

1333 M Street
Sustainable Landscape Narrative
December 17, 2013

The landscape at 1333 M Street will extensively incorporate features to capture, convey and filter storm water within the site. These features will be implemented in the streetscape, urban plazas, roof terraces and open spaces throughout the development.

Components of the streetscapes on M Street, SE, Virginia Avenue, SE and the private interior street connecting M Street and Virginia Avenue will include a permeable paving system within the parallel parking spaces and the tree amenity zones between street trees to aid in reducing storm water runoff. Curb extensions with bio-retention cells will be located at regular intervals along the streets to capture and filter water from adjacent streets and sidewalks.

Urban plazas located in front of the buildings on Virginia Avenue and especially the one in front of Building One – Tower B also offer opportunities for the integration of low impact development features. Planting areas within the plazas and the monumental staircase on the south eastern edge of the site will serve multiple functions. Not only will they provide visual interest throughout all seasons of the year, they will help to reduce heat gain and will be actively used in storm water filtration for the site. Storm water from the south eastern plaza will be directed toward the terraced bio-retention planters flanking the northern edge of the staircase. This series of planters will serve as a sensitive way to accommodate storm water within the project site by reducing water velocity during storm events through the implementation of a series of weir walls. Water will pond behind the weirs and will slowly infiltrate through amended soils. Water that does not immediately percolate will cascade from one planter to another cleansing and filtering the water through a series of staggered weir openings that will continuously redirect flow and slow the speed of the water. The bio-retention planters will be planted with wetland vegetation that will further filter the water running through the system.

A composite of extensive and intensive green roof systems will be created for the roof and penthouse levels of all proposed buildings as well as the interior courtyard between Towers A and B. These green roof systems will reduce storm water runoff, conserve water, mitigate the urban heat island effect, reduce noise, create habitat for birds, insects and butterflies, provide great aesthetic value and even aide in fire protection.

Excess storm water from the roof, penthouse and courtyard that are not intercepted by green roof will be redirected to the plaza and day-lighted into small basins connected to a channel system that will convey water in a visible water trail illustrating the journey of rainwater during storm events. The channel system will lead to a curvilinear wall located on the southeastern edge of the courtyard terrace. During rain events, the storm water will fall over the edge of the curvilinear wall and trickle down etched grooves in the façade eventually terminating at a vegetated storm water filtration planter. The water planter will be sectioned into cells and function in a similar fashion as the monumental stair planters.

The planting design will utilize native and adaptive plants throughout the project. In storm water filtration and bio-retention planters, plants will be specifically selected to thrive in those locations and to perform the filtration function.