Campustown's skyline rises, Campustown's sewer system pays the price

By ANNA ECKBURG

CHAMPAIGN, IL – With the construction of high rises and apartment complexes surging in Campustown, the city hired Donohue and Associates to conduct a Campustown Sanitary Sewer Capacity Study in 2018.

The engineering firm came back with a report that four major sewer lines were over-capacity and work needed to be done to prevent overflows.

Some recommended fixes from the 2025 Donohue study call for upsizing existing 8-inch and 10-inch sewers to 12-inch or even 15-inch ones. Other sections require further investigation because the current slope and sizing data appear inconsistent with typical construction standards.

Until the city verifies those measurements, major repairs remain on hold, a city engineer said recently..

In a more recent report in June of 2025, a Donohue study warned that without further upgrades, eight sewer lines will retain "no remaining capacity for future development."

"It was well known to be an issue before I started," Nathan Dornfeld, a City of Champaign engineer who has worked for the city for six years, said in an interview in October. "It's not that the sewers are in disrepair. It's more the fact that there's not enough capacity for the development there."

Dornfeld said one way to deal with the problem is to add a new collector sewer line leading to Healey Street. The cost to add this sewer line is estimated at $2.8 million, and is expected to take two years to complete.

Collector sewer lines collect flow from individual buildings in that area. They flow to the interceptor sewers, which take the flow to the Northeast treatment plant in the Urbana Champaign Sanitary District treatment plants.

The Northeast plant is located in Urbana, just north of Ambucs Park. The Southwest plant is in Champaign at the intersection of Windsor and Rising Roads.

Meanwhile, development of high rises has continued and now another 16-story high-rise is set to break ground at 201 E. Green St. The 176-foot apartment tower, with nearly 500 units at Second and Green, will require a sewer extension to keep the existing lines from being overwhelmed.

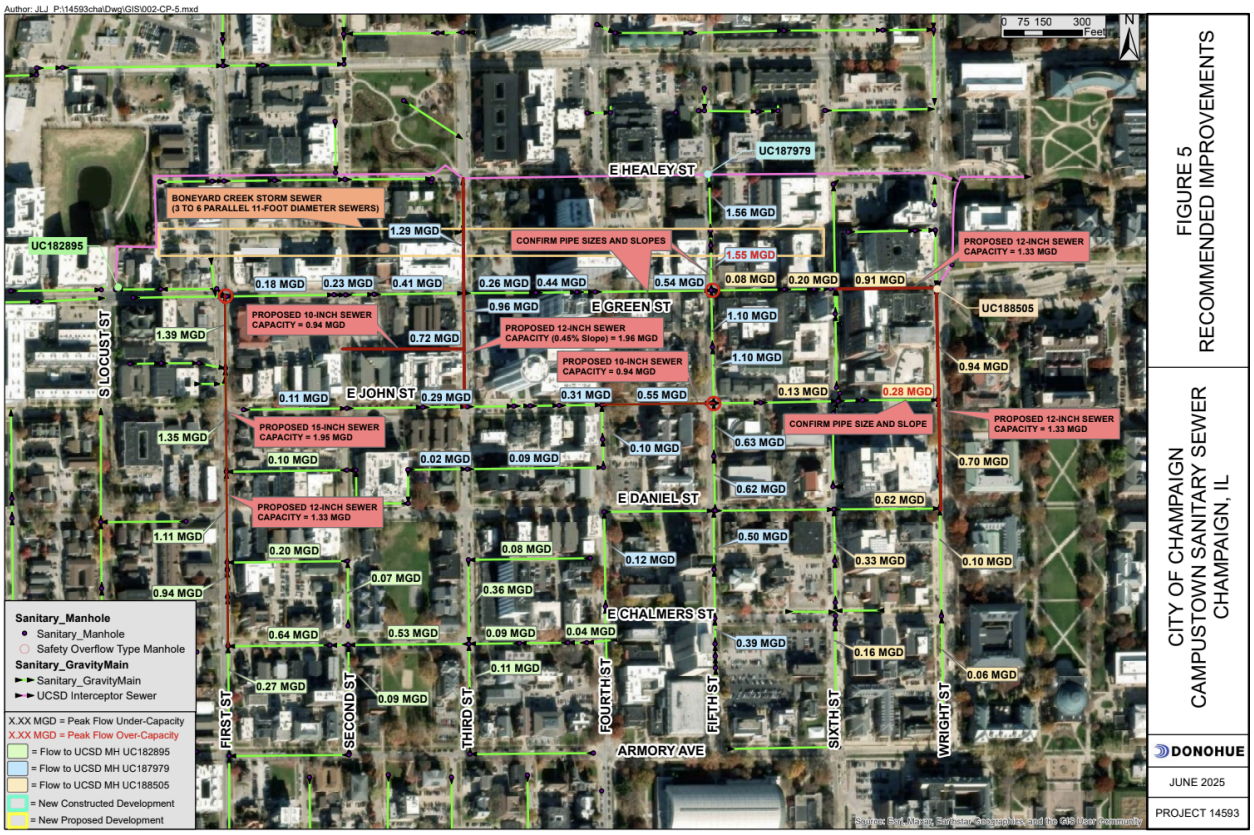
"What [the study is] talking about is in the downtown Champaign, Campustown area … There hasn't been any backups or sanitary sewer overflows associated with it," said Brad Bennett,

Director of Engineering at Urbana Champaign Sanitary District., “It just means that the pipe is starting to flow close to 100% full.”

He said the pipes are either between 15 feet or 7 feet deep underground. “Even if the pipe gets full in the underground portion of it, it doesn't come out of the ground,” Bennett said.

Campustown Sewers are Over Capacity

The 2025 Donohue report that Dornfeld shared in an email with CU-CitizenAccess said the eight sewer pipes at capacity run beneath Green, John, Wright, First, and Fifth Streets.



(Source: Donohue & Associates 2025 Sanitary Sewer Capacity Study, p.g. 9, June 17, 2025)

In 2024, Champaign issued permits for 347 multi-family units, primarily being located near “Campustown, Downtown, and the In-Town Districts.”

“In the campus area south of University Avenue and East of Neil Street within the City of Champaign, our last count of dwelling units show just under 11,000 dwelling units,” said Eric

Vanbuskirk, senior planner in the Planning and Development department of the city of Champaign.

“The majority of these dwellings are in multifamily buildings, which are any buildings that have three or more dwelling units.”

“They just weren’t built for this level of development,” Dornfeld said of the sewer pipes.

The original collector network, built for low-rise student housing in the 1990s, was never intended to accommodate today’s population density, according to the 2025 and 2018 Donohue reports.

“The City’s Public Works Department staff has recognized that the sanitary sewers in the Campustown Area were originally designed in the early 1900’s with an original design intent likely never anticipating high density, multi-story apartments being tapped into those sewers,” according to Donohue & Associates first sanitary sewer report in 2018.

But Champaign has continued to approve multiple high-rise projects that includes one by the developer CORE Spaces.

CORE Spaces is constructing a new line at its own expense of $2.8 million, but the city of Champaign has voted on and agreed to reimburse CORE up to $1.95 million through future property tax revenue.

CORE Spaces was unable to be reached for comment despite repeated attempts.

The extension will eventually divert flow north to the Sanitary District interceptor on Healey Street, pulling wastewater away from the most overloaded pipes.

“There is enough interceptor sewer capacity and treatment plant capacity for this big new development, the issue was the collector sewer, which are typically smaller diameter sewers … there wasn't enough capacity in that,”said Bennett.

High-Rise Development Continues to Outpace Sewer Capacity

Over the past two decades, Campustown’s skyline has transformed into a dense corridor of 15- to 25-story apartment towers.

CU-CitizensAccess reported in 2024 that , “more than 2,000 new beds in apartment construction were added between 2009 and 2018.” Since then, at least three more major high-rises have

opened, with additional towers approved and waiting to break ground: The Dean, The Hub, and 302 E. Green St.

In August 2025, the city approved another 16-story building at 201 E. Green St., set to include nearly 500 apartments. It will become one of the tallest structures in the district.

Donohue & Associates' 2025 study found that the existing system was already "overwhelmed" in 2018 and that the volume of new development added in the years since has pushed several lines beyond their designed flow capacity.

Documents indicate that high-rises generate significantly more wastewater than the low-rise student apartments for which the system was initially designed.

Concentrations of residents living on a single parcel, sometimes more than 1,000 people in a single building, produce daily flows that the 8- and 10-inch pipes were never designed to handle, according to the engineering studies.

Dornfeld said the new sewer line will help relieve pressure on the most overloaded parts of the system:

"Right now, as you get close to Fifth Street is where we have capacity issues. So by putting this [new extension] in … it'll also collect from nearby properties and send it north to the Healey interceptor — kind of pulling away flow that has been going to those overburdened sections."

Like CORE Spaces, developers continue receiving permits as long as they construct their own sewer extensions or improvements. That was the case with the new Green and Second Street project, where engineers determined that the existing 10-inch line under Green Street could not accept any additional flow.

To move forward, the developer agreed to build a new collector sewer extension north to the Sanitary District interceptor.

A Sewer System Built for a Different Era

Much of the sewer network beneath the district was installed in the early to mid-1900s and later expanded in the 1990s, when low-rise apartments and small commercial storefronts still dominated Campustown.

At the time, planners considered the network adequate for projected growth. Engineering records show that between 2009 and 2018 alone, developers added thousands of student beds.

“Since 2015, there have been building permits issued for about 4,000 units – but these are not necessarily net new units being added. These permits also include renovations of existing dwelling units as well,” Buskirk said.

Over the years, the city has addressed specific issues. In 2021, crews installed a new 12-inch sewer line along Sixth Street to divert flow away from the most burdened areas.

But treatment capacity is only one half of the equation. Wastewater still needs a path to reach the plant and that path continues to bottleneck beneath Campustown.

“Like I said, we aren't currently having any backups or sanitary sewer overflows, so, as long as more flow isn't added to the pipe, there's kind of no consequences,” Bennett said.

“If people keep building big 17-story apartment buildings and keep putting that flow into that pipe that's 100% full, eventually it could manifest itself into sanitary sewer overflow or backups, because you’re just trying to put too much water into a pipe that doesn’t have the capacity to make it here to the treatment facility