

STRAIGHT LINES

Winter 2024



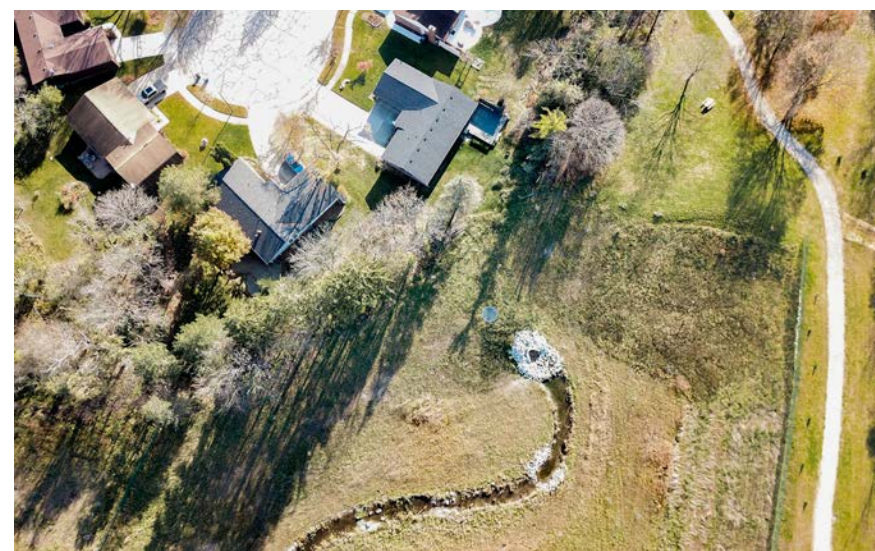
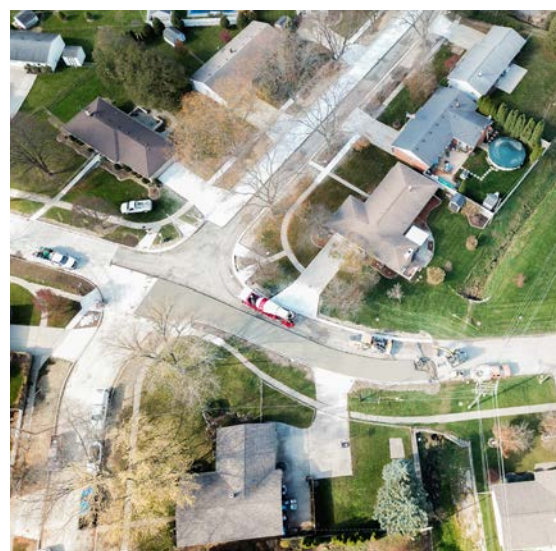
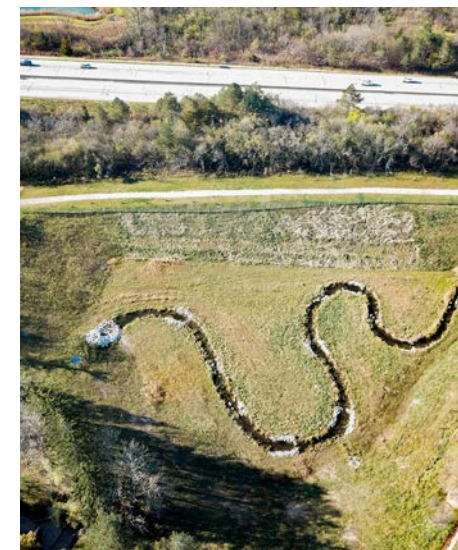


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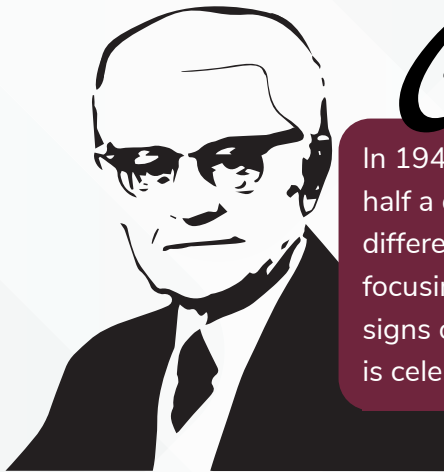
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EIGHTY
80
YEARS

Spicer
group

1944-2024

Celebrating 80 Years



Clifford H. Spicer

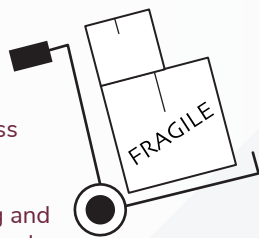
In 1944, this business began in the spare bedroom of a humble home with less than half a dozen employees. It has now grown to employ more than 300 people in 10 different offices. Over the years, we have remained true to those Cliff Spicer roots—focusing on project quality, integrity, and building good relationships. Now, with no signs of slowing down and a solidified commitment to quality services, Spicer Group is celebrating 80 years in business!

**19
44**

After working as an engineer for 20 years, Clifford H. Spicer, P.E., P.S., starts his own business in his home in Saginaw.

**19
45**

The business grows to include engineering and surveying, and moves to its first office in Saginaw, MI.



**19
51**

Continuous growth and expansion urges "Cliff H. Spicer Engineering" to move to a bigger office in Saginaw, MI.

**19
59**

The business is incorporated under Michigan law and becomes known as

SPICER ENGINEERING COMPANY

**19
64**

Twenty years after opening, Spicer has 24 employees.



**19
72**

"Mr. Spicer" grows the company to over 50 people and after 28 years, announces his retirement.

**19
73**

Otto Schiesswohl, P.E., takes over as President.

**19
76**

Charles G. Sessner, P.E., who joined the company in 1954, becomes President.

**19
79**

Spicer Engineering invests in a computer system that increases productivity.



**19
85**

James E. Curtis, P.E., is named President of Spicer Engineering.

**19
92**

Spicer Engineering moves its headquarters to a bigger office in Saginaw, MI.



**19
93**

Dale Deibel, P.E., who was hired as a Design Engineer for Spicer in 1974, becomes President of the company.



**19
94**

Spicer Engineering celebrates its 50th anniversary as a business and is honored by the Governor of Michigan.



**19
96**

The company expands and opens a branch office in St. Johns, MI.

**19
97**

Spicer Engineering moves its headquarters to its current home in downtown Saginaw, MI.



**19
98**

Spicer opens additional branch offices and is rebranded to Spicer Group.



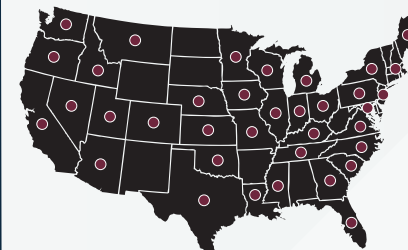
**20
05**

The company's presidential reins are passed to Don Scherzer, who has been with Spicer Group since 1979.



**20
13**

Spicer Group invests in mobile mapping technology and begins providing services nationwide.



**20
17**

Professional Planner Robert Eggers, AICP, is named as the new President.



**20
18**

The Georgia office relocates to Cumming, GA. The company opens a branch office in Byron Center, MI.



**20
19**

Spicer Group celebrates its 75th year in business!



**20
21**

Spicer Group opens an office in Traverse City, MI.



**20
22**

Spicer Group opens offices in Standish, MI, and Bingham Farms, MI.

**20
23**

Ron Hansen, P.E., P.S., who has been working at Spicer Group since 1993, takes over as President.



**20
24**

Spicer Group celebrates its 80th year in business!





St. Mary's Gardens Subdivision Undergoes Flood Mitigation Project

New Storm Sewer and Pump Station Helps Alleviate Flooding in Monroe

CITY OF MONROE - The St. Mary's Gardens subdivision has had a long history of flooding, spanning back to the early 2000s. After hearing the concerns from the residents, encouraging the City to help address the issue, Monroe made the decision to identify a solution to the flooding.

Efforts to find a solution began in 2015 when Spicer Group was hired to complete a study evaluating the stormwater concerns in the subdivision. Results of the study found that the existing storm sewer system was undersized, did not extend to every part of the subdivision, and was unable to properly convey stormwater into the Mason Run Drain which traverses along the northern end of the subdivision. Notably, the subdivision's low-grade topography compounded the drainage issues, necessitating urgent intervention.

"The St. Mary's subdivision, unfortunately, did not have enough grade to drain all the water to the Mason Run Drain, which presented a challenge in ensuring proper drainage," Spicer Group Project Manager Jonathan Witham, P.E., said.

The study resulted in the identification of four modeling alternatives which evaluated the five-year and ten-year design storms of the stormwater sewer system.

"Spicer Group looked at various solutions for the flooding, such as installing detention ponds, increasing storm sewer pipe sizes on select streets, adding storm sewer to the streets without an existing system, and installing relief pipes to a secondary storm sewer system which drains the southern half of the subdivision," Witham said. "We relied on software such as SWMM, or EPA Storm Water Management Model, which allowed us to analyze the existing pipe networks and to design alternatives throughout the project."

After the initial study was complete and each option was evaluated closely, Spicer Group embarked on an additional design process to develop sustainable solutions tailored to the subdivision's long-term stormwater management needs. Recognizing the limitations of the existing infrastructure, the design team explored innovative interventions for the 25-year-storm, per request of the City Council, to see what the impacts would be on each of the four design



alternatives created. This necessitated careful planning and engineering of strategies to address the drainage issues effectively.

In 2019, the City sought further modeling alternatives to ensure all potential alternatives were evaluated to determine the best solution to the flooding. This led to designs for additional detention storage, relief pipes, and increased stormwater pipe capacities on each street. This time, Spicer Group also introduced the idea of adding a pump station as a viable solution to mitigate flooding by pumping excess stormwater away from the subdivision and into the Mason Run Drain.

Upon completion of the modeling phase, Spicer Group presented their findings to the City, suggesting the construction of a pump station with a wet well below grade to pump excess water during a storm event provided the best level of service for the subdivision. Calgary Park, situated adjacent to the Mason Run Drain and elevated from the subdivision, was deemed the ideal spot for the proposed pump station.

In 2021, Monroe requested Spicer Group to continue with providing final design for the construction of the pump station and sewer upgrades to Lavender St., Hendricks Dr., John L Dr., McCormick Dr., and Calgary Dr.

"Spicer Group gave a number of options at various levels of cost and complexity." Patrick M. Lewis, P.E., Director of Engineering and Public Services for the City of Monroe, said. "Ultimately, we went with the option that solved the problem and would provide the best long-term solution."

Community engagement also played a pivotal role throughout the project's evolution, fostering collaboration between municipal stakeholders and residents. Two informational meetings were held that facilitated transparent communication

and garnered overwhelming community support for the proposed project.

The project went to bid in September 2022 and construction kicked off in January 2023 with ER Zeiler Excavating as the contractor.

The project encountered several unique challenges, including the presence of substantial bedrock underneath the subdivision.

“What many people don’t know is that the City of Monroe has large amounts of bedrock for being in southern Michigan,” said Witham. “This did put some delays in the construction process because there was much more bedrock excavation than anticipated.”

The bedrock also affected the existing sanitary sewer beneath the subdivision, which was discovered to be quite shallow. This meant that the new storm sewer had to be installed underneath the existing sanitary sewer lines. This is very uncommon as usually sanitary sewer lines are much deeper in the ground than the storm sewer.

This meant the project team and excavators had to develop an adaptive approach and carefully maneuver the lines while installing the new storm sewer.

In the St. Mary’s Gardens subdivision, many houses have sub-slab drains commonly found in basements. These drains collect and remove water that accumulates beneath the concrete slab foundation of a building. As part of the project, the city aimed to provide every house with a sub discharge into the storm sewer. To achieve this, every other house received a drainage catch basin, ensuring direct connection to the new storm sewer.

Approximately 7,000 lineal feet of 8-inch plastic pipe was installed as header tiles, connecting the yard drain basins to the main storm sewer, and 5,000 lineal feet of new reinforced concrete pipe ranging from 12 to 42-inches in diameter was installed under the roads.

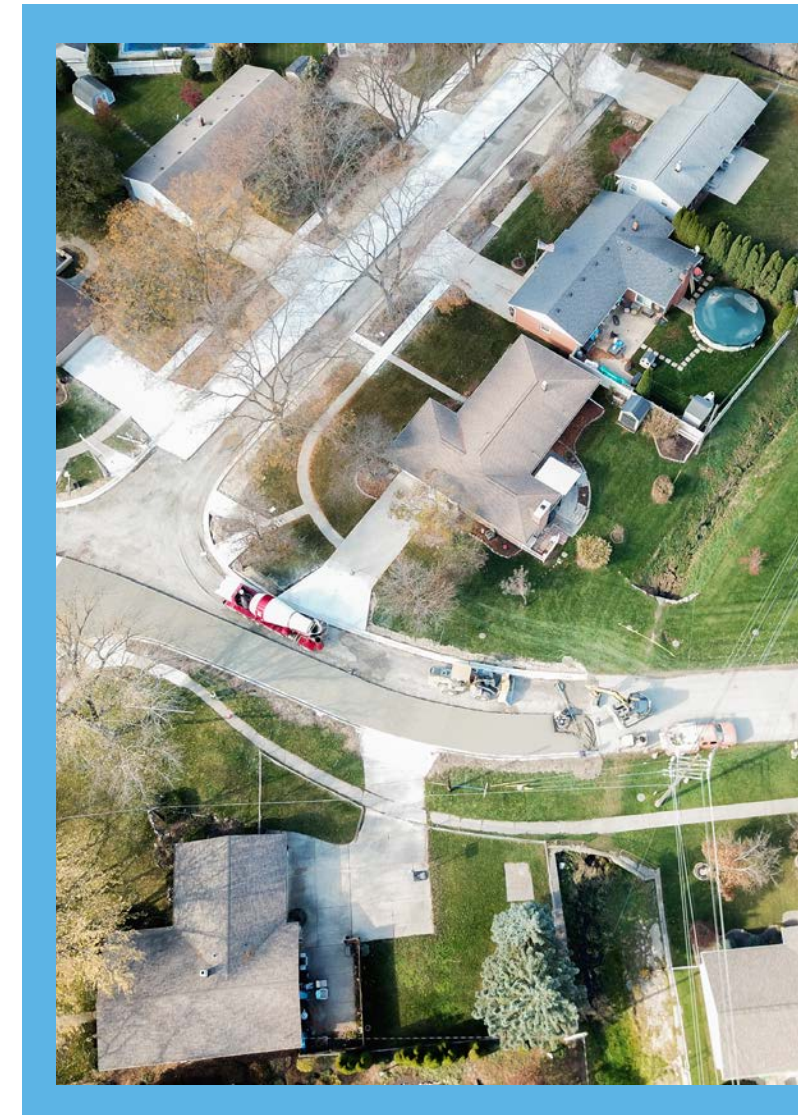
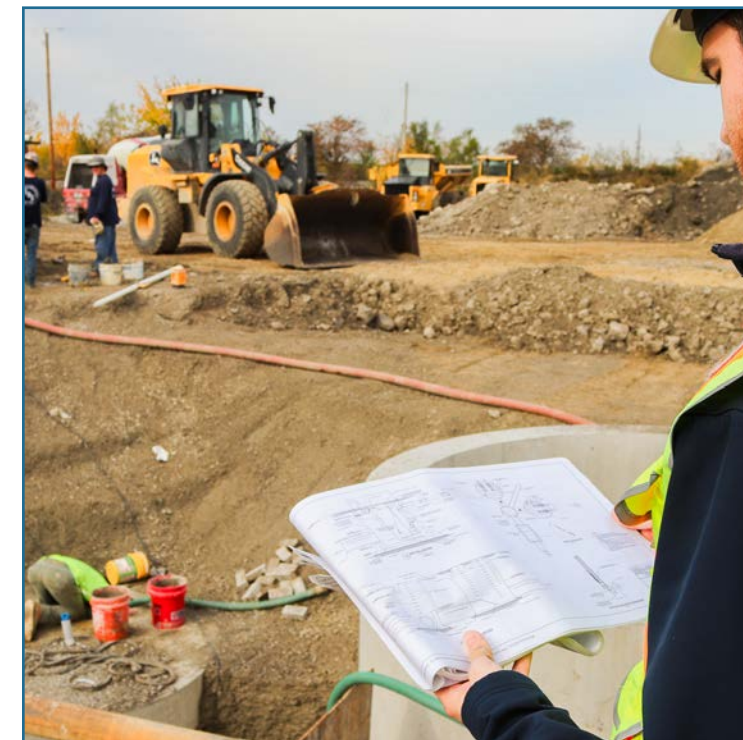
The newly installed pump station consists of a splitter chamber which directs water flow into two 14-foot diameter wet wells. The wet wells were supplied by Northern Concrete Pipe, Inc. and each contain two pumps that can run at a rate of 6,000 gallons per minute. Each pump turns on successively as the wet wells fill up, and the pumping rate was specifically designed to handle the 10-year storm. There is also a 27-inch diameter concrete overflow pipe for excess flow relief to the Mason Run Drain in the event of greater than a 10-year storm.

During the project’s progress, the City of Monroe received American Rescue Act Plan (ARPA) Funds due to COVID-19 circumstances, which aided in helping cover the \$6.4 million in total construction costs. This financial aid allowed the City to push forward with the project and proceed with the full design of the project as planned.



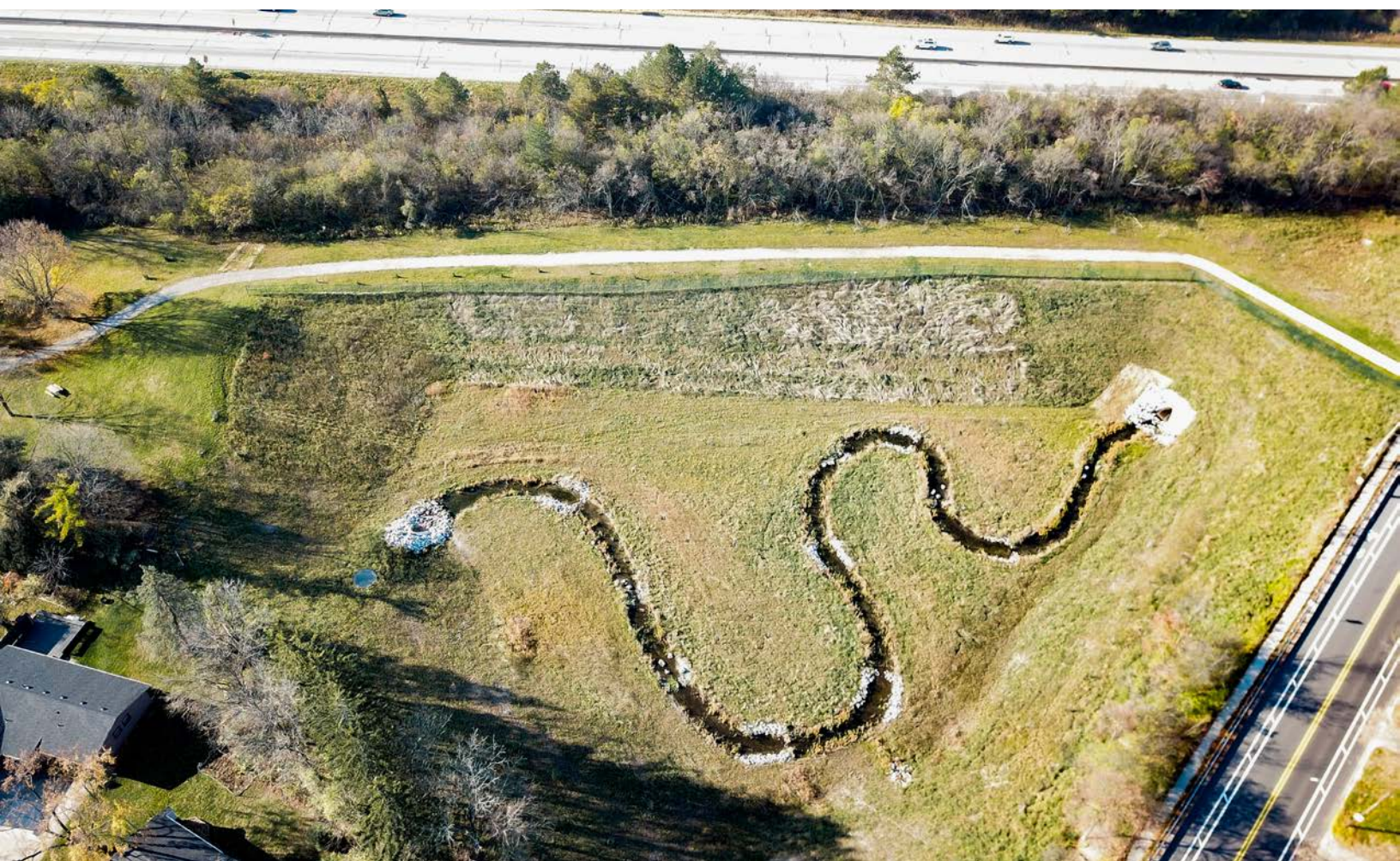
“We were able to find funding through ARPA, and because of this, the City was able to make this the highest priority infrastructure project,” Lewis said. “Spicer Group was a great one-stop shop for everything we needed during the project and provided high-level design and detail.”

The installation of the pump station, storm sewers, and basins are complete, and the system is expected to be operational later this spring with final restoration efforts expected to conclude this June.



BUILDING CHURCHILL DOWNS

The City of Ann Arbor Gets a Solution for Recurring Flooding



WASHTENAW COUNTY - The devastating storm that struck the Lansdowne/Churchill Downs area in Ann Arbor on March 15th, 2012, left a permanent mark on the community. Between I-94 and Scio Church Road, residents found themselves grappling with extreme flooding and overland flow, prompting urgent action from local authorities to address the pressing need for effective stormwater management measures.

In the aftermath of this catastrophic event, the City of Ann Arbor turned to the Washtenaw County Water Resources Commissioner (WCWRC) for assistance. Recognizing the significance of the situation, the Water Resources Commissioner's office embarked on a collaborative effort to identify and implement a solution to mitigate the impacts of future storms.

In 2013, the WCWRC hired Spicer Group to conduct a comprehensive study of the affected area, with a particular focus on the Upper Mallets Creek watershed.

"This study aimed to evaluate potential opportunities for improvements and identify viable solutions to address the recurring flooding issues that many residents had experienced, resulting in damage to their homes and properties," Project Engineer Megan Kluczynski, P.E., said.

The findings of Spicer Group's study laid the groundwork for several key recommendations and options for the WCWRC and the City of Ann Arbor to consider. Over 15 potential solutions were identified and publicly vetted as part of an extensive evaluation process.



Downstream end of outlet control structure

Additionally, a site walk-through was conducted with the public before start of construction, allowing residents to gain a better understanding of the project's construction impact.

Ultimately, a phased approach was selected to address the stormwater management challenges, with the creation of flood storage in three key locations identified as a priority. Among these locations, Churchill Downs Park on the east side of I-94 emerged as the initial focus due to its suitability for accommodating the proposed flood storage area.

A cost-benefit analysis was conducted on the three proposed stormwater storage areas, with the flood storage in Churchill Downs Park identified as the most cost-effective option. As the park was owned by the City of Ann Arbor, land acquisition would not be a factor impacting the project's design and implementation process.

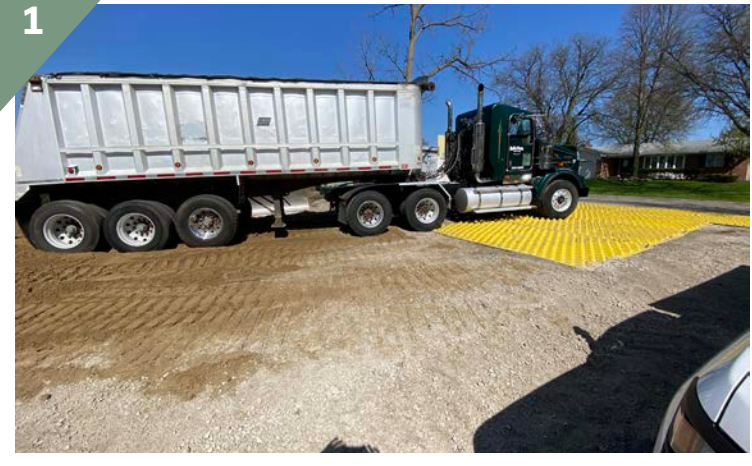
Community input was valued as a key component in identifying the best solution. Efforts were made to involve the community through various channels, including the development of a mobile app and dedicated website. These digital platforms served as crucial sources for updates, project details, and essential resources, providing residents with convenient access to information and a means to contribute to the project.

Additionally, landowners were encouraged to actively participate by submitting photographs and other pertinent information regarding flooding in their area. This data played a crucial role in ensuring the accuracy of the floodplain model developed by Spicer Group's engineers and helped build trust within the community through evidence-based decision-making.

Public meetings were held regularly throughout the project's development to facilitate community input and enhance public understanding of the flooding issues and proposed solutions. While not mandatory, these meetings played a vital role in keeping the public informed and engaged.



Top Photo - Inside of outlet control structure
Bottom Photo - Downstream end of project, outlet control structure



In 2017, Spicer Group officially began the project design, laying the groundwork for construction of a new 11-foot-deep floodplain area boasting 10.8 acre-feet of storage volume.

A remarkable feature of the Churchill Downs Natural Floodplain Area Project was the unconventional design of the outlet control structure.

“Typically, detention basins or floodplain areas are designed to detain the initial flows and then gradually release water after the peak of the storm has passed,” Kluczynski said.

In this project, a control structure was designed to allow for the selective passage of water, prioritizing low-flow drainage and temporarily detaining high-flows from large storm events in the natural floodplain, rather than detaining all the initial flows.



This alternative method allows typical storm events to pass through the system and provides protection downstream during large storm events. Extensive modeling was completed to evaluate and design the control structure and ensure it would reduce downstream flooding without having negative impacts for upstream landowners.

The design team also had to reroute the Malletts Creek Drain for this project. This was a meticulous process that required understanding of hydrology, urban planning, and ecological conservation. The design incorporated planting vegetation along the drain which will help improve water quality and enhance the ecosystem. Additionally, sediment management measures were implemented to prevent sediment from reaching downstream water bodies, further safeguarding water quality and environmental integrity.



Photo 3 - Floodplain excavation continues, preparing for outlet control structure installation

“In this project, a control structure was designed to allow for the selective passage of water, prioritizing low-flow drainage and temporarily detaining high-flows from large storm events in the natural floodplain, rather than detaining all the initial flows.”

Along with the Malletts Creek Drain, the project area was also traversed by a 20-inch watermain serving southwest Ann Arbor. Any impact on this watermain would have resulted in widespread service disruption. Therefore, the project team had to design the project to ensure their operations did not damage the watermain. Due to the size of the watermain and number of residents it served, it could not be taken offline for more than 24 hours. Line stops were installed and construction of the enclosure under the watermain was completed quickly to ensure water service to residents was not impacted.

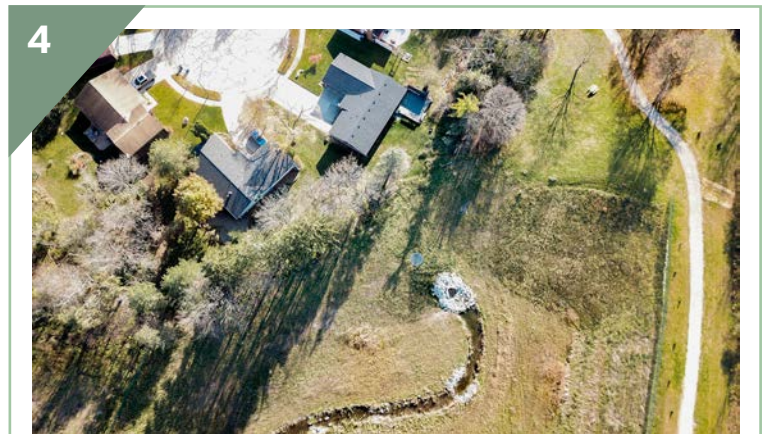


Photo 4 - Downstream end of floodplain and walking path
Photo 5 - Walking path to connect neighborhood and Scio Church Road

Over the course of construction, 60,000 cubic yards of spoils had to be hauled away to two separate disposal locations. The logistics of this massive operation involving excavation, transportation, and disposal stretched over a period of 29 days. Furthermore, it is worth noting that this is the first of three regional detention basins that were proposed as part of the broader flood control solution. The scale and complexity of the project was just a first step in the larger initiative, showing the depth of what is required to mitigate the flooding issues. The project was substantially completed toward the end of fall 2023.

Despite the challenges and complexities inherent in a project of this magnitude, the Churchill Downs Natural Floodplain Area project emerged as a comprehensive and cost-effective solution to the pressing need for effective stormwater management in the Lansdowne/Churchill Downs area. Through collaboration, innovation, and a commitment to environmental stewardship, the project set a precedent for sustainable urban planning and engineering excellence, safeguarding the community for generations to come.

The project was awarded the 2024 MACDC Innovation and Excellence Award at the MACDC Winter Drain Conference held in Kalamazoo, Michigan.



Steve Roznowski, P.E., Spicer Group Principal (left), Evan Pratt, P.E., Washtenaw County Water Resources Commissioner (center), & Megan Kluczynski, P.E., Spicer Group Project Engineer (right) accepting the 2024 MACDC Innovation and Excellence award for the Churchill Downs Park Natural Floodplain Area Enhancement Project

Matthew Bacon

Matthew was recently hired as a Design Engineer in the Water Resources Service Group in our Dundee office after spending one year as an intern with us. He earned his bachelor's degree in Civil Engineering from Michigan Technological University.

Tia Brewer

Tia was recently hired as an Administrative Assistant in our Manistee office.

Bryson Hatch

Bryson was recently hired as a Crew Chief in the Survey Service Group in our Atlanta, Georgia office. He came to Spicer Group with more than nine years of surveying experience.

Kaiden Johnston

Kaiden was recently hired as a Survey Technician in the Survey Service Group in our St. Johns office after spending a summer as an intern with us.

Paige Kipp

Paige was recently hired as a Designer in the Planning Service Group at our Lansing office after spending nearly three years as a Project Assistant with us. She earned her bachelor's degree in Applied Arts from Central Michigan University.

Marylynn McPhail

Marylynn was recently hired as a Project Assistant in the Architecture, Mechanical, Electrical, and Plumbing Service Group in our Saginaw office.

Kaitlyn Miklovich

Kaitlyn was recently hired as a Project Architect in the Architecture, Mechanical, Electrical, and Plumbing Service Group in our Saginaw office. She earned both her bachelor's degree and master's degree in Architecture from the University of Detroit Mercy.

Nicole Przygocki

Nicole was recently hired as a Design Engineer in the Water Resources Service Group in our Saginaw office. She earned her bachelor's degree in Environmental Engineering from Central Michigan University.

Jake Roberts

Jake was recently hired as a Construction Engineer in the Construction Service Group in our Saginaw office. He earned his bachelor's degree in Civil Engineering from Michigan Technological University.

Travis Thelen

Travis was recently hired as a Survey Technician in the Survey Service Group in our St. Johns office after spending one year as an intern with us.

Krista Valesano

Krista was recently hired as a Project Assistant in the Construction Service Group in our Saginaw office. She earned her bachelor's degree in Business Administration from Saginaw Valley State University.

2024 PROMOTIONS NEW HIRES

PRINCIPAL

Spicer Group is proud to announce the recent promotion of **Richard D. Kathrens, P.E.**, to **Principal**. Rich started his career at Spicer Group in 1993 and has over 30 years combined experience with working at engineering firms and the Michigan Department of Transportation. Rich became a Project Manager and Senior Associate in 2017 and was appointed as Spicer's Director of the Structural Service Group in 2021. Rich earned his bachelor's degree in Civil Engineering from Michigan Technological University in 1992 and became a licensed professional engineer in 1998.

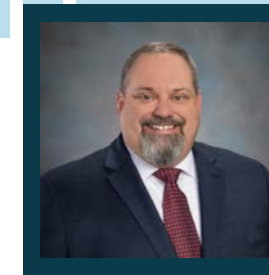


Richard D. Kathrens, P.E.

Spicer Group is proud to announce the recent promotion of **Kurt Engelhardt, John Townsend, Sam Szaroletta, P.E., and Myles Sakshaug, CPA**, to **Associates**.

ASSOCIATES

Kurt joined Spicer's Construction Service Group in 2000 as a Construction Services Technician. He became a Construction Manager in 2022.



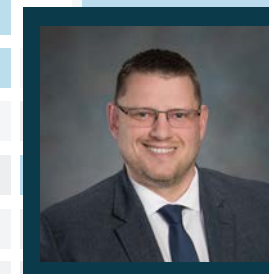
Kurt A. Engelhardt
Construction Manager

Jon joined Spicer's Construction Service Group in 2006 as a Construction Services Technician and in 2022, became a Construction Manager. He attended Mott Community College and studied Mechanical Engineering.



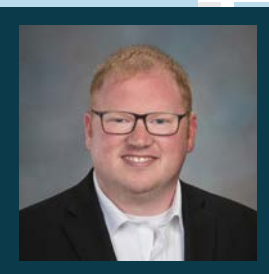
Jon M. Townsend
Construction Manager

Sam joined Spicer's Municipal Service Group in 2013 as a Design Engineer. In 2019 he became a Project Engineer, and in 2022, he became a Project Manager. Sam earned his bachelor's degree in Biosystems Engineering from Michigan State University in 2007 and became a licensed professional engineer in 2019.



Sam J. Szaroletta, P.E.
Project Manager

Myles joined Spicer's Accounting Group in 2023 as a Finance Manager. Myles earned his bachelor's degree in Finance & Accounting from the University of Michigan in 2015 and earned his CPA license in 2020.



Myles A. Sakshaug, CPA
Finance Manager

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