WHEATON GATEWAY

Engineering Narratives

2/24/20

ENVIRONMENTAL NARRATIVE:

The project site is located at the northwest corner of Veirs Mill and University Boulevard in the town of Wheaton in Montgomery County. Currently, the site is almost entirely covered by parking, drive isles, and buildings (including an automobile showroom, several automobile service buildings, a small retail building, and a former apartment building). The apartment building is actively being demolished and former single story retail building at the intersection of Veirs Mill Road and University Boulevard is vacant at the time of this submission.

The existing property slopes toward the northwest and drops about 40 feet in grade from the SE corner to the NW corner. Steep slopes exist on the northern side of the site along Kensington Boulevard. The site is located within the lower Rock Creek watershed and has no existing woodland. There are a few existing trees (no specimen/champions) and no critical habitat. No rare or threatened species were observed on the site. Additionally, there are no historic sites located within or adjacent to the subject property.

Numerous easements and utilities are located along the northern edge of the property along Kensington Boulevard.

FOREST CONSERVATION NARRATIVE:

There is no existing forest canopy on the subject property and all (8) existing trees located on site will be removed for construction. The required forest conservation threshold for mixed-use development is 15-20% net tract area and the required afforestation is 15% net tract area. The afforestation of 15% will be provided by acquisition of off-site forest mitigation banks or a fee-in-lieu per section 22A-12e (below).

Section 22A-12.(e) Standards for reforestation and Afforestation.

(2) Off-site afforestation and reforestation. In addition to the use of other sites proposed by an applicant and approved by the County, off-site afforestation or reforestation may also include:

(A) Forest mitigation banks designated in advance by the County.

(B) Protection of existing off-site forest. Acquisition of an off-site protective easement for existing forested areas not currently protected in perpetuity is an acceptable mitigation technique instead of off-site afforestation or reforestation planting, but the forest cover protected must be 2 times the afforestation and reforestation requirements.

(C) For sites located in existing population centers, use of street trees which meet landscape or streetscape goals identified in an applicable master plan.

STORM WATER MANAGEMENT NARRATIVE:

The Wheaton Gateway project will use stormwater management techniques to address the treatment of the site stormwater runoff. Some of the systems that will be used include:

- Porous (Permeable) Pavement
- Rain Gardens, Bioswales and Bioretention planters
- Green Roofs as can be accommodated in conjunction with roof mounted photovoltaics

Due to the limited space available for storm water management (SWM) areas, the proposed development will maximize all open areas for SWM and water treatment. The ability to incorporate stormwater management in open spaces will need to be balanced with the desire to provide functional public use space in accordance with the Master Plan. The access drive that connects the development to East Avenue is currently designed to feature a pair of stair-stepping bioretention areas, one along each side of the access drive. Additionally, storm water planters will be placed where space allows along Veirs Mill road and within our internal public use space to help retain and treat storm water runoff while providing a buffer and green space from Veirs Mill Road and the internal connecting street.

Permeable pavers will be used where feasible, but due to the underground parking facility, the areas to include porous or permeable pavers are limited.

While the team intends to investigate the use of green roofs including both intensive and extensive systems, it is also likely that the project will include roof mounted photovoltaic systems. The use of roof-mounted photovoltaics could be impactful to the team's ability to incorporate green roofs.