

1. EXECUTIVE SUMMARY

This engineering report describes the design of the Willert Park Green Infrastructure (GI) project. This design includes construction of green infrastructure practices at three sites in the Willert Park neighborhood to control runoff to Sewer Patrol Point (SPP) 281. A combination of bioretention, infiltration, porous pavement and impervious area reduction have been proposed to meet the Buffalo Sewer Authority (BSA) goal to control 20% of the impervious area that contributes to SPP 281. By meeting this goal of the Long Term Control Plan (LTCP), BSA will limit the frequency, duration and volume of combined sewer overflows which will then improve water quality in the City of Buffalo.

Wendel has developed a detailed design of GI practices to control runoff from 26.1 acres in the SPP 2812 sewer shed. The proposed projects at three sites in the Willert Park neighborhood will have a dramatic impact on water quality in the City of Buffalo. Using HydroCAD modeling, Wendel can confirm that the GI practices used will control 100% of the volume from the 90th percentile storm (0.95" of rain) while also providing close to 40,000 ft³ of water quality volume.

Construction of this project will occur this summer and it is anticipated that final work will be complete by spring of 2018. The total cost of this project has been estimated at \$3,585,000.