Mr. Greg Fedner gfedner@columbus.gov

Dear Mr. Fedner

Please accept the following comments and questions about **Type 2 Variance Request for the Ohio Exposition Center 2050 Phase 1 Plan**

1. .The State of Ohio Property is a large property in the Olentangy watershed and of high concern to the Friends of the Olentangy Watershed (FLOW). The parcels that they control contain more than 325.2 acres.



Of concern is the high amount of impervious surfaces and the low tree canopy (<8%). Even the grassed areas are likely to be highly compacted and impervious. Please note that tree canopy coverage issues, in general, are not within the purview of this variance application review/approval process. However, per the applicant, this project is providing several million dollars in additional storm water management features to provide significantly more storage volume within the property, which in turn reduces the overall peak runoff from the property that eventually drain to the Olentangy River. The finished site package should also include additional green spaces and trees within the property. Those features are not mentioned in this variance because the design work will not be complete for several months.

FLOW reached out to the Department of Public Utilities GIS mapping section to request records for this area to learn how this renovation project will impact the Olentangy River and we were surprised to get the response "Our records are incomplete in this area. Based on preliminary plans, it looks like the stormwater north of 17th Avenue is to be directed into a 100 year dry detention basin which would overflow into a 30" storm sewer that we do not have record of. This 30" e/w storm sewer would eventually flow into the Olentangy River immediately north of Woody Hayes Dr."

This is of concern to FLOW because of the potential impacts to the restored Olentangy River, post removal of the 5th Avenue Dam in 2012. The DPU can only provide the records in its custody, and we believe has provided all records we have pertinent to the request.

Our concern about the 4:1 side slopes of the proposed basin is related to the safety of visitors to the fair grounds. Has the applicant considered other stormwater best management practices like pervious pavers, Green Roofs, Blue Roofs, infiltration trenches, etc? Per the applicant, these slopes are existing in 2 of the 3 storm water basins, which were constructed in the late 1990's. The traditional paths of travel for pedestrians are along the adjacent roadways, which have a buffer of at least 10 feet of generally level grass. These buffers are also landscaped to provide a visual deterrent to pedestrians. In the case of Basin F, there is a guardrail to protect pedestrians and vehicular traffic from the slopes in the basin. Basin H which is where the slopes will be steepened, pedestrians do not travel within this area as it's bordered by the Kasich Building to the north, roadways to the south and east and the Concrete Association's vendor tents to the west.

If the Fairgrounds has to remove buildings, is it possible to build multiple level buildings to reduce their footprint and runoff or potentially build more parking lot buildings? Please note that the issue is outside of this variance purview. However, per the applicant, the programming of these buildings requires expansive open space, which leads to large structural members which make multi-story structures cost prohibitive. As for parking garages, there are plans for garages in future phases of this master plan. In general, the new buildings are being constructed within existing pavement areas thus not creating additional storm water runoff.

The applicant has stated that complying with the manual is not financially responsible. How can the City require Mom and Pop operations to comply with the Manual if the State of Ohio is not held to the requirements?

No volume, engineering or fiscal information is provided to evaluate their request. Although this variance request applies to only 34.7 acres (basins C, H and F), FLOW requests more detail before any decision is made on this request. Please note that this project will comply with every other aspect of the SWDM including quality and quantity requirements. The variance is only requesting exceptions from the SWDM requirements with the side slopes of the basins and the trees located inside the existing basins. Per the applicant, the full compliance alternative would require removal of a number of large trees from the campus and constructing an additional \$5 to \$10 million in buried detention to the project. The footprint of this additional storage volume would not be feasible due to the existing buildings and utilities currently located on the property.

Please note that they state that there is no stormwater detention or water quality treatment for Area A. Area B does not contain adequate storage volume to detain the 100 year post development storm. Area E has no stormwater detention of water quality treatment. Per the applicant: The project will provide water quality and quantity treatment for area A, where none currently exists. You are correct that Area B does not provide the 100-year detention in its current condition. However, this is a portion of the site that is not being disturbed in any way. This system was designed before 2006, when the current detention requirements were put in place and functions as it has for ~25 years.

Area E (11 ac) will remain undetained, although some of the drainage will be redirected to Area C! This is both vague and uncompelling. Per the applicant: Area E will discharge undetained runoff, but as required in the manual, this is considered with our discharge rates (we over detain on-site to reach our allowable release rate) and the area is still accounted in the water quality volume calculation.

Area G (21 ac) drains to an existing combination sewer on the west side of the Gilligan Building and all storms greater than the 2 year storm exceed the capacity of the combination sewer! What is the potential impact to the Olentangy's Water quality? "New Storm Sewers to convey runoff from Area G to Basin F will not be constructed as a part of this phase, but MAY be constructed in future projects".

Vague and uncompelling. Also how will this affect Area F? Per the applicant: Area G is not disturbed as part of this project. However, Area G is designed to overland flow to Basin F, which is designed to provide quantity control for Area G. Basin C is sized to provide water quality volume for the entire property south of 17th, which includes Area G. Even though in its current condition Area G drains to a combined sewer, which would not require water quality treatment. We designed for the future condition when Area G drains to basin F via storm sewer.

Area I (6.4 ac) has no stormwater detention or water quality treatment. Area J (1.5ac) has no stormwater detention or water quality treatment! Per the applicant: Areas I and J are misinterpreted as not providing quality or quantity. This is the current condition. In the proposed condition, both of the areas are combined into Area H and are treated for quality and quantity control.

FLOW understands that the redevelopment will be offering "new onsite trunk and branch storm sewers to replace the existing" but requests information to evaluate what the impact to the Olentangy will be. The issue is outside of this variance application's review process. Suggest contacting the Applicant directly to discuss.

Post Developed Conditions Exhibit- What does the small red rectangle in the western area (Area H) that still goes to the combined sewers represent? According to the legend Red is for a 26.4 acre impervious area. Per the applicant: The pink area is impervious/disturbed area for phase one and stretches throughout the site. The small red rectangle show just above the Kasich building is simply duplicate hatching that should be represented by the red hatch for the 91.0 acres of impervious.

FLOW is confused by the Pre Developed Conditions exhibit (undeveloped) that show the whole site (148 acres) as impervious. For example the photo of the existing Stormwater feature Southeast of the Bricker Building is shown with the same configuration in both pre and post exhibits. One as impervious and one as pervious. Will this basin be changed from the current concrete gutter with grass slope configuration? Significantly that it changes from impervious to pervious? Per the applicant: FLOW was confused by the Pre-Developed Condition Exhibit as the entire site is shown as pervious (they state impervious, but I believe they mean pervious). For storm water management, detention volume, we utilized the existing condition back to all pervious area. We did not use the actual current mostly impervious area. This helped to clarify how the release rates and volumes would be determined. The previous storm water management system, designed in the 1990's, was prior to any storm water manual was produced and the existing runoff rates were based on antiquated data. This approach leads to more detention volume required, but helps the site comply with the current manual. FLOW asks about the detention basins around the Celeste Center (appears that this was the question, and not about the Bricker Building). These basins will stay and their concrete channels will stay. They provide limited supplemental quantity storage. They may be removed in future development but are currently master planned to remain.

Basin C appears to have a good tree canopy. How many trees will be removed? How many inches of caliper? FLOW's concern is about the low tree canopy at the Expo Center and any reductions that will increase the Urban Heat Island Impact to visitors, volunteers and workers. Per the applicant: We are requesting a variance from the SWDM to allow the existing trees to remain within this basin. There are a few trees that will be removed in order to construct the new storm sewer. However, the majority of the trees will remain.



Laura Fay Laura Fay FLOW Science Committee Chair