

Reston Station Phase 1 Garage

Jon Fisher – Construction Management

Advisor: Dr. Leicht



AT A GLANCE

Building Name	Reston Station Phase 1 Garage
Location	Reston, Virginia
Building Owner	Comstock Partners & Fairfax County
Occupancy Type	Below Grade Parking Structure
Approximate Size	1.3 Million Square Feet
Building Height	2 Stories Above Ground & 7 Levels of Below Grade Parking
Dates of Construction	April 2011 - July 2013
Approximate Cost	\$95 Million
Delivery Method	Negotiated Construction Manager At-Risk

Project Team

Co-Owner	Fairfax County Virginia
Co-Owner	Comstock Partners, Ltd.
Owner Representative	KCM
Architect	DCS Design
MEP Engineers	Jordan & Skala Engineers
Structural Engineer	Luis Fernandez & Associates
Construction Manager	James G. DAVIS Construction



Architecture

The Reston Station project is being built to serve as a civic centerpiece and transit hub on the new Silver Line Metro expansion of the Washington DC Transit System. Reston Station complex will consist of a luxury apartment building housing 900 residences, a hotel with over 200 guest rooms, two commercial office buildings housing over 500,000 square feet of office space, and an amenities building consisting of 100,000 square feet of restaurants, shops, and retail space.

Directly beneath the plaza that connects these 5 state of the art facilities lies an underground 7 level parking structure that consists of 2300 public spaces and 750 private spaces. In addition to the parking spaces there is a two story bus vault that can hold 10 buses simultaneously and a bicycle storage room.

The plaza space includes a large public area decorated with large planters, public art, and beautiful architecture. There are centrally located, glass enclosed escalators and elevators to allow access to the parking structure below.



National Model Codes Used
2006 International Building Code
2006 International Plumbing Code
2006 International Mechanical Code
2006 International Energy Conservation Code
2006 Fuel Gas Code
2005 National Electrical Code
2006 NFPA Life Safety Code (NFPA 101)

Mixed Use Occupancies	
Area	Occupancy Type
Parking Areas	S2 (Low Hazard Storage)
Bus Terminal	A3 (Unclassified Assembly)
Retail	M (Merchandise Sale)
Restaurant	A2 (Food & Drink Consumption)

Building Enclosure

Façade

A large portion of the above ground façade is comprised of exposed concrete and masonry block. Several areas on the north and south elevations are decorated with ornate granite stone veneer and metal paneling. The enclosures on the plaza level for both the escalators and elevators are made of store front curtain wall systems.

Roofing

Due to the below grade nature of the project the roof of the garage also acts as the plaza level which carries with it several unique situations. The finish material on almost all of the plaza level consists of stone pavers including vehicular unit pavers for the areas where car traffic is anticipated. Beneath the 3” nominal pavers lies 1” of bituminous setting bed, protective board, and a waterproofing membrane to keep the concrete safe from water and traffic damage. There are also over 30 planters on the plaza level that will fill the public space with living plants ranging from small shrubs and flowers to large trees growing in up to 4 feet of growing intensive soil. Both geotextile fabric and drain board are used to line the inside of the planters.



Sustainability Features

The owner of the property is not seeking a formal LEED Certification for the Phase 1 Garage portion of this project. Instead, the various LEED point opportunities sought during this initial phase are being recorded for future certification of the entire complex. One of the design features that aide this sustainable motive is the inclusion of a bike room where cyclists can leave their bikes for the day in a secure location. Also, a “Kiss & Ride” area allows for members of the same household to car pull and drop off at the metro station helping to lessen commuter traffic pollution. In addition, the construction of the Phase 1 Garage has a waste diversion program in place as well as recycled material usage in concrete production.