TYPE III STORM VARIANCE

OSU Multi-Species Animal Learning Center

24 June 2025

Facility
OSU Multi-Species Animal Learning Center
2548 Carmack Rd

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June 24, 2025

Greg Fedner, P.E.
City of Columbus, Division of Sewerage & Drainage
111 North Front Street
Columbus, Ohio43215

RE: The Ohio State University Multi-Species Animal Learning Center (OSU MALC)
2548 Carmack Road
CC-20226

Mr. Fedner:

Sands Decker would like to request a Type III Variance from the City of Columbus Stormwater and Drainage Manual (SWDM) Section 1.3.1 Stream Corridor Protection Zone Delineation, Section 1.3.2 Permanent Protection of the Stream Corridor and Section 1.3.3 Prohibited Uses in the Stream Corridor Protection Zone for The Ohio State University Multi-species Animal Learning Complex (MALC), CC-20226, on behalf of The Ohio State University. Specifically, we are seeking a variance for "where wetlands are located partially within the Stream Corridor Protection Zone, the Stream Corridor Protection Zone shall be extended to include the full extent of the wetland area including any required setback". Additionally, we are specifically seeking a variance for "land designated as a stream corridor protection zone shall be placed in a Conservation Easement with the City stated as the Grantee". Furthermore, we are specifically seeking a variance for the prohibited facilities and activities as described in Table 1-1 Facilities and Activities Prohibited in the Stream Corridor Protection Zone.

The College of Food, Agricultural, and Environmental Sciences (CFAES), regularly engages in strategic master planning for its facilities. CFAES most recently updated its master plan for the Waterman Agricultural and Natural Resources Laboratory (Waterman) in 2021. This land laboratory is CFAES' preeminent opportunity to showcase programs that are innovative, interdepartmental, and interdisciplinary, and that emphasize experiential learning. Waterman is home to countless ecosystems, facilities, and programs that are crucial for teaching, research and community engagement. Within the master plan, CFAES identified planned enhancements to the stream corridor including research and demonstration of best practices related to the adjacencies of natural resources and agricultural land uses, including stormwater management strategies incorporating wetlands.

Constructed Wetlands

Although there is no direct documentation that the wetlands were constructed, the mention of the design for the wetlands is accredited to former students in a

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research study performed at The Ohio State University. Additionally, when using the history function of Google Earth, it is evident from aerial imagery that the wetlands were not present in March of 1995, then constructed prior to March of 2002. In November of 2023, the aerial imagery shows the monitoring boards that have been placed throughout the wetlands to conduct research.

Stream Corridor Protection Zone

There is a stream, formerly referred to as Ackerman Run South, but recently renamed to Pleasant Run based on a recommendation of a volunteer with the Friends of the Lower Olentangy (FLOW), that runs east/west across the site with well-defined banks that is home to stabilized vegetation. Based on available information provided by EMH&T, it was determined that the drainage and sewer-shed area for the downstream end of our project development adjacent to Pleasant Run is 204 acres or 0.319 square miles. According to the stream corridor protection zone calculations provided in the City of Columbus SWDM, $147(DA)^{0.38}$, the stream corridor protection zone adjacent to the project site is calculated to be $147(0.319)^{0.38} = 95'$.

The area within the calculated stream corridor protection zone is vegetated. The vegetation consists of natural grasses, ryes, and ground cover along with Quenn Ann's Lace, Joe-pye weed, Cup plant, and various voluntary small diameter trees (1" – 6") that appear to be comprised of cotton wood, silver maple, and invasive honeysuckle. Refer to STONE Environmental stream/wetland delineation report in Appendix A for additional vegetation identification.
Located within the calculated stream corridor protection zone are multiple pedestrian crossings, vehicular crossings, and livestock crossings. Additionally, there are multiple existing utilities crossing the stream and running parallel to the stream within the proposed protection zone. These utilities include, but are not limited to, water, electricity, communication, gas, storm and sanitary. Furthermore, there is an existing asphalt parking lot and building located within the 95' wide calculated stream corridor protection zone.

Fully Compliant Alternative

The fully compliant alternative would provide the 95' wide stream corridor protection zone centered on the centerline of the stream. It would also include the three wetlands north of the stream that partially lie within the 95' wide stream corridor protection zone. The Ohio State University would provide a conservation easement that encompasses the 95' wide stream corridor protection zone and the three wetlands north of the stream zone with permitted exceptions for existing pedestrian, vehicular, and livestock crossings, and for the existing asphalt parking lot and building that lie within the 95' wide stream corridor protection zone.

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Minimal Impact Alternative

The minimal impact alternative would provide the 95' wide stream corridor protection zone centered on the centerline of the stream. It would not include the three wetlands that were constructed for research purposes north of the stream that partially lie within the 95' wide stream corridor protection zone or the pedestrian crossings, vehicular crossing, or asphalt and gravel parking lot and the building at Waterman Headquarters.

Hardship of Fully Compliant and Minimal Impact Alternatives

The university believes that provision of the easement under the fully compliant and minimally compliant alternatives would prove a hardship to execution of its mission and programming at Waterman. Unlike indoor laboratories with defined walls, Waterman is an outdoor laboratory facility where students of all ages and the general public come to learn about agriculture and how people can positively coexist with the natural environment, and it is a true lab, where university faculty and college students engage in research and exploration to generate new ideas, study best practices, and solve real problems. Executing the mission and programming within the confines of a restrictive easement will prove difficult for the university. It is not possible for the university to definitively outline exact programming, research, etc. for the term of the easement. Faculty and students change over time, research opportunities present and must be quickly responded to in order to secure them, ideas about best practices evolve. The collaborations that Waterman enjoys with other agencies, such as Friends of the Lower Olentangy (FLOW), The Natural Conservancy (TNC), Franklin Soil and Water, Ohio Environmental Protection Agency, etc. will also unfold and be reshaped over time.

These activities do not fall neatly within the confines of the stormwater drainage manual requirements, but they *do* align with the overall purpose of the storm requirements, which is to safeguard and improve water quality. The university is requesting the ability to continue to operate its laboratory facilities with sufficient flexibility to serve the public and our faculty and students and to engage in research that has far reaching impacts across not only Ohio, but beyond.

Preferred Alternative

The preferred alternative is to not provide the 95' wide stream corridor protection zone. Additionally, The Ohio State University would not abide by the prohibited facilities/activities as stipulated in the City of Columbus SWDM. As noted earlier in the introduction section of this request, the university has strong research, experiential education, and teaching functions currently in place as well as noted within future master planning efforts. The university believes that placement of a stream corridor easement would present a hardship to its ability to deliver these

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valuable public research and teaching objectives. Furthermore, CFAES' plans do not conflict with the intent of the City of Columbus SWDM but rather serve as a living example of how people can coexist with the natural environment. This alternative would eliminate hardship for The Ohio State University as CFAES implements its master plan, which will grow and evolve as faculty, staff and students identify research options, react to grant funding opportunities, explore current and possible future best practices, etc. It would provide the university the ability to grant future research opportunities to staff and students. This flexibility will allow CFAES to achieve its vision for the Waterman Agricultural and Natural Resources Laboratory as a teaching and outreach facility for students and visitors who will be able to explore the site to learn about the multiple agricultural, ecosystem, and stormwater control devices throughout the land laboratory.

The university is in support of this alternative applying for so long as the land remains in university ownership and being used for the stated research, teaching, and experiential purposes. If the university were to sell the land, the city could revoke the variance.

Conclusion

In conclusion, Sands Decker, on behalf of The Ohio State University, is seeking a Type III Variance from the City of Columbus Stormwater Drainage Manual (SWDM) Section 1.3.1 Stream Corridor Protection Zone Delineation, Section 1.3.2 Permanent Protection of the Stream Corridor and Section 1.3.3 Prohibited Uses in the Stream Corridor Protection Zone. The purpose of the variance request is for the continued use of Waterman Agricultural and Natural Resources Laboratory as a teaching and research institute. The Ohio State University finds great hardship in the requirements set forth by the aforementioned sections of the City of Columbus stormwater and drainage manual as it pertains to the stream corridor protection zone and wetlands. Approval of this variance would still fulfill the spirit and intent of the manual, where stormwater management, water quality, minimizing erosion and sedimentation and improved ecological services are all ingrained in the mission of the Waterman Agricultural and Natural Resources Laboratory. This variance would not detract in protecting natural stormwater resources.

Furthermore, The Ohio State University wishes to reserve their right to maintain the stream corridor and wetlands for the use of teaching, research, extension and outreach. In doing so, they will encompass agricultural best management practices, including, but not limited to, open channel two-stage ditches, stream bank stabilization, constructed wetlands, grass filter strips, controlled drainage structures, and wood chip bioreactors or other phosphorus filter. Additionally, The Ohio State University and its staff frequently partner with organizations that also have the stream, wetland and ecosystems best interest awareness. Between The Ohio State University and its partner organizations, the stream corridor and

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wetlands will be maintained in such a way as to preserve, enhance and foster the natural ecosystems while providing teaching, research and outreach opportunities.

Please contact us with any further questions or concerns. We appreciate your consideration of the variance request for the re-development project at Waterman Agricultural and Natural Resources Laboratory.

Sincerely,
Sands Decker

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