Executive Summary: Community First Credit Union’s vision for their new headquarters was to build a state of the art facility that would not only provide a rewarding environment for their members and employees, but to improve the quality of life where their members live and work. Part of this vision was fulfilled by taking advantage of sustainable products, including 31,000 sq. ft. of Harmony Permeable Pavers manufactured by County Materials. Installed for the facility’s parking lot, the permeable pavers are designed for storm water to drain straight into the ground, keeping runoff water part of the natural water cycle.

The Decision to Install Permeable Pavers
In many cases permeable pavers are required by municipalities and other local governments as part of a system to manage storm water runoff and increase the usable area on proposed sites. For Community First Credit Union this was not the case; utilities were already in place for their parking lot to be constructed of non-permeable surfaces such as asphalt. However, in the pursuit of sustainability and giving their members a unique, eye catching parking lot, Community First and their project architect, Performa, Inc., decided to move forward with Harmony Permeable Pavers manufactured by County Materials. It took months of deliberation and research for the final decision. The architect and board members wanted to ensure permeable pavers would have a positive impact on sustainability. Conversations about utilizing permeable pavers started between County Materials and the architect in 2015. County Materials worked with the architect to offer guidance on what materials and depths were required by the Interlocking Concrete Pavement Institute (ICPI) to comprise base layers, and to discuss the importance of curbing for edge support. These conversations helped the architect determine technical features and understand the benefits of a permeable paver system. From here the architect was able to generate plans that would work best for the site.

Community First was extremely hands on in the design process. Representatives from County Materials worked with the architect, general contractor, and Community First to demonstrate the performance of permeable concrete. They made several trips to a similar parking lot project completed one year earlier to see first-hand the pavers’ performance with rain, sleet, and snow melt. After witnessing the exceptional performance of County Materials’ permeable pavers, Community First decided they were the best option for the job.

A New and Improved Paver for the Job
During this design process, County Materials finished developing a new permeable paver line that also offered a three-piece design in-line with what Community First was looking for. The new line, Harmony Permeable Pavers, was designed with larger tabs, giving them one of the highest surface water infiltration rates in the industry. County
Materials approached Community First with the new Harmony paver line, and representatives quickly jumped on board with the idea of using pavers that had higher infiltration rates.

Harmony Permeable Pavers not only met but exceeded many of the sustainable benefits Community First was looking for in their parking lot. The performance of Harmony Permeable Pavers adds to the project’s sustainability and units are manufactured with recycled content and abundantly sourced materials. The fine aggregates installed between pavers effectively filter out most impurities, making stormwater that infiltrates back into the ground cleaner. In addition, Community First was impressed by the ability of permeable pavers to speed up snow melts, which allows them to drastically reduce their salt usage during the winter months.

Ramping Up Installation with Machine Installation
Laying 31,000 sq. ft. of pavers can seem like a daunting task. Harmony Permeable Pavers were engineered specifically for machine installation. Each pallet arrives onsite pre-arranged in a unique pattern, ready for immediate installation. Because of the large size of this job, mechanical installation was an obvious choice. Mechanical installation allowed for the parking lot to be completed in exactly one week, which included a day and a half of grading and setting base aggregates. If the pavers were conventionally laid by hand, the timeframe may likely have been extended to two months.

One of the biggest challenges of this project was getting the large quantity of pavers to the site on time and efficiently. Because of the sheer number of pavers going into the parking lot, there wasn’t enough room on the job site for storage of the pavers before installation. Because of this, County Materials coordinated with the paving contractor, Aqua-Paving Construction, to deliver five to six loads each day on an as needed basis. Every day, dispatchers from County Materials’ Janesville and Appleton facilities regularly were in contact with Aqua-Paving. Throughout the entire process, every deadline was met, which is a testament to the logistical abilities of dedicated of County Materials’ dispatchers and drivers.

Finishing Touches
H₂O Pro Pavers were still incorporated in the parking lot to meet ADA compliance in select parking spaces. Their smaller joint spaces are more suitable for wheel chair accessibility. The 4x8 inch size of H₂O Pro Pavers were installed in several handicap parking spaces and throughout the project along pathways and cross walks.