

Diving into the History of the Crescent Hill Reservoir

Louisville's Castle on the Rhine

Louisville has its own version of a castle along the Rhine River — the Crescent Hill Reservoir and Gatehouse. Chief Engineer Charles Hermany designed the structures from inspiration on a trip to Germany to study water filtration. It is on the National Register of Historic Places and is a Kentucky Historic Marker Site.

Louisville Water's archives include Hermany's drawings of the reservoir and gatehouse; detailed and ornate, the drawings show how the reservoir would operate with the gatehouse as the centerpiece.

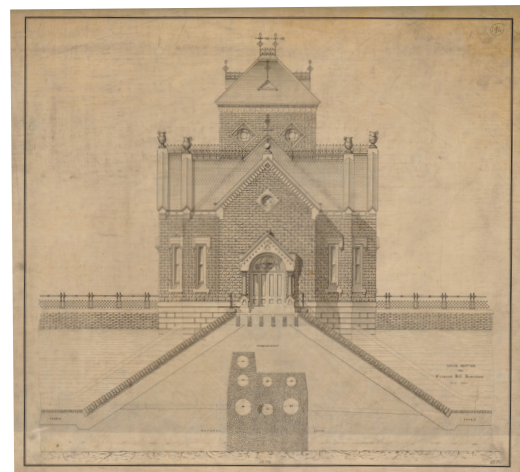
Construction began in 1877 as crews cut into the thick limestone by hand to build the reservoir basins. An on-site quarry provided the stone for both the reservoir and the gatehouse. It was tough, grueling work with long hours. A small city of sorts was on the property next to the site where employees lived during the construction.

It took two years, eight months, and four days to build the basins and the gatehouse. Louisville Water began using the reservoir on December 15, 1879.

An Attractive Structure

Hermany was unimpressed with the aesthetics of the site. In his report to the board, he wrote there was "nothing in itself nor in the surroundings which would make it attractive." Hermany had a sense that the reservoir would become a special place, and he was right. Within the first five years of operations, Louisville Water added amenities to handle the many visitors who came by train, horse and buggy, and walked to visit the grounds.

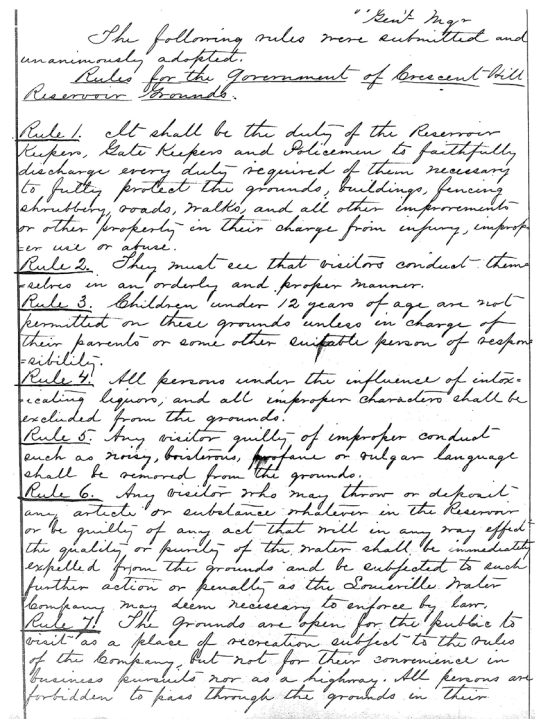
Louisville Water planted trees, created a lake, built a hitching post for horses, and even assigned employees to meet the visitors departing from trains who stopped to see the reservoir. After company leadership complained about whiskey bottles being left behind by visitors, Louisville Water published a set of rules for how to behave while visiting the reservoir, built guard houses at the entrances, and in 1885, completed a shelter house containing restroom facilities. That house remains today to the west of the reservoir.



Chief Engineer Charles Hermany's design



Construction on the reservoir in 1877



Rules for behavior at the reservoir

The Crescent Hill Reservoir and Gatehouse have been a backdrop for thousands of photos. In the early 1900s, the site was rumored to be the place for wedding photos, and a postcard from that time shows two women enjoying a walk near the gatehouse.

Taking Care of a Muddy Mess

The Crescent Hill Reservoir and Gatehouse are a blend of form and function.

In the reservoir basins, mud from the Ohio River water settles with the valves inside the gatehouse moving the water through chambers. It's accurate to say while beautiful, underneath the reservoir water, it's a muddy mess. The reservoir was built to be watertight with 24-foot-high embankments, but occasionally, all that river mud needs to be removed.

Over the past 146 years, Louisville Water has used hand tools, mules, tractors, and heavy equipment to clean the basin.

1894: A crew built a barge in an empty basin to pump out the mud.

1910: Louisville Water announced a full-scale proposal to clean the basins and put a layer of concrete at the bottom.

1918: In a photo from this year, employees and tractors appear small amid an empty basin.

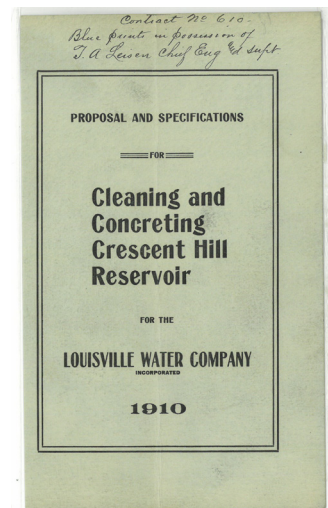
1938: Louisville Water's archives include film of mules cleaning out the reservoir basins.

1996: Following a series of leaks from the limestone basins, Louisville Water started the process of installing liners to keep the structure watertight.

2025: Louisville Water will replace the original liner and clean both basins.



A postcard from the early 1900s



The 1910 proposal to clean the basins



Reservoir cleaning in 1918



A blend of form and function



The liner installation project began in 1996