Ms. Cheryl L. Smith
Department of Public Utilities
111 N Front St
Columbus, OH, 43215

Re: Comments on Stormwater Type III Variance Request - Greensward Rd

Dear Ms Smith:

Thank you for the opportunity to comment on the variance request for a proposed development on Greensward Rd. The protection of central Ohio water resources is of the utmost importance as our City continues to grow. In addition to my comments on the proposal, I have included a comment that was posted on the Ohio Game Fishing Board public forum.

Statement of Hardship for a Stream

The importance of protected riparian zones cannot be overstated. Natural stream habitat provides so many benefits to human society, but encroaching development isn't providing enough room for streams to meander and change course over time, but streams do remain steadfast in the water- and air-quality benefits they provide. Many people do not realize that the riparian zone is part of the stream, and necessary for the proper function of the waterway.

Construction can be a messy affair, with smothering silt depositing in streambeds during a downpour despite best efforts at managing construction spoils during earthwork. These deposits endanger creatures at the foundation of the food web, with effects cascading throughout the ecosystem. This seems to be the case at Sugar Run, which has seen a significant negative impact to QHEI scores during a boom in construction.

Development sites used to be so easy to identify, and streams were easier to avoid. Now, square parcels of flat land are harder to find. Remaining sites contain streams crossing the land at angles not oriented to the cardinal points, and developers seek to build on sites that were previously considered unsuitable for development, requiring encroachment on Stream Corridor Protection Zones to preserve profit margins.

Scientific data show that an increase in the percentage of impermeable surfaces in a watershed increases environmental damage to waterways. The preferred plan for this development has

the highest amount of impermeable surface and it proposes construction of buildings and roadways on ephemeral streams and SCPZs.

Specific Comments

Why is the SCPZ so narrow on the east side of Sugar Run. Maps depicting the various options show the SCPZ as less than 125 feet from the center of the stream in several locations, and much wider on the west side of the stream. For example, between the two ephemeral streams, the Sugar Run SCPZ appears to be about 60 feet wide. Should the established SCPZ be measured from the center of the stream extending out by 125' from each bank?

How open is the "Open Space" identified on plans in the variance request? Will this SCPZ land be available to the general public to explore? Who will care for these open spaces to ensure they are not overrun by invasive plants and litter? The site photographs show the presence of honeysuckle and the QHEI data forms indicate the presence of litter. Will these problems be addressed during the project?

Logjams can be a natural occurrence in the progression of a stream-side forest. They can help change the course of a stream leading to sinuosity that helps the health of the stream and riparian corridor. Large woody debris is helpful in maintaining healthy balance of organic material in soil and habitat for aquatic and riparian species. Removal of logjams and streamside snags would likely not help to maintain the health of the stream and its riparian zone, and certainly should not be recommended as a mitigation for encroaching on the stream. The variance request indicates that the logjams are a barrier to fish migration. What species of fish are currently using the stream, and what benefits to which aquatic species will come from this proposed mitigation?

For the tree planting at the northwest portion of the project, if this is allowed as mitigation, will trees removed (snags and logjams) equal the number of trees planted? Will invasive plants be removed from the SCPZ? Will trees planted be replaced if they are damaged by deer or die? Who will monitor the stream and SCPZ during and after construction?

How will the boundary of the SCPZ be delineated on the ground at the rear of the building lots? After construction, will there be any visual cues at the edge of the property so that new homeowners are discouraged from impacting the riparian zone with mowed turf grass, dumping at the top of the slope or inappropriate plantings?

The low score on the QHEI for this segment of Sugar Run may be indicative of upstream development, with low scores for substrate where silty fines have coated the streambed. An anticipated higher future score for QHEI could mean that stormwater flashiness will send this silt downstream toward Rocky Creek or Big Walnut Creek, where a freshwater mussel

population has been documented. The Big Walnut mussel population may be the best local resource for this group of sentinel species after the recent die off in the Darby Creek watershed. Half of the predicted increase in QHEI scores are attributed to improvements in stream substrate. Since QHEI scores have declined since Ohio EPA performed their sampling, meeting or exceeding the presented QHEI scores in post-restoration evaluation may be setting the bar very low. THE 2010 Watershed Action Plan for Rocky Creek identified Sugar Run as being in full attainment with a QHEI score of 66.5, although the report noted potential sources of impairment due to siltation from urban development.

Where is the proposed 9.54 acres conservation easement, and (other than being recorded on the deed) who will hold the easement in perpetuity? Who will monitor conditions at any conservation easement to ensure that it is properly managed?

The Statement of Hardship has a focus on financial losses associated with compliance with the Stormwater Drainage Manual, but does not paint a complete picture of the project finances. If fewer houses are built, it would result in lower construction costs and may make it easier to locate necessary stormwater control structures without impacting riparian zones. Is it possible that the No Impact alternative could be implemented while still delivering a reasonable return on investment? (Note: The No Impact Option appears to impact the SCPZ by filling in the corridor at houses 10 and 11.) Also, what was the date of purchase on this property? The statement of hardship also doesn't explain the technical challenges other than stating there was a need to maximize developable space. Could it be that there are just too many houses planned for the space when the needs of the stream are considered. What is the definition of hardship?

As a member of an environmental organization, we receive heartbreaking reports from homeowners that experience problems years after construction. We hear of homes built on the rim of a ravine where the deck is collapsing into the ravine and the building foundation is cracked; condos built on the bank of a stream, then the stream erodes the back yard away until there is a precipitous drop from the steps outside the kitchen door. All we can tell them is that they bought the wrong house, or that the placement of the home was unwise from the beginning. This makes me wonder about the long-term wisdom about building houses 2, 12, 21 and 22. Will any special consideration be paid to building houses in the course of an ephemeral stream or on fill material at the top of a slope?

The 2010 Watershed Action Plan for Rocky Fork Creek recommended, "Allow no retention/detention ponds to be constructed within the floodplain." This proposal intends to build stormwater detention basins that impact the SCPZ and this proposal is in conflict with that plan.

Comment posted on the Ohio Game Fishing Board Public Forum

WOW!!! This developer is being totally un-realistic with his riparian "improvement" proposal!!!

They are proposing to remove habitat in the logjams and snags and calling that mitigation!? Those are all habitat for fish and wildlife! Removing them could increase erosion of the banks! Removing a logjam only helps to increase flow downstream and reduce upstream flooding!

Planting pretty flowers on a street corner does nothing to improve the water quality! The grass does a better job of that to begin with.

They need to propose something like re-creating another stream or wetlands somewhere else on the property, or expanding the riparian corridor in a different location. They could also do some bank stabilization with natural channel design techniques in an area of the main stream that is eroding.

These riparian regulations are there for a reason! They protect the community from additional flooding and erosion, and protects the new new construction from being washed into the stream when the channel course changes!

Please, incorporate my comments in your response and tell that developer to find a better property for development next time!

Closing

Thanks again for the opportunity to comment on this project in our community. If a little more time than 14 days were available, I would have been able to make my comments a little more constructive. I hope that we can enjoy the benefits of development, while preserving the natural resources that help to make Columbus a great place to live.

Alice Waldhauer

Via email to CLSmith@columbus.gov

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