Albany Water Dept. and CHA Consulting earn engineering excellence award from ACEC NY

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Albany, NY The Albany Water Department, together with CHA Consulting, Inc. (CHA), have earned a Platinum 2019 Engineering Excellence Award for the Beaver Creek CSO Abatement and Flood Mitigation Project. The project is being recognized by the American Council of Engineering Companies of New York (ACEC NY) for the use of innovative technology combined with traditional and green infrastructure to reduce flooding and combined sewer overflows (CSO) in the city.

The city has experienced localized flooding in several neighborhoods for decades–in particular during the extreme rain events that occurred during the summer of 2018.

“This project is just one example of our commitment to system-wide infrastructure improvements to address localized flooding and improve the quality of life for Albany residents.” said Joe Coffey, Albany water commissioner. “We will continue to find innovative solutions to make these needed upgrades, while simultaneously planning for future resiliency to deal with the impacts of climate change.”

“This award helps to highlight part of the significant investment our Water Department has made in installing green infrastructure, cleaning the Hudson River, and working to mitigate flooding that comes with extreme weather events that are becoming the new normal,” said Albany mayor Kathy Sheehan. “Thank you to commissioner Joe Coffey, our hard-working Albany Water Department employees, and CHA for their dedication to this mission, and for earning this prestigious recognition.”

The city has a history of CSOs due to its aging combined sewer network and is part of a regional plan to reduce CSOs over a 15-year period. CSOs occur during rain events when the city’s combined sewer system becomes overwhelmed and discharges untreated sewage and stormwater into the Hudson River.

The award recognizes the city’s efforts in several projects related to both CSO and flood reduction within the Beaver Creek sewer shed.

Key among those efforts is a new platform (CMAC) that features continuous monitoring and adaptive controls to make real-time adjustments within the sewer system. The platform uses a cloud-based service to work with on-site sensors, weather forecasts, and site specific parameters to make intelligent and predictive decisions. For example, sensors and valve controls located at

Washington Park Lake enable the automatic lowering of the lake to allow for extra stormwater storage before a heavy rain. The network also allows for early detection of potential problems and impending flooding, thereby promoting proactive maintenance and quicker emergency response.

In addition to the CMAC platform, the project is also recognized for infrastructure improvements, including a constructed wetland providing 350,000 gallons of stormwater storage and an underground cistern providing 750,000 gallons of stormwater storage.

The Engineering Excellence Awards are presented to projects that encompass both the public and private sector and demonstrate complexity, innovation and value to society.

In addition to celebrating among peers, the Engineering Excellence Awards program helps to publicize the many significant contributions consulting engineers make to the built environment throughout the world.