided for the use on Senior Thesis



■ www.engr.psu.edu/ae/thesis/portfolios/2009/cmm5035 ■



Draft Presentation Outline – AE Senior Thesis

Three slide presentation. Introductions include criteria for evaluation.

1. Introduction (2 slides)
 - a. Self
 - b. Project
 - c. Presentation Outline
2. Project Background (1 slide)
 - a. Location
 - b. Cost
 - c. Building Stats
3. Concrete Placement (4 slides)
 - a. Introduction
 - b. Original Method
 - c. Suggested Method
 - d. Analysis
 - i. Schedule
 - ii. Cost
 - e. Recommendation & Conclusion
4. Precast Façade (9 slides)
 - a. Original Façade
 - b. Suggested Façade
 - c. Analysis
 - i. Introduction
 - ii. Schedule
 - iii. Cost
 - iv. Thermal Resistance (Breadth 1 = 3 slides)
 1. Introduction
 2. Hand Calculations
 3. Computer Calculations
 4. Recommendation & Conclusion
 - v. Structural Analysis (Breadth 2 = 3 slides)
 1. Introduction
 2. Analysis Method
 3. Analysis Results
 4. Recommendation & Conclusion
 - d. Recommendation & Conclusion
5. Spatial Planning (3 slides)
 - a. Introduction
 - b. Concept

- c. Workflow
- d. Results
- e. Recommendation & Conclusion
- 6. LEED (Critical Industry Issue = 4 slides)
 - a. Introduction
 - b. Survey
 - c. Pamphlet
 - d. Conclusion
- 7. Acknowledgements (1 slide)
- 8. Questions (1 slide)

Estimated Total = 25 slides

Estimated Duration = 12.5 minutes

