



To: Montgomery County Planning Board

From: Sarah Morse, Executive Director, Little Falls Watershed Alliance

Date: March 8, 2019

Re: Regency Centers/Equity One Development, Preliminary Plan 120170170; Site Plan 820180190

Dear Planning Board,

Little Falls Watershed Alliance (LFWA) is an environmental stewardship group for the Little Falls Watershed, where the Regency Centers' projects are located. We were founded in 2008 in response to the need for a neighborhood group to advocate for our local parks and streams. We have over 2,200 members and have engaged some 4,700 volunteers in trash pick-ups and habitat restoration events. In 2010, we were named one of seven Montgomery County Green Giants by *Bethesda Magazine*. We have been working on the redevelopment of Westbard since 2015, when the process to redo the Westbard Sector Plan began. We would like to thank the Planning Staff and County agencies for their hard work on the project and their dedication to the environmental health of the Little Falls Watershed.

Our comments focus on two areas – 1) the need for a more robust stormwater management plan – we believe that a full redo of the plan should be a condition of approval and 2) contributions to the Willett Branch Stream Valley Park.

1) STORMWATER MANAGEMENT PLAN

The Stormwater Management Plan does not Support a Vital and Healthy Willett Branch

Central to the entire Westbard Sector Plan is the naturalization of the Willett Branch stream and the formation of a new Willett Branch Stream Valley Park. It is the unifying element of the Plan, and when it is done, will be jewel for Montgomery County and a model for the nation on urban stream restoration. However, a vital Willett Branch depends on a robust stormwater management (SWM) plan and the strictest application of the Sector Plan and County regulations.

Streams get their water from the ground. It comes up through the bed rock to feed the creek flow. The SWM plan must truly allow the stormwater to soak into the ground (or infiltrate) to the maximum extent practicable or the stream will not have sufficient groundwater to allow it to flow during dry periods. The SWM plan must also allow the water soak into the ground so that during storms, the stream will not be flooded by the volume and velocity of rain water running down the streets and other impervious surfaces. You have only to look at the recent flooding at Ellicott City to understand the need for stormwater management that infiltrates the run-off.

There are two main problems with Regency's SWM plan:

1. The plan depends largely on structural stormwater methods (vaults) that do not allow the water to go back into the ground to recharge the ground water which feeds the stream steadily from below. Instead, the water is held in vaults and released into the storm drain system which goes directly to the stream causing stream bank erosion and degradation of the stream bed.
2. Regency Centers' plan includes a 82% waiver to leave the road run-off untreated. This is the worst case scenario for the stream as the toxic mix of chemicals from the road will flow directly to the stream.

The Maryland Stormwater Management Act of 2007 states that stormwater standards must be applied to best mimic pre-development conditions. Infiltration is critical to achieving this goal. Montgomery County requires that the applicant do as much as possible to use green techniques, also known as Environmental Site Design (ESD), like green roofs, micro-bioretenctions, infiltration swales, and dry wells to treat the stormwater before turning to structural stormwater management and waivers. The County's own benchmark is to use at least 60% green techniques when retro-fitting a site for stormwater management. The applicant's preliminary plan falls short of that benchmark, with only 46% green techniques – the rest of the SWM plan depends on structural treatment including vaults (43%), and an 11% waiver. The site plan is only a little better, with 50% ESD and 50% structural treatment.

According to our research and a study done for us by Designgreen, an engineering firm that focuses on stormwater management, the applicant's Stormwater Management Plan does not do enough to maximize the vitality of the Willett Branch. The study shows that 100% of the water can be treated on-site with ESD to realize a 245% increase in infiltration and a 75% decrease in run-off.

Approved Stormwater Management Concept Plan is not in the Best Interest of the County

In light of the Designgreen study and given the County's commitment to managing stormwater on-site (as evidenced by the RainScape program), the millions of dollars that the County has spent on restoring streams degraded by the volume and velocity of unchecked rain water run-off, and the eminent naturalization of the Willett Branch, it is not in the best interest of the County to approve this application with the current stormwater management plan, especially the waiver for the road. **We recommend that the Planning Board set redoing the Stormwater Management Plan with the goal of 100% ESD, and NO waiver for the road as a condition for approval.**

Recommendations to Increase Infiltration with Environmental Site Design

In December, 2018, LFWA hired Designgreen to review Regency Centers' plan from the stream's point of view. Designgreen Principal Rebecca Stack is a former DC DOEE Environmental Engineer who led the effort to update the District's Stormwater Management Guidebook. Using the Regency Centers' January 2019 Stormwater Management plan, Designgreen ran the EPA SWMM model to explore:

- Would Regency Centers' plan allow enough re-charging the groundwater to ensure a good baseflow?
- Would more infiltration ESD give the Willett Branch a better baseflow?
- Were there other opportunities to do more infiltration ESD on the site?

What they found was:

- More infiltration ESD would considerably improve the baseflow of the stream.
- More infiltration ESD would also reduce run-off, which is one of the leading causes of flooding in major storms.
- There was room in the development, without reducing the footprint of the buildings, to increase infiltration.

Following the study, we did a thorough review of the proposal, and accompanied by Rebecca Stack and Diane Cameron, of Green Growth, met with Regency Centers and their engineers from JBA to explore how to increase the infiltration. Our recommendations follow.

Again, the focus of our comments is not to change the footprint of the development, but rather to tweak the SWM plan to allow more infiltration for a healthy Willett Branch.

A. Use Silva Cells instead of Tree Boxes throughout the Development

We support the staff recommendation that Silva Cells or continuous pavement be used along the Westbard streetscape, which we understand to mean both on Westbard Avenue and throughout the shopping center site (pg. 13 Staff Report). However, we would prefer to see Silva Cells rather than continuous pavement, as we believe they are the best technology for growing large trees AND providing stormwater infiltration benefits. We therefore urge the Board to require that the applicant replace all tree boxes throughout the development with Silva Cells, and to make this a condition for approval of the certified site plan. (pg. 17 Staff Report)

To explain, with Silva Cells, the sidewalk around trees is held up by pillars which create additional space for the water to soak in and tree roots to spread. (See Figure 1.) They are designed to provide stormwater management in urban areas where the soil is seriously compacted and trees roots and utilities compete for space. Existing and new utilities can run through the Silva Cells, which are filled with loamy soil to allow for maximum tree root spread. Soil volume should not be less than 1,500 CF for a large tree.

Large healthy trees provide additional stormwater management and benefits in other ways. They soak up rainwater as well as provide shade, and reduce the heat index. Wouldn't it be nice if in 15 years, we were proud to see a well-established tree canopy in the development, rather than the pathetic stunted trees you so often see at shopping centers, where the trees are planted without the soil, nutrients, and space they need to grow properly? If you have ever wondered how the trees can grow in the boxes? The answer is - they can't. Using Silva cells for tree planting is a small request, but one with a huge impact. We do not believe that the incremental costs to the developer are so great as to preclude this requirement.

Figure 1: Silva Cells with tree roots shown going under the pavement. The pavement is suspended by columns. Below is the Lincoln Center plaza in NYC. The trees were planted in 2009 in Silva Cells. Trees planted in Silva cells will grow to full height and live 50 or more years, while the average life of a tree planted in a tree box is 7 to 13 years. Silva Cells save money by not having to replace trees!



B. Install Permeable Pavement for the Loading Dock, Sidewalks, and Parking Areas

We support the DPS request that the applicant continue to look for ways to incorporate more permeable pavement. Permeable pavement is a type of pavement with a high porosity that allows rainwater to pass through it into the ground below. It can be used for sidewalks, driveways, parking lots, residential roads and more. (See Figure 2.) We recommend that the developer be directed to explore using it for sidewalks as well as in the loading dock and surface parking areas. Any time that run-off from a parking surface can be infiltrated, it is a win for the environment as pollution from cars is some of the worst. The applicant should have regular meetings with DPS so they can monitor how much progress is being made towards finding new places

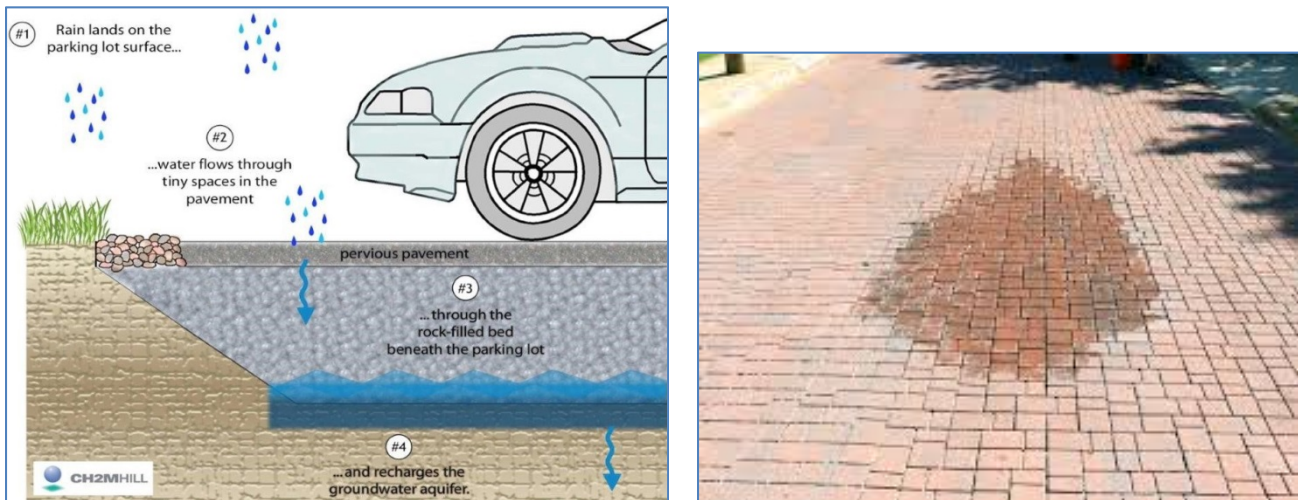


Figure 2. Above left : Pervious pavement used for parking spot. Above right: Water flows through the permeable pavement where it is infiltrated into the substrate.

C. The Stormwater Buffer Near Kenwood Place must Include Infiltration Techniques

A buffer strip between Kenwood Place Condos (KPC) and the new townhouses is mandated in the Sector Plan (pg. 76) to “address the unmitigated storm flows.” We support the staff’s recommended conditions for a swale in this location that would “enhance the landscaping along the site boundary to increase infiltration” (pg. 15 Staff Report) with the emphasis on *infiltration*. (See Figure 3.) This buffer strip should function as green infrastructure and should be designed to allow the stormwater to soak into the ground through infiltration or by directing 100% of the flow to the rain gardens. Check dams should slow the run-off and the swale should be planted with native plants which provide increased infiltration. Anything less would allow untreated water from the Kenwood parking lots and roads to flow to the new creek – bringing with it the mix of chemical and trash pollution that is urban stormwater run-off.

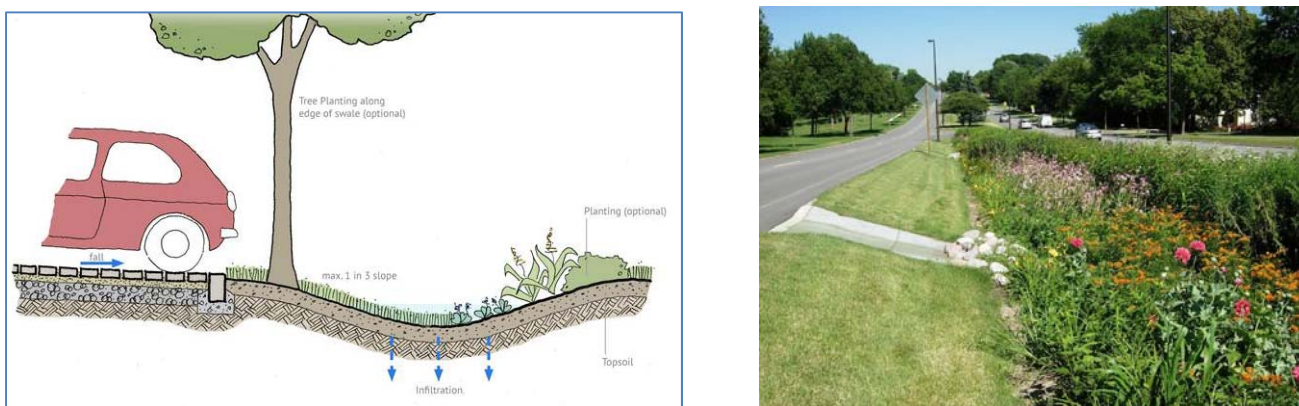


Figure 3. Above left: Swale on the edge of a parking lot. Right: Swale with native plants captures the stormwater run-off and infiltrates it.

D. Direct Green Roof Run-off to Bioretention Sumps, NOT to Stormwater Vaults

Although green roofs are an ESD technique, the water they treat does not go into the ground. Instead, it runs off the roof in a down spout system. In Regency Centers' plan, this run-off is then piped to stormwater vaults. The vaults release the water into the storm drain system, which flows directly to the Willett Branch. We would like Board to require that the run-off from the green roofs be infiltrated by piping it to the sumps, the rocky bottoms of the rain gardens (or micro-biorentions), instead of to the vaults. This is an easy way to add more infiltration to the site, as the water is already being piped – it just needs to be re-directed to the bottom of the micro-biorentention structures where it will soak into the ground.

We also understand that the green roof design as proposed uses modular units, for plantings. We recommend that the applicant use a built-in system, as the modular systems are generally hard to maintain, because they tend to dry out more quickly than green roofs with continuous planted areas. It would be beneficial to ensure the health of the green roofs by requiring an installed system, given the dry summers this area usually endures.

No Waiver for Treating Stormwater on Westbard Avenue MUST be a Condition for Plan Approval

We remain firm in our objection to a waiver, conditional or otherwise, allowing Regency not to treat run-off on Westbard Avenue. The waiver constitutes 11% of the stormwater management for the entire Regency site, and amounts to an 82% waiver for treating the road. In effect, Regency is dumping most of the polluted road run-off directly into the stream. Road water run-off with its poisonous mix of chemicals, dirt and trash, is the worst case scenario for the Willett Branch. The revitalization of the Willett Branch is a core goal of the Sector Plan. To compromise stream health with this type of pollution goes against the mandate of the Plan. An 82% waiver violates the Sector Plan's requirement that use waivers should be limited (pg. 58).

DPS has given a conditional waiver, with the request that the applicant try to find ways to capture and treat the stormwater. While we appreciate the concept, we fear that the result will be the same as giving the applicant a waiver. If DPS believes that there are opportunities to manage to stormwater, then NO waiver should be given. The Regency Centers should find ways to treat the water before their application is approved.

Designgreen studied the road issue and offered several ideas, including stormwater treatment in the right of way and in the median. In Montgomery County, Dennis Avenue Green Street (pictured below) is a good example of this type of SWM, and these techniques are used in DC as well. There is also a large vacant triangle of land that will be abandoned during the road realignment that could be used to manage some of the road's water. The variance trees proposed for that location could be placed elsewhere. In our meeting with the applicant, we presented these ideas, but as we understand it, they did not follow through to look into them.



Above left and right: Examples of median treatment for stormwater runoff. From the Dennis Avenue Montgomery County Green Streets project.

2) WILLETT BRANCH STREAM VALLEY PARK DEDICATIONS AND CONTRIBUTION

We would like to thank Regency Centers for their commitment to the Willett Branch Greenway Park. We are in support of their \$500,000 contribution to the Parks Department for developing the Park, and appreciate their willingness to dedicate land for the Park.

\$500,000 Contribution:

We understand that this contribution will be given in Phase I, but we urge the Board to ensure that the funds will be provided at some point, even if EYA does not construct the currently planned 55 townhouses on which the donation is conditioned. Further, the donation should not substitute for Regency's responsibility to naturalize the stream and build the retaining walls and park paths on the Westwood II site when that site is developed.

Access to the Park:

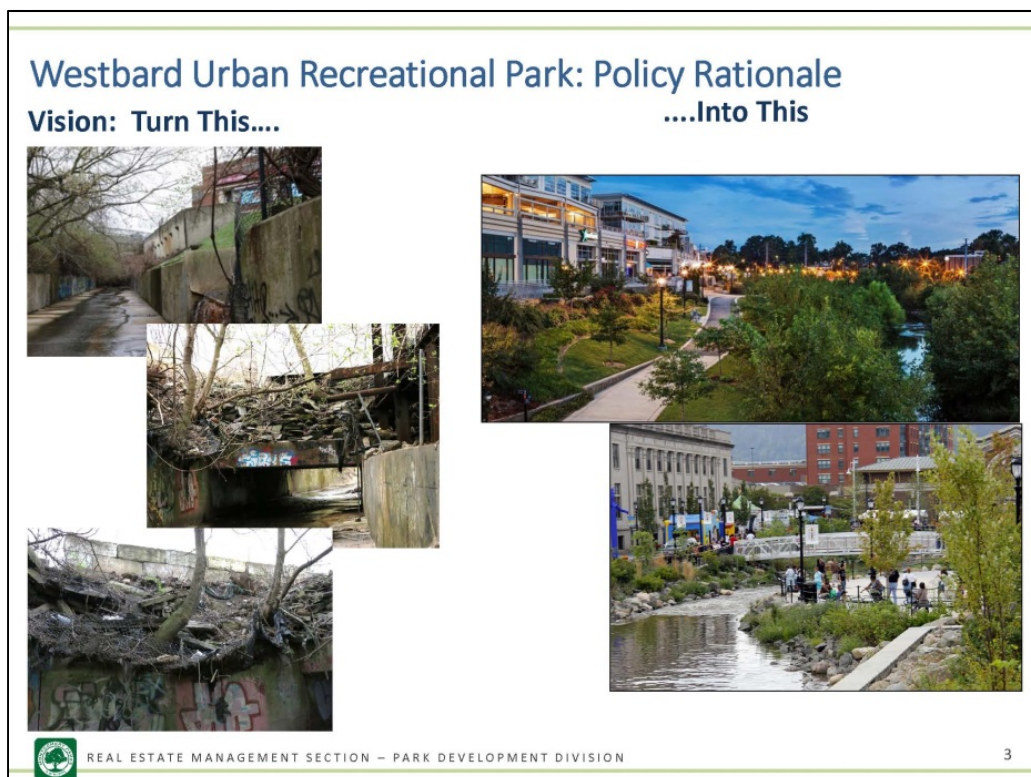
The Sector Plan calls for an access to the greenway park from Westbard Avenue across Parking Lot 1. This should be indicated on the certified preliminary plan.

Land Dedication:

It is our understanding and expectation that land dedications will be recorded by the time the first plat is filed for the shopping center (pg. 10 Staff Report) and will extend to the desired boundaries of the new Park, known informally as "the green line." We expect this line to correspond with or be beyond the 100-foot stream buffer in most cases.

We expect that the Bowlmor conveyance will include a 20-foot maintenance easement on the Bowlmor property extending east along the property line for Parks maintenance, which we would like to see extended along the west side of the dedicated land to allow for a trail on that side of the stream, given the steep slope below. (pg. 10 Staff Report)

Finally, we believe the conveyance of the improved portion of Westwood II should be finalized when the current building is torn down, and should not wait for a site plan for that property.



Healthy Willet Branch, Beautiful Development!

We like to think we have a common goal with the developer—a healthy and vibrant new Willett Branch, which enhance the most beautiful development in Montgomery County. The Willett Branch Stream Valley Park will be something our grandchildren will cherish, and will attract buyers and renters to the new Westbard homes and patrons for the new shops and restaurants. The additions we have proposed for stormwater management will beautify the development with bigger trees creating the type of urban oasis everyone would love to see, and the increased infiltration will ensure a healthy stream. We should note that the stormwater management system installed is likely to be there for a long, long time, making it even more important that we get it right. With so much at stake, no one wants to look back at missed opportunities. The Willett Branch Park is a vision that is starting to take form. It should be there for our children and their children. With a new stormwater management plan, we can make sure that happens.

Again, we ask that the Board condition approval of the application on a revision of the stormwater plan with NO waivers and a goal of 100% Environmental Site Design.

Thank you for your attention.

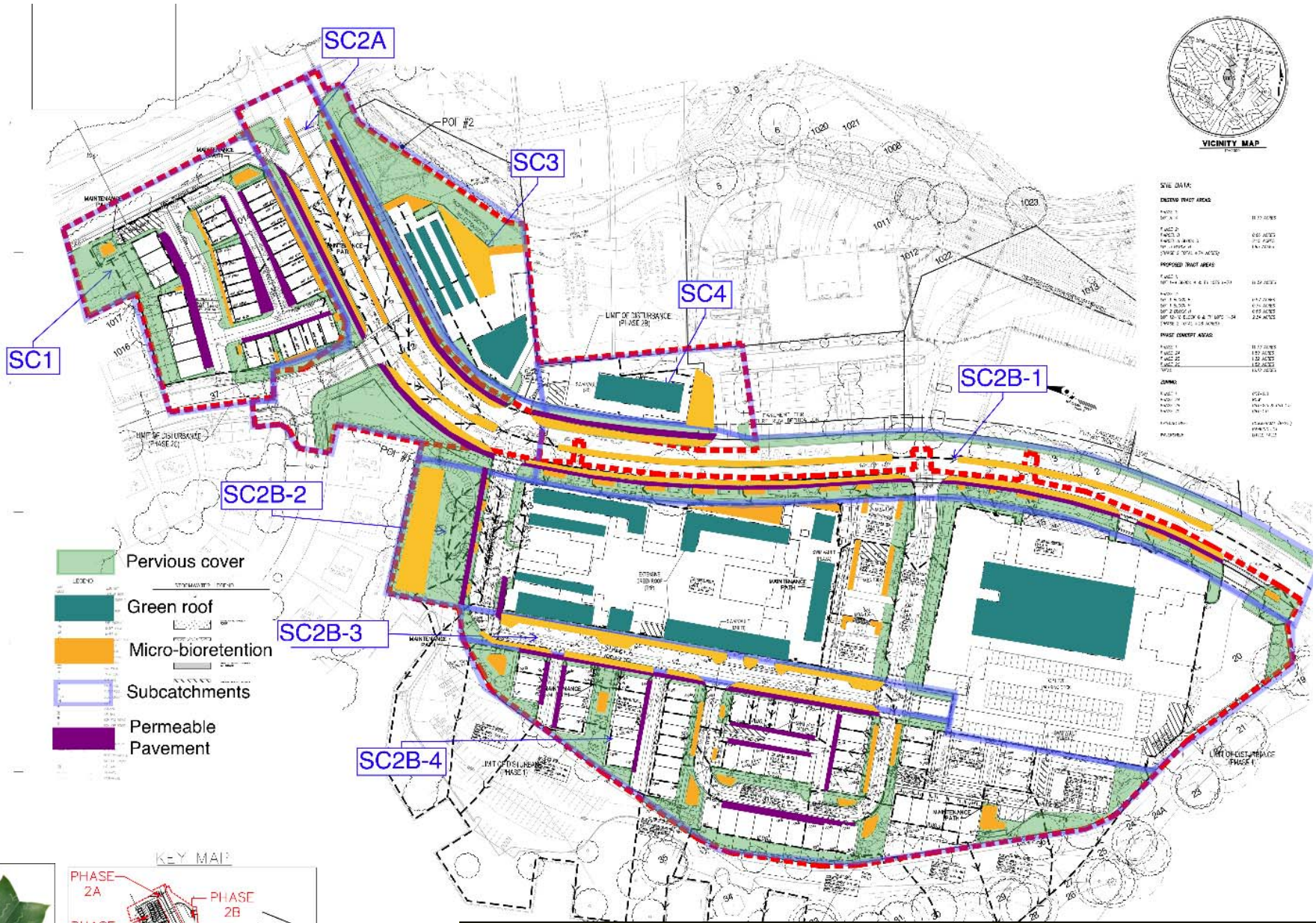
Sincerely,








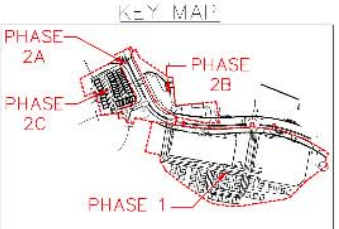
Sarah Morse
Executive Director

Attachments:
Increased ESD Vision for Westbard Development (two pages)
Designgreen Stormwater Management Study of Westbard

AFTER: Regency Centers Development with Enhanced ESD Proposed by Little Falls Watershed Alliance

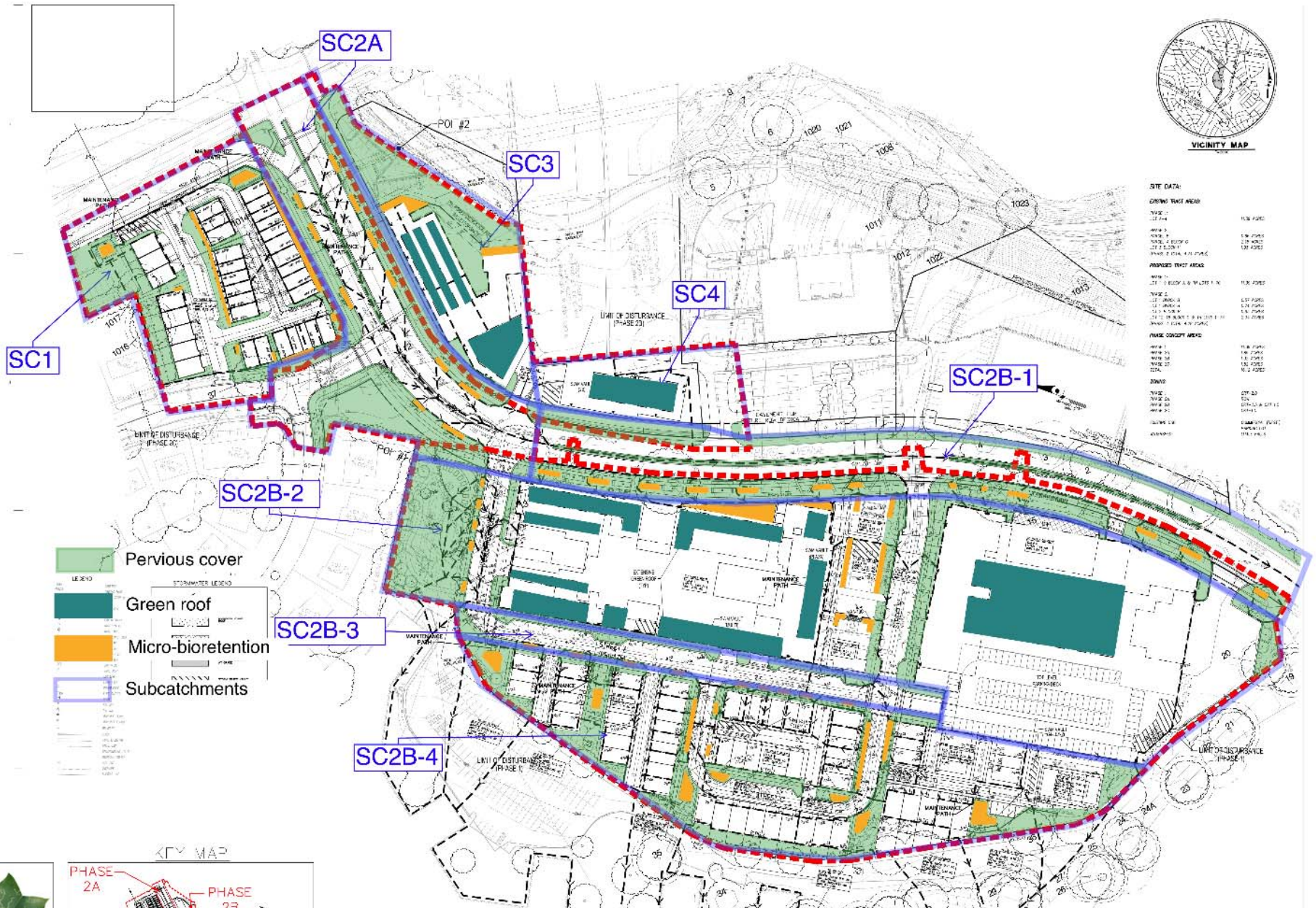


-  Pervious cover
-  Green roof
-  Micro-bioretentation
-  Subcatchments
-  Permeable Pavement



100% Environmental Site Design and NO fee-in-lieu waiver means that most of the stormwater soaks into the ground where it is cleaned by the bacteria living in the soil, recharges the groundwater, and improves the baseflow of the Willett Branch.

BEFORE: Regency Centers Development Stormwater Management Concept



Less than 50% Environmental Site Design and a 11% fee-in-lieu waiver means that most of the stormwater does not soak into the ground. Instead, it flows directly to the Willett Branch where it causes flooding, erosion, and polluted waters.

