LCP Holdings, LLC. Stormwater Feasibility Study Lexington, KY

June 2023 - November 2023

EcoGro was contacted by Dr. Tuttle to assess a situation involving stormwater runoff from a historic property in the heart of downtown Lexington. The client's concern centered on stormwater from parking lots and buildings appeared to have been routed towards an old limestone retaining wall running along Vine Street. Following heavy rains, water had been observed flowing over the wall as well as seeping out of cracks and gaps. It was unclear as to where water was going, the existence and condition of stormwater infrastructure, as well as the boundaries of the work area. We recommended a stormwater feasibility study to answer these questions. In 2022, EcoGro partnered with Stantec Consulting Services to develop and submit a stormwater grant application.

In 2023, this project was awarded funding in part by the Lexington-Fayette Urban County Government's Water Quality Management Fee and the Stormwater Quality Projects Incentive Grant Program. In conjunction with a property and utility team found no survey. our stormwater infrastructure exists at this rock wall. Stormwater runoff either flows over the face of the wall or infiltrates behind it. The result was significant erosion and even loss of wall material.

We evaluated various BMP options to both protect the stone wall from further damage and to improve stormwater management at the site. Pros and cons of different solutions were weighed to form a sound plan to meet these goals in a way that is both effective and cost-efficient. The team identified specific objectives that would need to be repair damage to the wall, create a met: stormwater conveyance structure, use a bioinfiltration basin to attenuate and treat parking lot runoff, as well as replace asphalt parking lot surface with permeable pavers to reduce runoff volume.



VINE

Exist. Stacked **Rock Wall**

HIGH



Bio-Infiltration