



STRAIGHT

LINES

FALL 2017

**Spicer**  
group

# Fall 2017

- 3 Splash into Jackson Cascades
- 7 New Trailhead in Bridgeport Charter Township
- 11 Oliver Street Construction
- 15 Asset Management in St. Charles
- 17 Spicer Group New Hires

**Front cover:** Hemmeter Road, Saginaw Charter Township, MI.  
**Inside cover:** Jeremy Dancer, P.S., setting up mobile mapping survey equipment near Okemos, MI.



# Splash into the Jackson Cascades

JACKSON COUNTY – For decades now, families have been making memories at the Cascades Falls in Jackson County’s Sparks Foundation County Park. The combination of concerts, fireworks, and light shows at the 500-foot-long illuminated man-made waterfall structure have provided entertainment for all ages in the park since the 1930’s.

To continue that memory-making tradition and expand the use of the park, the Jackson County Parks and Recreation Department added a splash pad attraction to the Cascade Falls this

year, giving park visitors a chance to not just see the water, but to jump in and enjoy it as well.

“In previous master plans for the Cascades, there was always a plan for an interactive feature,” Mark Vysoky, PLA, Manager of Park Planning and Operations, said. “But it was too insignificant to make a difference. We wanted to do something that was on a grander scale than what had originally been proposed, and create a bigger opportunity for young kids and families to get out to our park.”



Spicer Group was hired to design the project, which required having to modify the area on the south side of the waterfall structure where the splash pad could fit, and develop a water pumping system to feed the hundreds of gallons of water needed to keep the attraction going.

“The well that supplied water to the Cascades structure was too small to also feed the needs of the splash pad,” Darrick Huff, P.E., the project manager for Spicer Group, said. “The splash pad required another 500 gallons of water per minute and that well couldn’t support it.”

A new 180-foot-deep well was dug and then connected to a pumping station that fed the splash pad. Water now drains from the pad and into a holding tank below ground, before eventually making its way back to the Cascades, or into the nearby pond.

The pumping equipment is housed in a new outbuilding also constructed with this project. There are more than a dozen water features on the splash pad, including a 40-gallon giant dumping bucket, hoops and posts that spray water, spouts and water swirls, an area for smaller children to enjoy, lounge chairs around the outer edge of the pad, a patio area, and on-site concessions.

Spicer Group also redesigned the north side entrance to the Cascades to allow more parking and easier access.

Construction on the project began in late 2016 and finished in June of 2017. According to the numbers, the splash pad is already helping to draw crowds down to the park.

Kyle Lewis, the Parks Manager for Jackson County Parks, said in 2016, attendance at the



Cascades was 27,081. In 2017, attendance at the Cascades totaled 35,857, with the falls accounting for 21,201 of that, and the splash pad accounting for 14,656.

The splash pad is scheduled to reopen Memorial Day weekend of 2018.

“This attraction was very well received by the community,” Vysoky said. “It would not have been possible without the support we received from foundations, private businesses and the community. There’s now an additional opportunity for people to get out and recreate with their families and friends in Jackson.”



5



6

Les Hamann 1950's



# BRIDGEPORT OIL AND GAS CO.

## Decades-old gas station becoming focal point of new trailhead



1970's

Les Hamann at candy counter 1970



**BRIDGEPORT TOWNSHIP** – For decades, the small concrete building along Williamson Road in front of the State Street Historic Bridge in Bridgeport Charter Township had “Bridgeport Oil & Gas Co.” painted across the top in big, bold letters.

The font and colors changed throughout the years, along with the style of gas used, but it remained a gathering place for Township residents until closing in the 1970's.

**“IT WAS WHERE EVERYONE CAME TO HANG OUT, HAVE COFFEE, AND SOLVE THE PROBLEMS OF THE WORLD.”**

Carl Hamann, the son of Leslie Hamann, who owned and operated the business for years, said. “There were mornings they would be waiting on me to get there, open up the shop, and start the coffee.”

Once the business closed, the building that acted as the storefront, and the garage building behind it on the property, sat vacant until about 2010 when they were renovated into offices. At that same time, the Township started construction on the rehabilitation of the State Street Bridge with funding from the Michigan Department of Transportation.

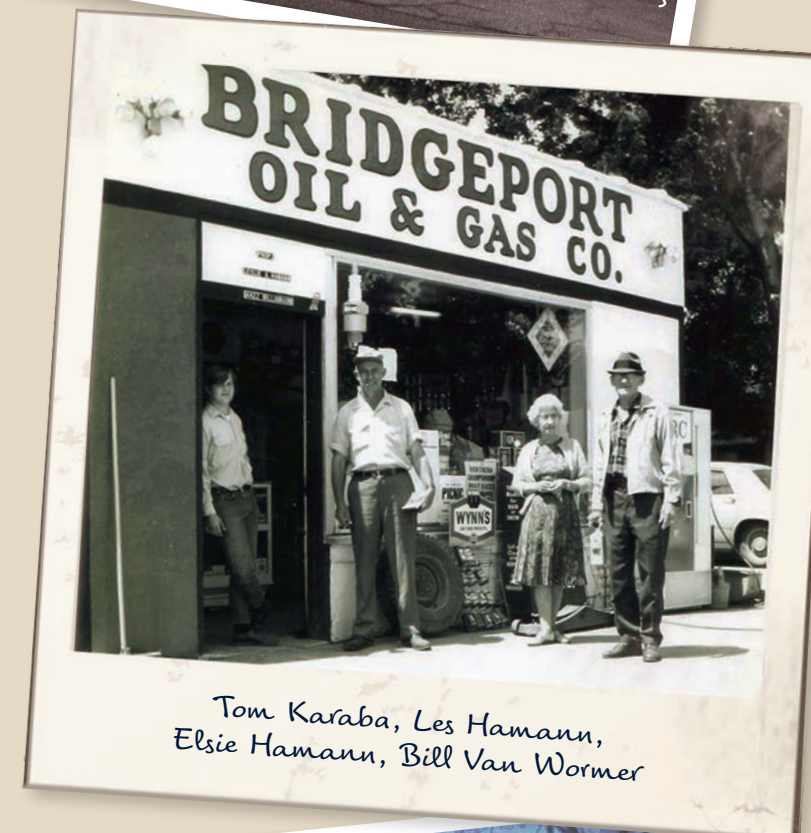
Bill Wheeler, the Parks and Recreation Director for Bridgeport Charter Township, said during that bridge construction Township officials discussed acquiring the Bridgeport Oil & Gas Co. property to build more of a community space and trailhead, and have been working towards that goal since then.

That goal was met in 2014 when the Bridgeport Downtown Development Authority swapped properties with the private owner of the Bridgeport Oil & Gas Co. property.

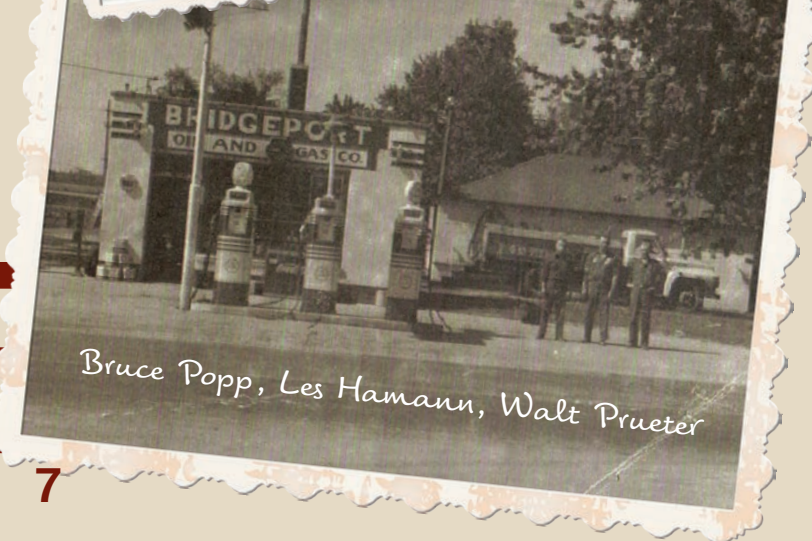
After the Township acquired the property, public meetings were held to gain input from the community on using the land, and the consensus was to preserve at least one of the old building facades.

Spicer Group assisted the Township in developing a conceptual plan and cost estimates that preserved the front building, which served as the store front to the old gas station, and restore its façade while renovating the interior of the building for the restrooms the trailhead needed. The plan also included demolishing the back building to make more space on the property.

Once the plan and costs were determined, Spicer assisted the Township in finding funding in 2015. The Township was awarded a grant for \$275,800 from the Michigan Natural Resources Trust Fund grant program to develop the land into the Cass River Trailhead, which is also part of the



Tom Karaba, Les Hamann, Elsie Hamann, Bill Van Wormer



Bruce Popp, Les Hamann, Walt Prueter



Bridgeport Oil and Gas 1974

state-wide Iron Belle Trail. The Township also received matching funds needed for the project through the Saginaw Bay Watershed Initiative Network, The McNally Family Foundation, The Frank N. Andersen Foundation, and the Wickes Foundation.

“We have this great historical bridge and wanted to add to the property and enhance it,” Tanya Moore, the project manager for Spicer Group, said. “The building is being renovated to include restrooms and storage, along with restoring the façade to look like the gas station that stood there for years.”

Along with a new sign to mimic the old Bridgeport Oil and Gas Co. sign, memorabilia donated by the Hamann family will be displayed in a shadowbox-window being constructed behind the historical facade. The Township is also working to acquire historical gas pumps to display, Moore said.

The trailhead project will also include a wildlife viewing and fishing platform on the Cass River, a pavilion with tables and grills, bike racks, interpretive signs, landscaping to buffer the neighboring property, decorative fencing and columns, a bench, a little library, and pathways to connect all the features to the existing regional path system.

Construction by Sajdak Contracting of Prudenville on the project began in August, and is scheduled to finish before the end of the year.

“This will give the community residents and visitors a place to enjoy the natural beauty of the river and allow for small functions to go on there,” Wheeler said. “Along with the bridge, it will be a focal point of the Township and will enhance the history of our Township.”

*Historical pictures provided by the Hamann family*



1. **PROPOSED DOCK**
  - FOR WILDLIFE VIEWING AND FISHING
  - 25% OF RAILINGS LOWERED FOR ADA
  - WITH BENCHES FOR SEATING
2. **PROPOSED PAVILION**
  - SIZE APPROXIMATELY 20' X 20'
  - WITH PICNIC TABLES AND GRILLS
  - ADD STONE TO COLUMNS
  - ADD LIGHTING AND ELECTRIC OUTLETS
3. **REMOVE EXISTING BUILDING**
4. **PROPOSED LANDSCAPING**
  - SCREEN NEIGHBORING RESIDENT
  - ADD IRRIGATION TO LANDSCAPE BEDS
5. **PROPOSED STONE COLUMNS WITH DECORATIVE FENCE**
  - MATCH EXISTING COLUMNS / FENCING
6. **REMOVE EXISTING PLANTER BOXES**
7. **RESTORE EXISTING BUILDING**
  - WITH GAS STATION FACADE
  - ADD (2) UNISEX RESTROOMS
8. **PROPOSED CONCRETE PATH**
  - CONNECT PROPOSED SITE FEATURES WITH EXISTING SITE FEATURES
  - WIDTH: 6 FEET
  - RELOCATE EXISTING TRASH RECEPTACLE AND SHRUBS
9. **EXISTING CONCRETE MANHOLE**
  - PAINT TO IMPROVE AESTHETICS
  - LANDSCAPE AROUND IT TO SCREEN
10. **EXISTING TRASH RECEPTACLE & SHRUBS**
  - RELOCATE ON SITE
11. **PROPOSED INTERPRETIVE SIGN**
  - 3-SIDED KIOSK ABOUT HISTORIC BRIDGE, OLD GAS STATION AND HISTORY OF BRIDGEPORT
12. **PROPOSED BIKE RACKS**
  - WITH POSSIBLE ART FEATURE SUCH AS OLD GAS PUMPS
13. **REMOVE STONE COLUMNS & FENCE**
14. **REMOVE EXISTING CONCRETE WALK**

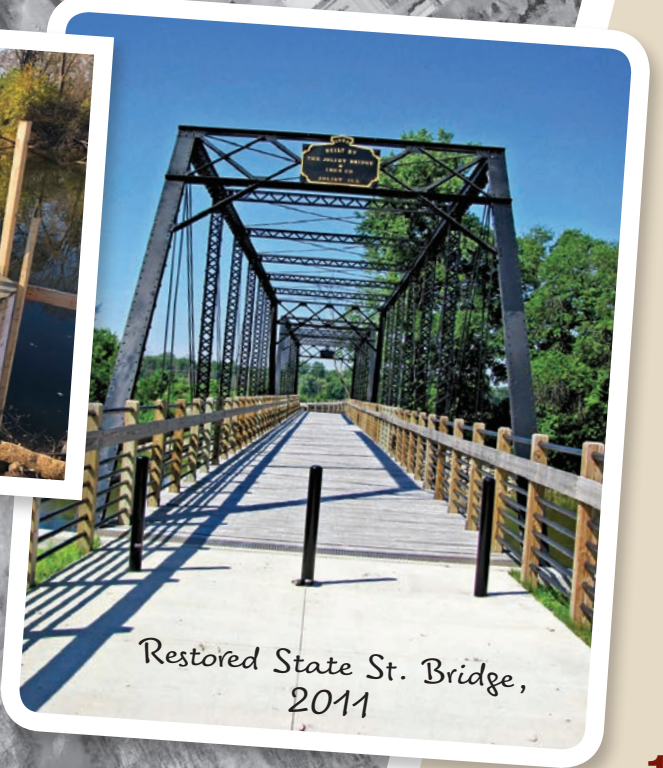
PHOTOGRAPH OF BRIDGEPORT OIL AND GAS, ABOUT 1956  
PHOTO COMPLIMENTS: CARL HAMANN

www.spicergroup.com  
230 S. Washington Ave.  
Saginaw, MI 48607  
(989) 794-4717

Bridgeport Charter Township  
www.bridgeportmi.org  
6076 Dixie Highway  
Bridgeport, MI 48722  
(989) 777-0940

**DEVELOPMENT MASTER PLAN**  
**4422 Williamson Road**  
BRIDGEPORT CHARTER TOWNSHIP, MICHIGAN

DATE: DECEMBER 2014  
JOB # 121864SG2014



# REmaking OLIVER STREET

*CITY OF OWOSSO* — Drivers who use Oliver Street on a regular basis are enjoying a much smoother ride after a section of the street recently underwent a complete makeover.

Part one of a two-phase project, this phase involved removing the entire roadway between Washington Street and Oak Street stretching approximately four-tenths of a mile.

The road was last worked on back in the 1940's, and the City had limited records on how it was constructed; however, construction crews soon found out once excavation began. During excavation of the old roadbed, crews had to remove a layer of asphalt, a layer of brick and a layer of concrete before getting down to the original sand base.

Normally, sand is used as the bottom-layer base when fully reconstructing a road, however the project team chose to use a special geotextile separator fabric in substitution of the 12 to 18 inches of sand base that would typically be used.

"The soils in the Owosso area are very granular, unlike other areas nearby that have a lot of

clay," Owosso's City Engineer Randy Chesney explained. "This allowed us to use the geotextile fabric in place of a layer of sand."

Chesney said using the geotextile fabric layer provided an extra layer of safety for the road and also eliminated the need to excavate deeper into the roadbed.

This saved extra time and materials by eliminating the need to dig deeper to allow enough room for the sand base. Eight inches of aggregate base was placed on top of the geotextile layer before being covered by five inches of fresh hot mix asphalt (HMA).

"We were able to avoid interference with shallow water services and existing natural gas line service leads by not having to excavate to deeper depths," Chesney said.

Nearly 2,700 feet of new 8-inch water main was replaced prior to work on the roadway surface. This particular stretch of street hosts an extremely old and historic grove of very large oak trees which were directly in the path of the new water main's route. Instead of tearing them down,





the project team opted to horizontally directionally drill 1,100 feet of the water main several feet below them. This significantly reduced the amount of disruption to the area and also saved the trees. The remaining water main was installed through the open-trench process.

Chesney said that according to a local environmentalist, the type of oak trees located within the project area were possibly the largest collection of that type and size in Michigan.

“We were glad that we were able to avoid

disrupting the trees, and keeping them helped fulfill our goal of retaining the residential neighborhood look and feel of the street,” Chesney said.

Other design factors that helped keep the residential characteristics of Oliver Street were the addition of bike lanes and reconstruction of the sidewalks with new ADA ramps on the north side of the street.

“The sidewalks running along the north side of the road were in very bad shape,” Spicer Group

Project Manager for the project Mike Niederquell, P.E., said. “In fact, the side slope between the original sidewalk and the roadway was very steep and created some complication during the design.”

Niederquell said this particular part of the City slopes downhill to the south toward the middle of town, and the street was essentially constructed on the side of the hill. In these situations, you have to design the vertical profile and elevation of the crown point of the road to ensure you still have enough room on the downhill side of the

slope to the curb and gutter to accommodate positive drainage from the south sidewalk and maintain driveway grades at a reasonable slope.

“The sloping topography definitely presented a challenge for the project, but Mike’s design team did a great job in getting it all worked out,” Chesney said. “The project team effort on this project was very good. Everyone from the City, Spicer Group, Michigan Department of Transportation, Tri-City Groundbreakers and the public all worked together well, and the project was a success.”



# Making a Plan

Village prepares and plans for future infrastructure needs



Mobile LiDAR scan of St. Charles at the Saginaw and Water St. Intersection looking North



Manhole scanning in St. Charles

**VILLAGE OF ST. CHARLES** – In 2016, the Village of St. Charles was awarded a \$498,546 grant through the Michigan Department of Environmental Quality’s (MDEQ) Storm Water, Asset Management, and Wastewater (SAW) program to develop asset management plans for the Village’s wastewater and storm water systems.

Plans to identify and manage storm water and/or wastewater assets include: developing an inventory of a community’s assets; an assessment of the condition of those assets; a determination of the level of service the community would like to provide; a criticality and risk assessment; a rate analysis; and a capital improvement plan.

Spicer Group assisted the Village with applying for the SAW funds, used Mobile Mapping technology to survey and scan the entire Village, and are now building the asset management plans for their storm water and wastewater system. At the same time, Spicer is also developing asset management plans for the Village’s drinking water system and streets.

“We are capitalizing on an opportunity presented

by our SAW Grant to use Spicer’s Mobile Mapping technology to help us analyze all of the data that we will need to develop each of these plans,” Matt Lane, the manager for the Village of St. Charles, said.

This is the first time St. Charles has had an asset management plan completed for its infrastructure. Building four plans at once allows the Village to take advantage of cost saving measures within the work, and builds a more comprehensive picture for future planning.

“We wanted to capture a more complete picture of our infrastructure needs. We will use the information gathered through these plans strategically and in conjunction with one another to identify areas of the Village that have the most critical infrastructure needs and to prioritize our capital improvements to address them in a more effective and sustainable manner,” Lane said.

Throughout this past summer and into the fall, crews have been taking inventory of the assets and conducting standardized assessments of their conditions. This included digitally scanning the inside of the storm water and sanitary sewer manholes.

“This digital information gives us a better assessment of the manhole’s condition,” John Olson, P.E., a project manager for Spicer Group, said. “That information is added to the plan. So long after we’re done, decades from now, the Village will be able to bring that particular manhole up in their system, see all of the information and compare it to the future condition.”

Corby Energy Services, an engineering support services provider with headquarters in Detroit, conducted the manhole scanning, along with cleaning and televising pipes within the sanitary and storm water sewer systems. Cameras record each length of pipe, and a technician looks for defects, infiltration, cracks and breaks, Olson said.

The assets in the system, like the pipes and manholes, are inspected, recorded, and scored. Then the criticality and risk is developed to score the likelihood of failure and consequence of failure should that asset fail for the system. Next, the community develops the level of service they would like to provide to their customers.

“We look at the system, the condition of the

components and the scores, and come up with the improvements that are needed to bring it to the level of service the community would like to provide to its customers. We then look at how that level of service would affect the rates and the revenue structure. We’ll do that exercise over and over again with different levels of service and rate numbers until we come up with something that is sustainable for the Village,” Olson said. “This needs to be an exercise that is doable and affordable over the long term for the community.”

That same process is repeated for the drinking water system and the Village-owned streets. Lane said these plans will allow the Village to prioritize the use of tax dollars based on the need for improvements.

“It will ideally help us avoid digging up brand new streets to fix water main breaks caused by aging pipes,” Lane said. “It also gives us more flexibility in the way we use our ACT 51 state road funding by allowing us to move money between major and local streets as project needs arise.”

The entire process will be finished and completed plans will be delivered to the Village by November of 2019.



# SPICER NEW HIRES

**Seth Bergman:** Seth was hired into the Construction Services Group in our Saginaw office as a Construction Technician after completing an internship with Spicer Group. He earned a Civil Engineering degree from Western Michigan University and was given the honorable title of Eagle Scout in 2009.

**Matthew MacDonald:** After spending time as an intern with Spicer, Matthew was hired as a Survey Crew Chief for the Survey Group in our St. Johns office. He received his bachelor's degree in Surveying Technology from Ferris State University.

**Anna Camilleri:** Anna was recently hired as a Design Engineer in the Water Resources Group in our St. Johns office. She recently graduated from Calvin College with a bachelor's degree in Civil Environmental Engineering.

**Joseph Yarosh:** Joseph was hired into the Water Resources Group as a Design Engineer in Spicer's Saginaw office. He earned a bachelor's degree in Civil Engineering from Michigan Technological University.

**Megan Grohnke:** Megan was recently hired as a Design Engineer for the Water Resources Group in our Dundee office. She earned a bachelor's degree from Michigan State University in Civil Engineering and serves as a Social Co-Chair for the Society of Women Engineers.

**Neil Noack:** Neil was recently hired as a Design Engineer for the Municipal Group in our Saginaw office. He graduated from Michigan Technological University with a bachelor's degree in Environmental Engineering.

**Ryan Roggie:** Ryan was hired as a Design Engineer in the Water Resources Group in our Dundee office. He earned a bachelor's degree in Civil and Environmental Engineering from Calvin College.

**Nicholas Colaianne:** Nicholas was recently hired as a Geospatial Technician in the Applied Technologies Group in our Lansing office. He graduated from Grand Valley State University with a

bachelor's degree in Geology, as well as a GIS Certificate and was awarded Eagle Scout rank in the Boy Scouts of America in 2011.

**David Marr:** David was recently hired as a Project Architect in the Planning Group in our Saginaw office. David graduated with his bachelor's degree in Architectural Technology from Baker College in 2013 and received his master's degree in Architecture from Southern Illinois University in 2017.

**Daniel Warren:** Daniel was recently hired as a Project Manager for the Municipal Group in our Dundee office. He graduated from the University of Michigan with a bachelor's degree in Civil Engineering.

**Joseph Wright:** Joe was recently hired as a Project Manager and Landscape Architect for the Planning Group in our Saginaw and St. Johns offices. With more than 25 years of experience in his field, he is a graduate of Michigan State University with a bachelor's degree in Landscape Architecture.

**Trenten Cameron:** Trenten was hired as a Survey Technician for the Survey Group in our Saginaw office after a year of internship. He recently attended Northwestern Michigan.

**Erica Marr:** Erica was recently hired as a Water Resources Technician in the Water Resources Group in our Dundee office. She graduated from Eastern Michigan University with a bachelor's degree in Geography with a concentration in GIS and Urban Planning. She is also a Certified Tourism Ambassador.

**Olivia Stewart:** Olivia was recently hired as a CAD Technician for the Municipal Group in our Saginaw office. She graduated from Mott Community College with a degree in Computer Aided Drafting and Design.

Interested in joining our team? Visit: [www.spicergroup.com/careers](http://www.spicergroup.com/careers)



**Spicer Group, Inc.**  
230 S. Washington Ave.  
Saginaw, MI 48607-1286  
989.754.4717

St. Johns, MI  
989.224.2355

Dundee, MI  
734.823.3308

Lansing, MI  
517.325.9977

Grand Rapids, MI  
616.458.8580

Detroit, MI  
989.928.8036

Manistee, MI  
231.794.5620

Atlanta, GA  
989.284.8178

PRSR STD  
U.S. Postage  
**PAID**  
Saginaw, MI  
Permit No. 189

[www.spicergroup.com](http://www.spicergroup.com)



Installation of water main along Davis Road in Saginaw County. Picture taken by Spicer Construction Inspector, Nate Pfenninger, P.E.