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Washtenaw County Boardwalks

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The Farm at Timberlake

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CELEBRATING 60 GREAT YEARS!



A MESSAGE FROM OUR CEO

Leanne H. Panduren, PE, Principal, President

It's hard to believe we are already halfway through 2022! It has been great to gradually return to normalcy and begin attending some events in person again. Many of our professional society annual meetings and awards programs are hosting their meetings in person once again. In this newsletter, you will find recent awards received by ROWE and our staff.

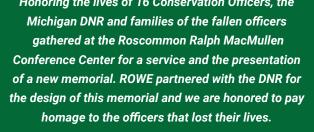
I was honored to receive the Diamond Award from the Michigan Society of Professional Engineers (MSPE) in May. I have been an active member at the local, state, and national levels of the National Society of Professional Engineers (NSPE) since 1995. Over the years, I have had the opportunity to take on different roles within the society including MSPE State President in 2003-2004 and on the NSPE Board of Directors from 2009-2017, where I served four of those years as Treasurer. ROWE has supported me through all my volunteer endeavors and for that, I am grateful. Our philosophy has and continues to be one that supports our team members in being active participants in both professional and civic organizations. I truly believe this helps develop better leaders and fosters lifelong relationships with our peers and other community leaders.

We currently have several team members serving in leadership roles at various professional organizations. Among them:

- Henry Horton and Kent Edwards were just sworn in as the President and Treasurer, respectively, with the Michigan Chapter of the International Right of Way Association.
- Jon Rick is a Vice-President with the Michigan Society of Professional Surveyors.
- Jack Wheatley is completing his tenure on the American Council of Engineering Companies (ACEC) Board as his year as Immediate Past-President concludes.
- With Jack's departure, we are pleased to announce Cheryl Gregory will now be a member of the ACEC Board.
- Bonnie Wood is serving as a Director for the Michigan Section of the Institute of Transportation Engineers.
- In South Carolina, Ryan Harvey is mid-term in his position as the State President of the American Society of Civil Engineers.
- Deveron Sanders serves as the Chair of Michigan's Board of Professional Engineers and serves on the Board of Architects as the professional engineer member.

We are also happy to support the many staff who are in leadership roles at the local chapter level or serve on various local, state, and national committees. In addition to those involved with their professional organizations, we have a long list of team members serving on local Planning Commissions, Zoning Boards of Appeal, and School Boards. Adding even another layer are the various civic organization boards and committees that ROWE staff participate in, many in leadership roles. We encourage our team to continue to grow both professionally and personally as we move into the latter half of 2022.









Memorial Healthcare - Neuro Wellness Center

Memorial Healthcare (MHC) has partnered with ROWE on many projects over the past 20 years. This year, all phases of the new Neuro Wellness Center located at 819 N. Shiawassee Street have been completed. Our team had the pleasure of working alongside the architectural team and Owner on their new 43,000-square-foot three-story health care facility. Our services for this project included complete topographical and boundary survey services including easement preparation; and civil design services including water, sanitary, storm sewer, grading, landscaping, and permitting. All site plan and permitting was completed by ROWE through the City of Owosso and MDOT. A portion of work also included the design of a large block retaining wall along the north end of the property. ROWE was also minimally involved in construction, providing construction staking services and utility conflict resolution as necessary.

Focusing on the complete development of the remaining property on the site, the proposed 43,000-square-foot building included a circular drop off and patient entrance, along with a sky link to the adjacent cancer center. The project included relocating existing water and sanitary lines to make room for the building, a complete analysis and reconfiguration of the existing parking lots to provide maximum capacity, a new boulevard entrance from M-52, a large block retaining wall along the north property line, and a comprehensive landscaping plan that included lighting

and irrigation. Stormwater management also focused on an underground detention facility that is connected to the existing municipal storm water system.

Being the third major development on Memorial Healthcare land, this project essentially completed the build out of the property. This area has been used as a hospital for over 100 years and has served the community well. Knowing that there was very little real estate available for development, our design utilized every square foot of property.

ROWE has had the privilege of working with MHC for over 20 years on a number of projects across Shiawassee County. We have enjoyed partnering on these exciting projects that provide healthcare services to our community.

During construction, one of our challenges was the discovered discrepancy on the north property line. The original 1920s hospital property description

differed from the later description for the adjacent subdivision. The result was a property line that overlapped by as much as twenty feet. To complete the project without delays, MHC decided to construct a concrete block retaining wall and natural screening along the contested property line to meet zoning requirements for the parking lot. ROWE worked through the requirements with the City of Owosso and prepared the necessary legal descriptions for resolving the contested property lines. In the end, MHC chose to waive their right to the contested property and convey it to the adjacent property owners.

The differing floor elevations between the new building and the Cancer Center was challenging structurally, and required detailed cooperation between ROWE, the sky walk fabricator, and the contractor. As a solution, ROWE worked with the contractor and fabricator to redesign and field stake the proposed supporting columns for the sky walk. Additionally, the existing sanitary sewer that serviced the existing cancer center was determined to be too flat to function properly. The project ended up relocating this service to accommodate the new building.

This new facility will provide many health care services for the surrounding community. Offering a wide range of wellness classes, the facility also includes a health club with a cardio exercise area, sky track, swimming pool, sauna, and more.

For more information, visit https://www.memorialhealthcare.org/wellness-center/







Temporary steel supports under each beam, these steel supports allow the structure to be posted at 30 tons. The new superstructure will restore full capacity to the bridge.

GENESEE ROAD BRIDGE BEFORE IMAGES



The approach slab has spalled and has been patched with cold patch material increasing the impact loading on the bridge. The approaches will be replaced,

creating a seamless transition to the bridge deck.

Spalled areas on the deck have been patched with cold patch, allowing water and salt to sit in these locations further deteriorating the deck. The deck and superstructure will be replaced.

Steel truss supporting water main. Water main will be maintained during construction.



Restoring Michigan Bridges

Set for construction in April 2023, the bridge on Genesee Road over the Flint River is undergoing a superstructure replacement. Genesee Road is a county primary road with significant traffic. The project includes removal of existing deck, superstructure and partial substructures, and replacement of the superstructure and related concrete approach pavement. The existing bridge has a current weight restriction of 30 tons, and is continuing to deteriorate.

The new superstructure will restore full capacity to the structure, allowing unrestricted flow of industrial, commercial, and residential traffic along this corridor. ROWE has provided survey and design for this project and will provide construction engineering services when the fieldwork begins next year. The existing bridge is a single 134-foot span consisting of variable depth steel girders. The proposed superstructure consists of 134-foot-long, 5-foot-tall steel built-up painted girders. Due to the existing substructures capacity, everything had to be as light as possible. This included placing light weight fill (EPS Blocks) behind the abutments and backwalls and using an 8-inch-thick deck with stainless steel reinforcement as opposed to the typical 9-inch with epoxy coated rebar.

Required to be constructed part-width, the biggest challenge was the width limitations on each lane. In order to allow emergency services to continue to provide 24 hour access to the community south of the bridge, the traffic will be maintained utilizing temporary signals with one lane of bi-directional traffic travelling over the bridge. Pedestrian traffic will also be maintained during construction.

Funded by MDOT Local Bridge Funds, this project will improve the capacity and allow for unrestricted growth along this heavily traveled corridor.







Pipeline Locator Training

Here at ROWE, we are dedicated to mentoring professionals and providing continuous learning. Members of our surveying team have designed an internal training program to increase the knowledge and accuracy of staff that are regularly tasked with performing underground pipeline locating services. Certified Trainer, Garrison Rule, is now leading a simple 3-day training that provides real world experience in the field and written work in a classroom setting. The training will be utilized on an as-needed basis in our surveying department.

All trainees passed their written and field testing, proving their ability to properly identify location and depth of utilities in an urban setting as well as reduce the potential for dangerous and expensive line strikes. As we continually strive for our goal of zero incidents, it is important to have these prevention and reduction skills. Ensuring utilities and pipelines are accurately located within the right of way or utility corridor also helps to avoid potential future issues such as encroachments to adjacent landowners or environmentally sensitive areas.

8







Day One

- Introduction and Overview
- Type of Utilities to Locate
- Methods of Underground Utility Locating
- Identify existence, horizontal position, and depth of pipeline utilities
- What conditions can cause erroneous readings?
- Locator Functionality
- How Do Electromagnetic Utility Locators Work?
- Common Sources of Interference
- Technologies FLIR cameras, thermal imaging, ground penetrating radar, GNSS capable locators, utilization of drones
- Line Locator Hands On Practice

Day Two

- Continuation of Day One Topics
- How to Use EM Locators Part 1
- How to Use EM Locators Part 2
- Field Training

Day Three

- Class Review
- Written Test
- Hands-on Field Proof Test

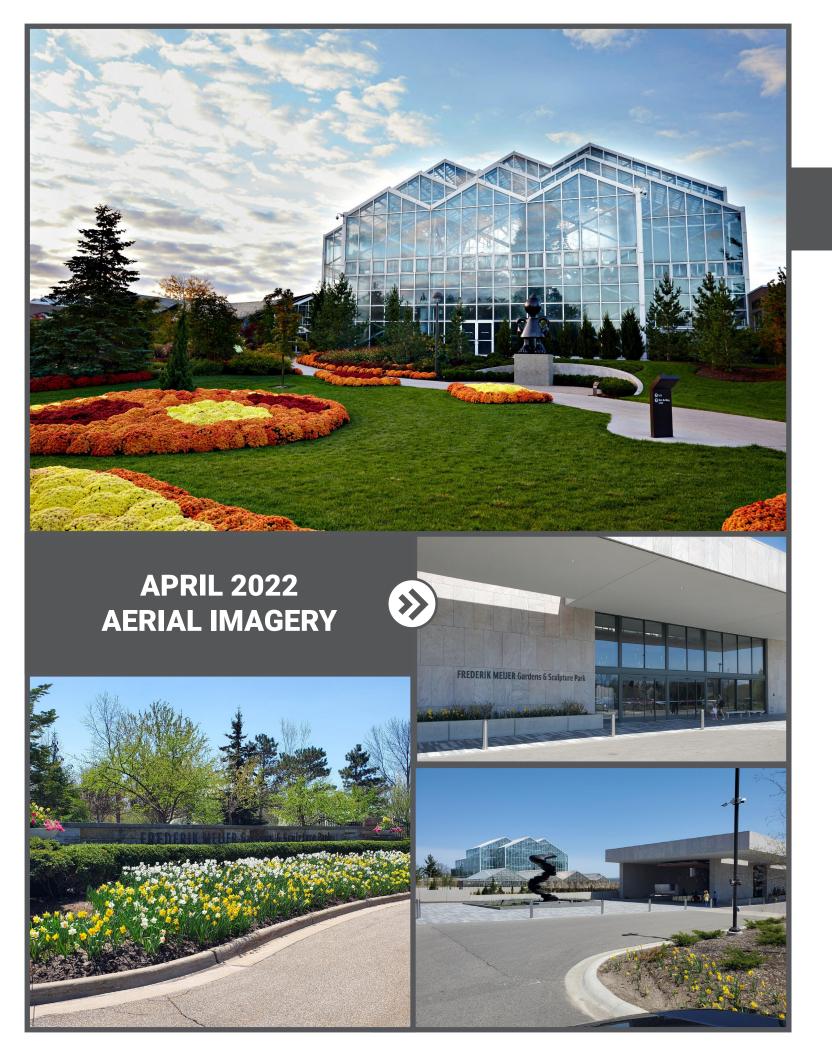
Quotes from staff







"I have been involved in locating for going on 2 years now. Working out of the Lapeer office, the majority of our work is for Consumers Gas. Garrison showed alternate ways to accomplish tasks which was a great learning experience. The class definitely left me more confident and I always look forward to gaining more experience in the field." -Mitch Jaynes





Frederik Meijer Gardens

The Frederik Meijer Gardens facility is a West Michigan favorite among community members. Open since 1995, the park has been home to Michigan's largest tropical conservatory along with many other connections to nature.

ROWE completed updated digital aerial imagery for the facility in April of 2022. Working around discouraging weather conditions and seasonal foliage, we used the previous survey ground control established for Meijer Gardens to supplement the new aerial imagery. The existing digital elevation model was edited to account for any changes to the original terrain surface and the new digital orthophotography was generated and delivered.

These services will allow the staff to evaluate current conditions of the facility and plan for the future.

Grand Rapids, MI



https://www.meijergardens.org/



Notes for Rookie Planning Commission and Zoning Board of Appeals Chairpersons (and Experienced Ones too!)

You have just been voted the new chairperson of your Planning Commission or Zoning Board of Appeals (ZBA). Congratulations! So, now what?

Having worked with hundreds of new chairs, we have a few simple ways make a big difference in how effectively planning commission and zoning board of appeals (ZBA) meetings operate. Coincidentally, these approaches also tend to make the experience of being chairperson much less stressful. As you prepare for your next meeting, here are some things you can do to help the next meeting run even better:

Know the rules – Planning Commissions are required and ZBAs are recommended to have an adopted set of by-laws. If you do not have any, that should become a priority for you and your commission. Among other things, by-laws:

- Outline the responsibility of your officers (chairperson, vice-chairperson, and secretary).
- Establish the order of business at all meetings.
- Establish the order of speakers during public hearings.
- Specify if there is a time limit on public comments.
- Establish what to do if a member has a conflict of interest.

Follow the rules – Once you know what the rules are, do not use them only in a crunch. If time limits are not enforced on public comments at every meeting, your authority to require them when you have a room full of residents is questionable. Furthermore, if you limit public comments to a certain phase of the hearing, do not let supporters or opponents of a particularly contentious request hijack the meeting by speaking out at other times. Bylaws provide you with a roadmap to handle other contentious situations like conflicts of interest and expectations of members.

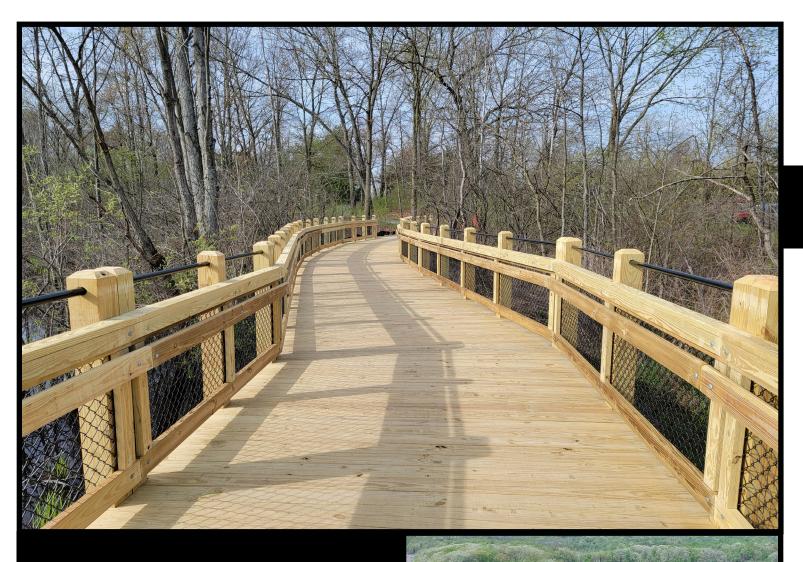
Remind others of the rules – Before a hearing or review of a request, take a few minutes to go over the rules so everyone knows what to expect and when they will have an opportunity to comment. This helps to remind your fellow planning commission or ZBA members of the rules as well! Some communities print a summary of the public hearing rules on the back of their agendas.

Let staff speak first – When reviewing a request like a site plan or special land use, let your planner or attorney present their report first, or if none is present at the meeting, you as the chairperson can read the report. Next, allow the applicant to speak and address any issues identified in the report. At this point, it is likely that many of the questions that the public has about the request will be addressed. This approach allows the public to understand the criteria the planning commission or ZBA are using to evaluate a request so they can orient their comments to address those standards if they wish or focus on their concerns, rather than asking questions about the project.

Don't take it personally – Be prepared for upset or angry applicants or members of the public – land use decisions often have a significant impact, whether real or perceived, and meetings can become very emotional. It is important to consistently treat everyone on both sides of an issue with patience and respect (having clear rules and procedures makes this much easier). It is natural to get defensive when people are yelling at the commission and making statements that demonstrate they do not understand the commission's role or the limitations on your authority. Do not take it personally. Most people will respond well if they believe they are being heard and treated fairly.

While this list is certainly not exhaustive, it should be helpful as you take on your responsibilities as a chairperson. Remember, you are not alone. Your municipal planner or attorney can help. Organizations such as the Michigan Association of Planning, Michigan Municipal League, Michigan Township Association and MSU Extension offer training courses for planning commission and ZBA members. ROWE also conducts two Continuing Education Series programs annually, and regularly consults with our clients on strategies to improve public meetings and the land use decision-making process. With these tools, we know you are set up for success in your new role!

Contact: Doug Piggott, FAICP Dpiggott@rowepsc.com











Take a Walk

With the summer season upon us, it is a great time to go outside and enjoy the new boardwalks in Washtenaw County. The community now has access to safer walking paths with wider designs that will last for over 30 years.

Draper-Houston Meadow Preserve: With the existing boardwalks shifting from their original location due to high flow events, from the adjacent Saline River two Draper-Houston boardwalks were reconstructed. The longer of the two was widened to better serve the park and reconstructed in place, while the shorter boardwalk was removed and reconstructed outside of the floodplain. To avoid further displacement from floodwaters, helical piles were used to anchor the boardwalks as opposed to resting the boardwalks on the ground with no anchor system. Existing environmental factors were the biggest challenge while reconstructing the walks. Care was taken to protect the wildflower meadow and floodplain from any damages. This reconstruction was built in the winter to minimize disturbance.

Independence Lake County Park: Scoping for replacing 7 existing boardwalk segments was completed since they were deteriorating and sinking into the wetlands. The first phase included reconstruction of three boardwalks. During reconstruction, the soils encountered in the middle of these boardwalks were much softer than perimeter soil borings, so the helical piles needed to be driven deeper than originally anticipated. This proved to be a challenge due to the cost overrun for the piles. Working closely with the client project manager, the maximum design load was defined more precisely based on park staff needs and the total length of piles was able to be reduced to save costs while maintaining park quest and staff needs. The new boardwalks included railing and width increases to meet modern codes which the previous boardwalk did not meet. These boardwalks are also used during school field trips and special access gates were installed in areas identified by the park staff so that the park naturist can better access the wetlands.



Client: Washtenaw County Parks & Recreation Commission

To Learn More:

https://www.washtenaw.org/Facilities/Facility/Details/DraperHouston-Meadows-5 https://www.washtenaw.org/424/Independence-Lake-Park





Building a Community

Providing homes to hundreds of people, ROWE has been working on design, permitting, construction, and survey for The Farm at Timberlake project. The project has been through many different phases since 2015, with the most recent being Phase III. This involves construction of a residential subdivision with new road construction, sanitary sewer, storm sewer, force main, water main, sidewalk ADA ramps, and landscaping.

This development is a 220-acre, 456-lot subdivision in Horry County, South Carolina. The project is bounded on the north by an existing subdivision, on the south by commercial development, on the east by Highway 707, and on the west by Freewoods Road.

ROWE has designed the subdivision, including the boardwalk and pond. To develop the master plan, storm water reports for adjacent properties were obtained and incorporated into the design considerations. The final design was developed with consideration of avoiding adverse impact to other properties in the watershed area while still protecting the development during rain events. Downstream conditions were evaluated and used to develop tailwater conditions for the outfall. A network of storm sewer, existing/proposed ditches, and interconnected ponds were designed using the ICPR storm water analysis software program.

New residential land developments are in the works for Florence and Darlington Counties in South Carolina. Working out of our Myrtle Beach office, ROWE is providing aerial mapping, land surveying, and design services for DR Horton. The single-family residential development will be 292 acres, totaling 850 homes.

ROWE has performed the aerial LiDAR flight to map the site and topography. Conventional surveying practices were used to run the boundary and to pick up any supplemental topography for the entire site. Being a large parcel of land, our biggest challenge will be the sheer number of phases to be completed. There will be 14 phases for this development. Our engineering division is in the process of creating lot layouts for Phase I and Phase II, along with mass grading of the site. Set for final completion in 2028, this project will help the community grow sustainably and create more business for local shops and restaurants.

Horry, Florence & Darlington Counties, SC

AWARDS

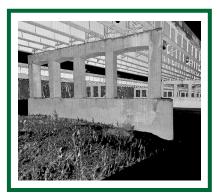
The Road to Excellence ACEC Award | I-196

Awarded the American Council of Engineering Companies of Michigan (ACEC) 2022 Surveying Merit Award, our I-196 design survey assisted with consultant design for replacement of two bridge structures, interchange improvements, and I-196 mainline upgrades. A team of two primary surveyors, along with as many as five survey field crew members, were on site for approximately five miles of mobile terrestrial LiDAR (MTL), two miles of expressway full right-of-way mapping, and for hydraulic surveys of two bridge structures over Grand River.

A big factor in our success was the team's innovation strategy, practicing a merging of topographic data collected using MTL, stationary terrestrial LiDAR (STL), and bathymetric remote sensing techniques together in one deliverable. Remote sensing strategies have been used in the surveying industry for quite some time; however, the ability and practice of merging topographic data collected using MTL, STLS, and bathymetric remote sensing techniques together in one deliverable is still a new practice. The methodology that ROWE developed for this project can be used on future projects, increasing both the efficiency and safety of how data can be collected. The ability to collect the necessary under clearance, travel way, and bridge structure measurements without the need to put field staff in potentially dangerous situations is a major advantage to using remote sensing techniques. The more these techniques are utilized, with their data quality proven, the safer topographic data can be collected. We are honored to be acknowledged among such talented professionals and look forward to next year!

196 PROJECT IMAGES







INDIVIDUAL AWARDS







Leanne Panduren Diamond Award

Presented at the 2022 Michigan Society of Professional Engineers annual conference, ROWE CEO, Leanne Panduren, PE, FNSPE, FMSPE, was honored with the Diamond Award! New for MSPE's 75th anniversary, the Diamond Award recognizes members who have provided exemplary service to the Society, including leadership at the state level, fostering membership, protecting the practice, securing the future, and providing a hand in governance. Thank you for your contributions to the engineering profession.

Hailey Savola ASCE Young Engineer Award

Congratulations to Senior Project Engineer, Hailey Savola, for her professional achievements! Awarded the Edmund Friedman Young Engineer Award for Professional Achievement, Hailey has demonstrated her dedication to the industry and continues to be a leader in her field.

Douglas Piggott College of Fellows Induction

Congratulations to Senior Planner, Douglas Piggott, FAICP, for his induction into the American Institute of Certified Planners (AICP) College of Fellows! This highest honor is well-deserved, and we look forward to seeing your impact on the planning profession for years to come.

HAPPENINGS



Kettering CNX

To provide a space for vehicle testing, ROWE designed the Mobility Research Center (MCR) at Kettering University where CNXMotion, a Continental and Nexteer joint venture, promoted their new software technologies during a week in June. CNXMotion has expanded their brake-to-steer technologies in all vehicle types to enhance safety, control, and cost-efficiency. ROWE Project Manager, Doug Schultz, PLA, met with Jack Stock of Kettering University and Brian McGregor of CNXMotion to preview the event.

CNXMotion General Manager, Greg Katch, commented, "CNXMotion is appreciative of the MRC track and all the hard work Kettering puts into making it a great facility. This local cost-effective track makes it convenient to showcase our emerging safety technologies to major automotive manufacturers."



KETTERING UNIVERSITY

Lieutenant Governor Gilchrist Visit

Stepping into the field for a firsthand look, Lieutenant Governor Gilchrist came to visit the I-196 project construction site. An investment of \$8.5 million allows the new construction to feature an interchange connection lane westbound. Using Rebuilding Michigan funds, over 16,000 miles of roads and more than 900 bridges are expected to undergo repairs this year.

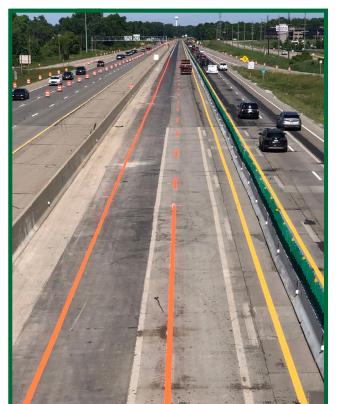


Work Zone Safety Aiming to increase saf

Aiming to increase safety in Michigan work zones, ROWE collaborated with the Michigan Department of Transportation, Dan's Excavating, and PK Contracting to install the first orange pavement markings in our state. Special approval from the Federal Highway Administration was needed to move forward.

To obtain test video data, the American Safety Council will perform several data collection runs with a range in ambient lighting, sun position, and road conditions. The ASC vehicles, equipped with high-resolution video cameras and precision GPS, will be driven through the new test zones following posted speed limits to collect video data for post-drive engineering laboratory analysis. This testing will determine the capabilities of vehicle vision software in relation to detecting and differentiating the orange construction zone pavement markings.

With safety being ROWE's top priority, we are excited to be part of this pilot!







SPOTLIGHT



2022 IRWA Michigan Chapter 7 - President

HENRY HORTON



We're excited to announce that Henry Horton, PS, Senior Project Manager for ROWE Professional Services Company, has been acknowledged as the newest President of the International Right of Way Association Michigan Chapter 7 for 2022. Please join us in congratulating him on this significant achievement!

New Hires

Bonnie Wood
Jonathan Palmer
Jackson Lockwood
Benjamin Keller
Armando Lopez
Morgan Raley
Robert Broadbent
Alexander Newell
Julia Alexia Balona
Lynsey Baker
Jennifer Pellegrini
Cameron Brosamer
William Mayhew
Matt Bellgowan

Summer Interns

Nicholas Gorney Tyler Reichel Jacob Irwin Samuel Kuipers **Tyler Sladick Jacob Voelker Brady Lawrence Cade Palmer Matthew Plaga Mason Powell** Carli Warren **Abigail Righter Simon Peter** Lily Craighead **Zackary Brown** Jimmie Elizando **Alison Swanson Aaliyah Harris Jonathan Romes**

Total Employees: 241

Careers

We recognize talented, self-motivated, and open-minded professionals are the key to ROWE's continued success and growth. From competitive benefits / compensation packages, to company sponsored events, ROWE takes pride in being a progressive place to advance your career.

Email: employment@rowepsc.com

ROWE is an Equal Opportunity Employer.



ROWE Social Media

Be sure to follow all of our social medias to keep up with our newest projects, events, and announcements! (scan the QR code)



Our funding booklet has officially launched!

This booklet contains a range of funding resources that ROWE clients have received, or for which we see potential to address common infrastructure and community development needs. ROWE staff are glad to assist you in creating the best strategy to move forward with any project and we encourage you to reach out to your ROWE project manager for any booklet or information requests.

ESTABLISHED

PROFESSIONALS

LOCATIONS

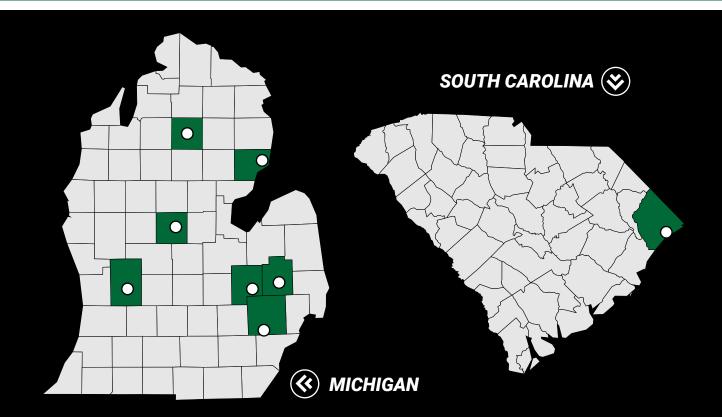
ENR TOP 500

1962

240+

8

#413



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Grayling, MI

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Kentwood, MI 4345 44th Street SE

Kentwood, MI 49512

(616) 272-7125

Oscoda, MI

212 N. State Street Oscoda, MI 48750

(800) 837-9131

Farmington Hills, MI

27280 Haggerty Road, Suite C-2 Farmington Hills, MI 48331

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Myrtle Beach, SC

6009 Kings Hwy Myrtle Beach, SC 29577

(843) 444-1020

Mt. Pleasant, MI

127 S. Main Street Mt. Pleasant, MI 48858

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