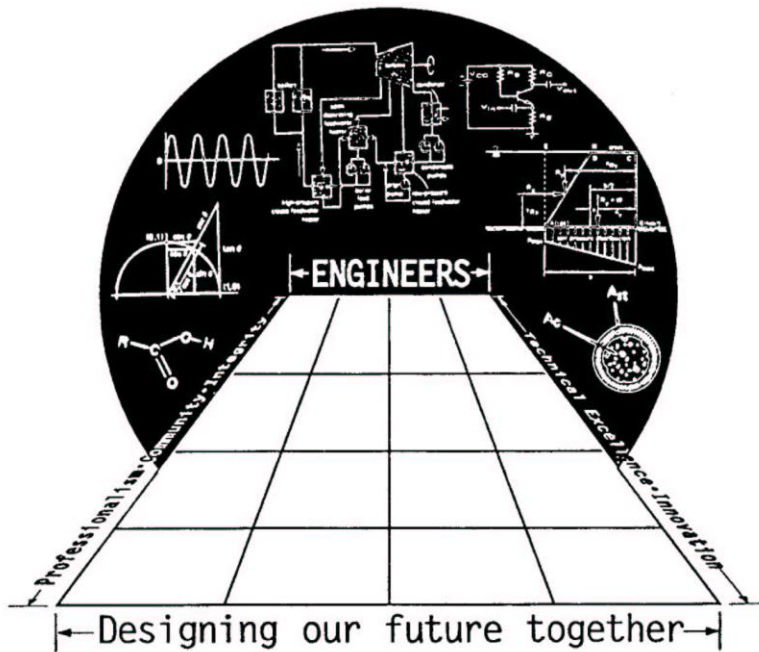


25th Joint Engineering Societies Conference

The Cajundome Convention Center in
Lafayette, LA

April 27 – 28, 2021



PARTICIPATING SOCIETIES

Louisiana Engineering Society
Institute of Electrical and Electronics Engineers
American Society of Civil Engineers
American Society of Mechanical Engineers
American Institute of Chemical Engineers
Society of Petroleum Engineers
American Council of Engineering Companies of Louisiana
Louisiana Society of Professional Surveyors

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Exhibitor

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Advanced Drainage Systems, Inc.

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D&W Systems

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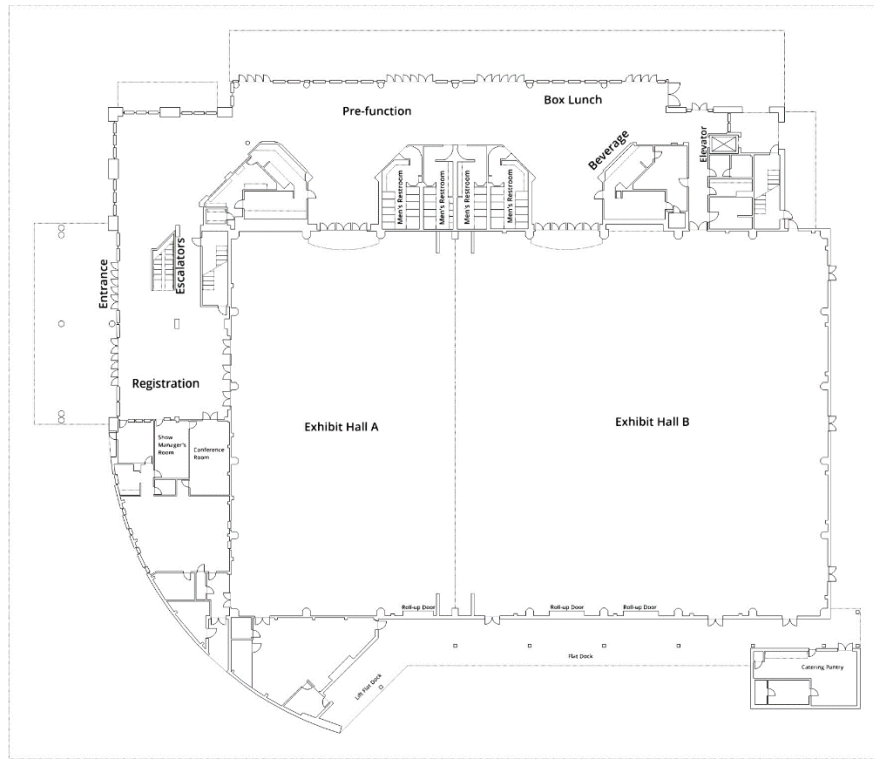
ETEC

Quality Site Work

Wholesale Pump & Supply

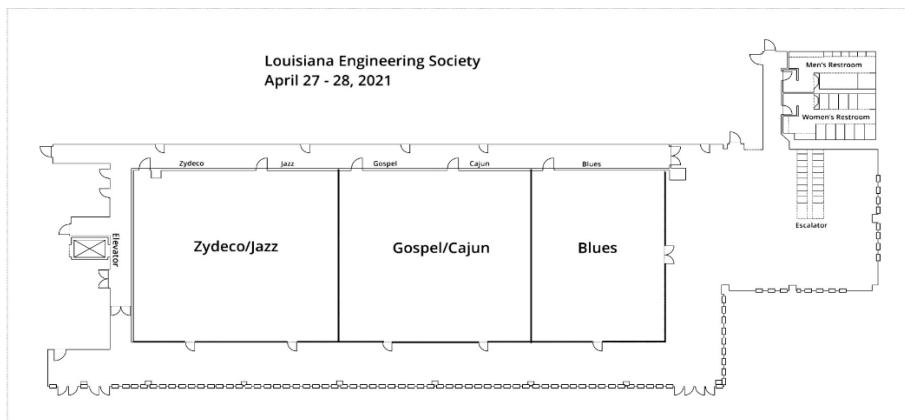
Keogh, Cox & Wilson

Conference Layout



Powered by Social Tables

Full Convention Center Floor for Floor Layouts w/room labels - January 1, 2021, 12:00 PM



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Festival Ballroom + Corridors Copy for La Engineering Society - April 27, 2021, 12:00 PM



25th Joint Engineering Societies Conference

Cajundome Convention Center—Lafayette, LA

April 27 - 28, 2021



Monday, April 26th		
5:00 PM—8:00 PM	LES & LEF Board Meetings	
Tuesday, April 27th		
8:00 AM—4:30 PM	LES Registration	
8:00 AM—8:30 AM	Continental Breakfast with Exhibitors	
8:30 AM— 9:20 AM	Blues	Google AppSheet, Leveraging Remote Operations in the Wake of COVID-19—Ryan J. Fuselier, PE, PLS
	Cajun/Gospel	Upgrading Lagoon Based Treatment Systems to Meet More Stringent Limits for BOD, TSS and Nutrient Removal—Tom Birkeland
	Jazz/Zydeco	Sanitary Sewer Triage—Josh Graham
	Exhibit Hall B	Pre & Post Installation Inspection of Storm Water Drainage Systems —Don Conrad
9:20 AM—9:45 AM BREAK IN EXHIBIT HALL A—Sponsored by ETEC		
9:45 AM - 10:35 AM	Blues	AWP—Advanced Workface Planning As Related to the Scaffold Industry—Glenn Young, PE
	Cajun/Gospel	Utilizing Crowd Source Technology and Big Data to Monitor and Manage Road Networks in Real Time—Candler McCollum
	Jazz/Zydeco	Standards of Practice—Shawn MacMenamin, PLS
	Exhibit Hall B	Contracting Basics—by Mary Anne Wolf, PE
10:35 AM - 11:00 AM BREAK IN EXHIBIT HALL A		
11:00 AM - 11:50 AM	Blues	7 Things You Should Understand About Quality Assurance—Danny Gierhart, PE
	Cajun/Gospel	Enhanced Outdoor Air and Building Pressurization Strategies—Jim Riendeau
	Jazz/Zydeco	Air Valves—Proper Application and Sizing on Pump Stations and Forcemains—Andy Brown
	Exhibit Hall B	Introduction to USDA Rural Development and Current Procedures for Funding Water and Environment Projects—Tony Matlock, Community Programs Director & David Suire, PE
12:00 PM - 1:30 PM LES AWARDS LUNCHEON—Exhibit Hall A		
1:30 PM - 2:20 PM	Blues	Utilizing the PE in the Federal GOM—Warren “Rick” Farmer, IV
	Cajun/Gospel	Navien NPE Commercial Applications Training—Kevin Milazzo
	Jazz/Zydeco	Tracer Wire—Using a Complete System for More Accurate Locating—Andy Brown
	Exhibit Hall B	Equipment Warranties and Operator Maintenance—Ben Humphries
2:20 PM - 2:40 PM BREAK IN EXHIBIT HALL A—Sponsored by Quality Site Work		
2:40 PM - 3:30 PM	Blues	Seismic Pipeline Design with Ductile Iron Pipe—Allen Cox, PE
	Cajun/Gospel	Subsurface Utility Engineering: Recent Developments & Upcoming Changes—Wilfred Barry, PE, PLS
	Jazz/Zydeco	Solutions for Headworks Design Hydraulic Challenges—Scott Griffith
	Exhibit Hall B	Evaluating Wireless Communications to Enable New Technology Efficiencies—Leo Holzenthal Jr., PE, Joe Brinz, & Brian Lozes, PE
3:30 PM - 3:50 PM BREAK IN EXHIBIT HALL A		
3:50 PM - 4:40 PM	Exhibit Hall B	Public Bid Law—Brett Robinson
4:40 PM - 6:00 PM EXHIBITOR MEET N’ GREET—Exhibit Hall A—Sponsored by D&W Systems & Ergon Asphalt & Emulsions		

DAY 1 – Tuesday, April 27, 2021

8:30 am – 9:20 am

Google AppSheet, Leveraging Remote Operations in the Wake of COVID-19

When I started my small surveying and mapping business, having worked many years for a top 500 engineering firm, I was looking for a way to manage the day-to-day operations with the level of mobile and desktop sophistication found with my previous employer's data management system. I was not aware of a canned solution, in a simple and easy to use platform, currently available on the market. Nor did I have a staff of programmers at my disposal to build one from scratch and offer continuous maintenance. Given the mobile nature of our operation, and in the wake of COVID-19, the solution needed a combined mobile and desktop component with the following modules: field schedule, field notes, project/proposal generation, accounting and timekeeper as a starting point. The system needed to leverage our primary source of organization being Excel and Dropbox. After several weeks of research my findings pointed to Google AppSheet. Google AppSheet is a hidden jewel within the user development community stacked with widgets that provide the backbone for custom user development. Let me show you how a non-programmer crafted and automated a comprehensive mobile platform, unique to my business, that manages over 350 survey related projects a year, 14 employees and customer specific applications. AppSheet will streamline your data, organize your workflow and provide the cutting edge you need to increase your volume while utilizing the same amount of manpower.

Ryan Fuselier, PE, PLS is a registered Professional Civil Engineer and Land Surveyor across Louisiana and Texas with over 25 years of experience in his field. Throughout his career Ryan has conducted well over 2000 surveying and mapping projects with an emphasis on advanced technologies such as laser scanning, dimensional control and UAV aerial lidar/photogrammetry services. Mr. Fuselier is President of R. J. Fuselier & Associates, LLC. A surveying and mapping firm centered around Lafayette, La. and North Houston, Tx. with clients across the Gulf Coast Region. Ryan is Past President of the Louisiana Society of Professional Land Surveyors and his hobbies include long distance running and general aviation.

8:30 am – 9:20 am

Upgrading Lagoon Based Treatment Systems to Meet More Stringent Limits for BOD, TSS and Nutrient Removal

Wastewater treatment process design modeling software, which models biological, chemical, and physical treatment processes, can be used to optimize the design, performance and reliability of lagoon based treatment systems. Lemna Environmental Technologies (LET) employs a dynamic wastewater treatment process simulation model, to analyze performance of existing facilities and the expected performance of proposed facilities. The modelling software is widely used in the wastewater community to investigate the impact of various changes in loadings and temperatures and allows LET to thoroughly verify process design and performance especially with regards to BOD, TSS and ammonia removal.

Using historical DMR data from an installation base of over 300 facilities, LET created a unique software model of its LemTec Biological Treatment Process, which utilizes a combination of aerated and settling lagoon cells for biochemical oxygen demand (BOD) and total suspended solids (TSS) removal, and the Lemna Polishing Reactor (LPR) for nitrification. By calibrating the model through the analysis of historical operating data, the model can be used as an accurate predictor of process performance. The model may be manipulated to reflect the size, configuration, loading, aeration and effluent requirements for current or future facilities and is especially useful in predicting and troubleshooting nutrient removal.

The model enables LET to consider the effects of non-steady state factors such as peak flows, constituent loading, and ambient air and water temperatures on treatment performance, improving upon traditional steady state wastewater treatment process design methodology. The discussion will provide data and specific case studies demonstrating the predicted performance vs. actual data, using the calibrated model. Regional case studies will be used to demonstrate the benefits of modeling practices for lagoon design.

Tom Birkeland is the Director of Project Development for Lemna Environmental Technologies (LET). He previously held project management positions with North American Wetland Engineering, Jacques Whitford, Stantec and Natural System Utilities, where he was responsible for 35 sustainable, decentralized water and wastewater treatment projects throughout Minnesota. He holds Class C Water and Wastewater licenses and the projects he managed received over 20 awards from the Minnesota Pollution Control Agency for operational excellence and compliance. He is a graduate of the University of Wisconsin-Madison and resides in Minnesota.

8:30 am – 9:20 am

Sanitary Sewer Triage

Since the beginning of recorded time, man has built and maintained some form of sanitary sewerage conveyance systems. These systems require ongoing maintenance, replacement and rehabilitation efforts. As these systems begin to age and deteriorate, they require assessment prior to owners making costly maintenance and rehabilitation decisions. The accurate, professional evaluation of sanitary collection systems is known as SSES and is critical to the rehabilitation process. This session will discuss an approach to SSES that will prove to be cost effective for the owner.

The collection, management and evaluation of field data are the center of any sewer rehabilitation program. The SSES is the driving force for rehabilitation and construction projects. This session will highlight the tools and technologies of an effective Sewer System Evaluation Survey. The application of each evaluation process will be discussed and its value in determining structural and hydrological system characteristics. An overview of system rehabilitation planning and capital budget preparation will be discussed.

Josh Graham has been with Compliance EnviroSystems (CES) since 2009 and is responsible for business development and client management for Louisiana, Arkansas and Texas. Mr. Graham is experienced in all aspects of sanitary sewer and storm drain evaluation, cross bore locating surveys, pipeline and manhole rehabilitation, disaster recovery and more. While at CES, Mr. Graham also gained extensive experience in Construction Program Management.

Mr. Graham is a Certified Class 4 Wastewater Collection Systems Operator, Class 2 Wastewater Treatment Plant Operator and has completed countless hours of wastewater operator certification training classes. The National Pollutant Discharge Elimination System (NPDES) recently certified Mr. Graham as a Stormwater Inspector.

Mr. Graham is on the Board of Directors for the Louisiana Chapter of the American Public Works Association (APWA) and is affiliated with the Cross Bore Safety Association (CBSA), Louisiana Rural Water Association (LRWA), Louisiana Engineering Society (LES), American Society of Civil Engineers (ASCE), Louisiana Municipal Association (LMA), National Association of Sewer System Companies (NASSCO) and the Water Environment Federation (WEF).

8:30 am – 9:20 am

Pre & Post Installation Inspection of Storm Water Drainage Systems

Discussion of the current inspection of drainage pipelines after installation. Includes the methods including man entry, mandrels and video/laser inspection. Discussion of new LA DOTD EDSM included.

Don Conrad has 7 years as Technical Resource Engineer for Forterra Pipe & Precast, 16 years of pipeline experience including ductile iron pipe, corrosion consulting and reinforced concrete pipe. He also has experience in geotechnical testing equipment sales and training.

9:45 am – 10:35 am

AWP – Advanced Workforce Planning as Related to the Scaffold Industry

To demonstrate the efficiency of BrandSafway's state of the art CAD based computer aided scaffold design software BrandNet™ and how it relates to overall Advanced Workforce Planning AWP as related to the Scaffold Industry. This design software is used in conjunction with the various 3-D modeling packages; Navisworks, SP3D, Construct SIM and the latest Laser Scan software packages to visualize designs and optimize solutions. These solutions are shared with site Scaffold Coordinators as well as all end user craft personnel to ensure the most efficient design for all. The presentation will demonstrate examples of cost savings during the engineering and construction phases of the project.

Glenn Young, PE is a graduate of Louisiana State University with a BS in Mechanical Engineering and a Professional Engineer specializing in scaffold design and access optimization for the last 35 years. Current title as a Director – Managed Access & Optimization Programs for BrandSafway Services, LLC. Assisted over the years in the development of our state-of-the-art 3D Scaffold Design Software used in conjunction with BIM Modeling. Specializing in engineered scaffolds, creative scaffold design & alternatives, project planning, various contract structures, and critical path productive solutions.

9:45 am – 10:35 am

Utilizing Crowd Source Technology and Big Data to Monitor and Manage Road Networks in Real Time

Roadway Management technologies is an integrated solution that combines passive survey collection, fleet tracking, and work order management.

Candler McCollum is the co-founder and CEO of Roadway Management technologies, the first company to integrate passive survey data collection, fleet management, and work order management into a single cloud source platform.

9:45 am – 10:35 am

Standards of Practice

Review of standards of practices for Land Surveyors to meet CEU for Louisiana Professional Land Surveyors 2021 requirements.

Shawn MacMenamin, P.L.S., is a graduate of Nicholls State University (2009). Initially licensed in Louisiana in 2013, he now holds licenses in Mississippi (2014), Texas (2015), Florida (2018), Oklahoma (2018), Georgia (2018), New Mexico (2019), Alabama (2020) and Kentucky (2020). Shawn has served as LSPS District 3 chairman since 2017. Shawn has worked for various Engineering and Surveying companies in south Louisiana, currently his position is Senior Project Manager at Duplantis Design Group, PC in their Lafayette office. He has been married to his wife Kathy since 2004, and they have one son Bryce who is 10 years old.

9:45 am – 10:35 am

Contracting Basics

This seminar will review the key provisions in a design professional's contract, including: scope of services, standard of care, indemnity, limits of liability, immunity, independent contractor, responsibility for consultant's services, deadlines, arbitration, and attorney fees; as well as language to avoid and case law applying the contract provisions.

Mary Anne Wolf, PE is a partner with the law firm of Keogh, Cox & Wilson, in Baton Rouge. She is a licensed professional engineer and trial lawyer who represents engineers, architects, contractors and others in construction and other complex litigation. Mary Anne has over 10 years of experience in the construction industry working as an engineer. She received her Juris Doctorate from Louisiana State University and is a member of the Louisiana Engineering Society.

11:00 am – 11:50 am

7 Things You Should Understand About Quality Assurance

Like a multitude of other things, a good quality, long-lasting pavement costs money. It's only natural that when you spend a lot of money on something, you want to make absolutely sure that you're getting what you paid for. Quality Assurance is important because of the large amount of money it takes to build pavements, so we want to make sure it's money well-spent.

Danny Gierhart, P.E., has been the Asphalt Institute's Southeastern Regional Engineer since 2009, primarily serving the states of Texas, Oklahoma, Arkansas, Louisiana, Mississippi, Alabama, and Florida. He earned his Civil Engineering degree from the University of Oklahoma in 1985 and has been a registered professional engineer since 1990. He has had a diverse career, working in industry, agency, and academia. His 20 years with the Oklahoma DOT included 3 years roadway inspection and 5 years in research and development. For most of his ODOT career, he held the position of Bituminous Engineer, managing both the liquid asphalt and asphalt mix laboratories, plus writing all asphalt-related specifications for the agency. He spent 4 years in industry as Materials Engineer for Broce Construction Company, managing all asphalt mix design, QC/QA, and materials cost estimating for the company in Oklahoma, Texas, Kansas, Colorado, and New Mexico. He served the College of Engineering at the University of Oklahoma as an adjunct instructor from 1999 to 2010, teaching CE 5303, "Asphalt Materials and Mix Design."

11:00 am – 11:50 am

Enhanced Outdoor Air and Building Pressurization Strategies (COVID-19 Discussion)

Topics that will be covered include: Understanding Building Pressurization, comparing building pressurization control methods, static pressure, airflow measurement control, design and apply airflow pressurization control strategies in a normal and pandemic mode of operation. Discuss the challenges we are phasing in building ventilation because of COVID 19. During the discussion we will identify links between ASHRAE, LEED, and building pressurization, applications for effective pressurization control with airflow measurement control strategies.

Jim Riendeau has a Master's Degree in Mechanical Engineering with over 30 years of HVAC experience in roles ranging from Regional Sales Manager for York & McQuay to Strategic & National Account Manager for York and Trane. Jim's role as a Vice President is to manage the HVAC Distribution Channels for industry leaders in instrumentation such as EBTRON, BADGER METER and SAGE METERING. ESC's main focus is to educate the HVAC market on how airflow, water flow, gas flow and BTU metering.

11:00 am – 11:50 am

Air Valves - Proper Application and Sizing on Pump Stations and Forcemains

This presentation will explain why air valves are critical to any pressurized piping system including sanitary sewer pump stations and forcemains. It will also focus on helping the engineer properly locate and size air valves to maximize pump and energy efficiency. The presentation will conclude with practical design applications and installation examples that can be utilized on existing systems and future designs.

D&W Systems is a manufacturer's rep firm based out of Clinton, MS with over 35 years of service to the water and wastewater industry. D&W represents multiple products from around the world, including the industry leaders in flow meters, air valves and tracer wire

systems. **Andy Brown** has been a part of the engineering sales team with D&W since 2010. Andy's primary focus is working with engineers and their clients to find solutions to their unique and everchanging problems.

11:00 am – 11:50 am

Introduction to USDA Rural Development and Current Procedures for Funding Water and Environment Projects

Rural communities face significant challenges for replacing and upgrading aging and obsolete drinking water and wastewater infrastructure. Small and rural communities typically have higher per-user costs due to low populations, and often face unique capacity challenges during and post construction (managerial, financial, operational and technical) which significantly and disproportionately inhibit their access to infrastructure funding.

The U.S. Department of Agriculture's (USDA's) Rural Development (RD) Water and Environmental Programs (WEP) provide affordable financing for water and waste projects to improve the quality of life in rural communities. These communities are characterized by small populations with limited financial and technical capacity. They depend on the infrastructure projects funded by USDA to provide basic health and sanitation needs, and due to limited resources, the need for sustainability and resilience to protect their investment is needed. USDA supports sustainability in its projects by carefully evaluating them against prudent financial, environmental and engineering policies.

USDA's application review and selection process emphasizes sustainability in fiscal, engineering, and environmental aspects. Engineering reviews check that the system is modestly sized and appropriate for its intended use. The engineering submittal also requires a realistic estimate of operating costs as part of a life cycle cost analysis.

Born in Bossier City, **Tony Matlock** lived in Northwest Louisiana until attending Northeast Louisiana University (NLU) where he earned a BBA in Finance/Commercial Banking and with a minor in Insurance and Real Estate. He previously worked in sales, real estate, and conventional mortgage lending prior to beginning his career with USDA in 1999.

At USDA he has worked as a Single-Family Housing Specialist, Community Programs Specialist, Area Director, and is currently the Community Programs Director. Through USDA he works with individuals and local communities to provide funding for business and industry, housing, safe and sanitary water and sewer systems, and other types of Community Facilities, such as fire protection services, healthcare, libraries, school projects, town halls, equipment and various other needs.

David Suire, PE is currently a resident of Rapides Parish. David graduated from the University of Southwestern Louisiana in May of 1995. After graduation, he worked for private Engineering Consultant firms from 1995 to 2008 in New Iberia and Lafayette, LA. David has served as the United States Department of Agriculture Rural Development State Engineer since 2008 and is headquartered in the USDA Rural Development State Office in Alexandria, LA. David is responsible for the Civil Engineering activities associated with projects financed by Rural Development. His duties include examining and analyzing preliminary plans, working drawings, cost estimates and all contract documents. He also reviews work in progress or work completed for the construction of major projects financed by the Agency's programs.

1:30 pm – 2:20 pm

Utilizing the PE in the Federal GOM

The PE has been utilized in the GOM for almost 10 years. They have served as the go-between for the Federal BSEE and the Operator to ensure that well integrity was maintained during the installation and the abandonment of the wellbores. Discussion will be presented on different problems seen by the author over a five year period and how these were presented during this time.

Warren "Rick" Farmer, IV graduated from Mississippi State University with a BS in Petroleum Engineering. He has worked in the offshore oil and gas industry for almost 40 years. He currently teaches a class at the University of Louisiana at Lafayette in "Introduction to Petroleum Engineering" and has worked for several Offshore Operators as a PE. He is a previous National President of the American Association of Petroleum Engineers and is a current member of the Society of Petroleum Engineers and LES.

1:30 pm – 2:20 pm

Navien NPE Commercial Applications Training

The presentation will discuss commercial gas tankless water heater applications and sizing training.

Kevin Milazzo has worked for Navien as a Commercial Sales Manager since 2018. From 2009 – 2018 he was the Southwest Sales Senior Territory Manager. Before then he was a representative at the Romer Agency from 2007 – 2009. Lastly, from 2004 – 2007 he was the Takagi South Central Sales Manager.

1:30 pm – 2:20 pm

Tracer Wire - Using a Complete System for More Accurate Locating

Have you or a client ever struggled to locate underground utilities regardless of age and even when you knew tracer wire had been installed? Locating utilities is more than just having tracer wire in the ground. This presentation will examine tracer wire as a system and the importance of using the correct wire, utilizing proper connectors, locating test stations and grounding your tracer wire system.

D&W Systems is a manufacture's rep firm based out of Clinton, MS with over 35 years of service to the water and wastewater industry. D&W represents multiple products from around the world, including the industry leaders in flow meters, air valves and tracer wire systems. **Andy Brown** has been a part of the engineering sales team with D&W since 2010. Andy's primary focus is working with engineers and their clients to find solutions to their unique and everchanging problems.

1:30 pm – 2:20 pm

Equipment Warranties and Operator Maintenance

Manufacturer's warranties, project documents, and owners responsibilities meet at the conclusion of a job. What is required of each party in order to produce a successful project with a happy client? Who stands behind the warranty?

Ben Humphries is a Louisiana Tech graduate and manager of the Municipal Products Group at Delta Process Equipment. He has been happily married for 39 years, has three daughters, one granddaughter, and twin 5-month-old grandsons.

2:40 pm – 3:30 pm

Seismic Pipeline Design with Ductile Iron Pipe

This presentation reviews the general design approach for underground ductile iron pipe applications in areas where seismic events such as lateral earth spreading, liquefaction, and fault rupture, etc., result in permanent ground deformation as well as unstable slopes and sinkhole areas. A brief discussion of past experiences is presented along with the various design mechanisms that are to be considered. These factors include the available joints, the deflection and expansion/contraction capacity of those joints, and the strength of the pipe material. The talk also provides a model for engineers and utilities to use to ensure good design for pipelines at risk in seismically active areas.

Allen Cox, PE is a graduate of the University of Tennessee at Knoxville in Civil Engineering. Allen's previous professional experience includes employment with Texaco, Inc., the US Army Corps of Engineers (Memphis Branch), a Tennessee-based construction company and Memphis Light, Gas and Water Division.

Mr. Cox joined DIPRA in 1981. He is a registered Professional Civil Engineer in the State of Tennessee and a NACE International Corrosion Specialist. He is a member of the American Water Works Association (AWWA), National Association of Corrosion Engineers (NACE) International, American Society of Civil Engineers (ASCE) and the Water Environment Federation (WEF).

2:40 pm – 3:30 pm

Subsurface Utility Engineering: Recent Developments & Upcoming Changes

Contractors and highway designers often find it difficult to obtain reliable underground utility information prior to the design and construction phases of development. What ends up happening can lead to costly setbacks such as design deviations, damage to existing utilities, etc. Subsurface Utility Engineering, or SUE, is an effective and non-destructive service SJB Group offers to provide accurate locating and mapping of underground utilities. SUE service reveals potential conflicts and leads to more informed design and construction decisions. This ends up saving the client time and money.

Wilfred Barry, PE, PLS has more than 45 years of extensive civil engineering, land surveying and planning experience related to design of public utility systems, streets and highways, land use, and site development. Mr. Barry moved the firm into land surveying for rights-of-way and topographic mapping in the late 80's, ROW acquisition services in early 2000's, SUE services in 2013, and mobile lidar in 2016. All of those efforts have resulted in SJB Group becoming one DOTD's highest rated firms in surveying, ROW, and SUE services

2:40 pm – 3:30 pm

Solutions for Headworks Design Hydraulic Challenges

This course will be an overview on screen sizing highlighting screen types, purpose, constraints, design options and understanding Hydraulic Profiles.

Scott Griffith has a Bachelor Degree in Environmental Engineering from the University of Central Florida. After graduating, he went to work for Wharton-Smith Construction as a Project Engineer eventually becoming an Assistant Project Manager. After installing three Great White Center Flow Screens at the Port of Tampa, he had the opportunity to become the Central Regional Sales Manager for Hydro-Dyne Engineering.

2:40 pm – 3:30 pm

Evaluating Wireless Communications to Enable New Technology Efficiencies

Modern evolving technology is driving manufacturing, construction, and operational efficiencies. Technology can automate many traditionally tedious accounting, inspection, and management tasks. High-speed wireless communications are essential to implementing

technology elements of the operation. This presentation provides an overview of present and coming wireless implementation options that are available. It will also discuss the interaction of outdoor and indoor wireless systems.

Leo L Holzenthal, Jr., P.E. is President and Supervising Engineer for M S Benbow and Associates, a professional consulting engineering corporation in Metairie, Louisiana. He is a graduate of the UNO and UT at Austin. Leo is also an Adjunct Professor in the College of Engineering at UNO. He is a registered engineer in the State of Louisiana in Electrical and Control Systems and holds registration in many other states. He also received the 2015 James M. Todd Tech. Accomplishment Award from LES

A digital pioneer, **Brian Lozes, P.E.** has conceived and developed multiple software solutions to resolve complex problems in real-life industry environments. Having cut his professional teeth improving engineering processes for titans in oil and gas—including Shell, Chevron and BP—Brian saw the opportunity for next-level technology services for the heavy industrial business sector. Based on that insight and a clear vision of the possibilities at hand, Brian founded Kinemagic. Now a global leader in XR technologies, Kinemagic developed XR technologies to improve facility design and operations.

Joseph Brinz, P.E. is CEO and co-founder of Engineering & Inspection Services, a professional engineering firm in Metairie, LA. He is a graduate of the University of New Orleans. Joe is a registered engineer in the State of Louisiana in Mechanical Engineering. He has broad experience in piping systems and fixed equipment, as well as immersive technologies. In 2019, he created a new division focused exclusively on emerging technologies including virtual reality, augmented reality and animation. His company recently received the 2020 Louisiana LED Growth Leader Award. Mr. Brinz is a resident of Metairie, LA, and he can be reached at jbrinz@eisllc.net or (504) 249-5735.

3:50 pm – 4:40 pm

Public Bid Law

This presentation focuses on the basic elements of Louisiana’s public bid law and highlights important interpretations by Courts of Appeals and The Supreme Court. Additionally, it reviews prior opinions issued by the Attorney General’s Office.

Brett Robinson is a lifelong resident of Baton Rouge who has been with the Louisiana Board of Ethics for four years. Prior to his time with the Board, he received his bachelor’s degree in finance, his graduate diploma in civil law, and his juris doctor, all from LSU. He currently serves as a staff attorney and ethics trainer for the Board.



25th Joint Engineering Societies Conference

Cajundome Convention Center—Lafayette, LA

April 27 - 28, 2021



Wednesday, April 28th

8:00 AM—9:00 AM **Continental Breakfast with Exhibitors**

8:00 AM—12:30 PM **Registration**

8:00 AM—12:30 PM **Exhibit Hall Opens**

8:30 AM— 9:20 AM	Blues	Managing Your Pavement Network with Pavement Preservation —Stan Williams, PE
	Cajun/Gospel	Louisiana 811—Damage Prevention —Cole Vanderlick
	Jazz/Zydeco	Building Community by Culture in Virtual/Remote Workplace Environments —Dr. Philip Zimmerman, PE, PCC
	Exhibit Hall B	Legislative Issues Affecting Engineering —Randy K. Haynie, Ryan K. Haynie

9:20 AM - 9:40 AM **BREAK IN EXHIBIT HALL A—Sponsored by Keogh, Cox & Wilson**

9:40 AM - 10:30 AM	Blues	3D Data Capture Technology —Chris Cothron
	Cajun/Gospel	Helical Pile Overview —Moncef Souissi, Ph.D.
	Jazz/Zydeco	Aligning, Developing, and Advancing Virtual/Remote Workplace Talent —Dr. Philip Zimmerman, PE, PCC
	Exhibit Hall B	Improving Specification of Subsurface LID Measures —Larry Salzer

10:30 AM - 10:50 AM **BREAK IN EXHIBIT HALL A**

10:50 AM - 11:40 AM	Blues	The Seven Deadly Sins of Email —Justin Sanders
	Cajun/Gospel	Helical Pile Design Theory and Applications —Moncef Souissi, Ph.D.
	Jazz/Zydeco	How to Utilize Terrestrial and Aerial Mobile Mapping on Projects —Bradley S. Holleman, PLS, EI
	Exhibit Hall B	Innovative Repair of Failed MSE Walls Using Geosynthetic Materials In Conjunction with Strength Elements —Will Brantley, PE

11:40 AM - 12:00 PM **BREAK IN EXHIBIT HALL A**

12:00 PM - 12:50 PM **Exhibit Hall B** **Lunch-N-Learn— Louisiana Code of Governmental Ethics**—Kim Raines Chatelain, Esq., CIG, CFE, CIGE

1:00 PM - 1:50 PM **Exhibit Hall B** **Professionalism and Ethics in Engineering**—Jeff Pike, PE

2:00 PM - 2:50 PM **Exhibit Hall B** **LAPELS Panel Discussion**— Edgar Benoit, PE, Linda Bergeron, PE, Connie Betts, PE, Tom Carroll, PE, PLS, Reggie Jeter, PE, Jeff Pike, PE, Byron Racca, PE, Chris Richard, PE, Chad Vosburg, PE, Janice Williams, PE

DAY 2 – Wednesday, April 28, 2021

8:30 am – 9:20 am

Managing Your Pavement Network and Pavement Preservation

Every municipality faces the problem of maintaining their roads and streets with budgets that seem to be shrinking every year. Pavement preservation treatments can be part of the solution to this problem and offer opportunities to more than just the contractor.

Stan Williams, PE is the technical marketing manager for Mississippi, Louisiana, and Arkansas. Stan has been with Ergon Asphalt & Emulsions, Inc for over 6 years. Stan is responsible for assisting county engineers, DOT engineers, parish engineers as well as consulting engineers and contractors with applications and specifications. Stan is a graduate of Mississippi State University.

8:30 am – 9:20 am

Louisiana 811 – Damage Prevention

Know what's below. Call or click before you dig. This course will cover the Louisiana dig laws and the importance of 811 before excavation to create a safer environment during projects.

Cole Vanderlick is currently the Damage Prevention Manager for Louisiana 811, working all over Louisiana. He is a petroleum engineering graduate from LSU.

8:30 am – 9:20 am

Building Community by Culture in Virtual/Remote Workplace Environments

Pandemic related lockdowns forced most workplaces to create on the fly virtual/remote workplace environments. Based upon sustained engagement and productivity of talent, many companies are planning to adopt the virtual/remote workplace paradigm moving forward. The lingering question is, "How to develop organizational community in a virtual/remote workplace environment?" This presentation introduces the steps and provides guidance on Building Community by Culture.

Dr. Philip Zimmerman, PE, PCC is the founder and President of Engineering Leadership Design Company, a registered professional engineer, and a professional certified coach. For the past seven years he has focused on helping executives and their management teams envision and implement next generation leader initiatives to develop and advance talent at all levels. The pandemic impact on the workplace accelerated what he was preparing companies to address, flexible work/life balance for talent in a virtual/remote workplace environment.

8:30 am – 9:20 am

Legislative Issues Affecting Engineering

Randy K. Haynie is the President and founder of Haynie & Associates a government relations lobbying firm established in 1980 with offices in Baton Rouge and Lafayette, Louisiana. His son **Ryan K. Haynie** is his partner and the co-owner in the Baton Rouge-based firm, Haynie & Associates. Presently, they represent national corporations such as JP Morgan/Chase, General Electric, General Motors, Pfizer Pharmaceuticals, Caesar's Entertainment, as well as many Louisiana based companies and associations such as the New Orleans Saints, LAMMICO and the Louisiana Engineering Society. In 2016, Randy Haynie was inducted into the Louisiana Political Hall of Fame and honored for his 37-year career lobbying the Louisiana State Capitol through seven Governors and hundreds of Legislators.

9:40 am – 10:30 am

3D Data Capture Technology

In this presentation, we will examine ways to become more productive in your everyday workflows using 3D data capture technology. We will review some of the latest technology, how companies are implementing this technology, their decision process before adoption, as well as some time savings/productivity examples. Scanning advantages/disadvantages, return on investment, time savings, and most importantly safety all play a part when adopting advanced measuring technology. This presentation will give you an overview on how others have adopted this technology, their success stories, and hopefully answer questions pertaining to its applications.

Chris Cothron graduated from Louisiana State University with a Bachelor of Science in Geography, and began his career as a GIS analyst at a local environmental firm in Baton Rouge, Gulf South Research Corporation. Since joining Navigation Electronics (NEI) in 2015, Chris has become the scanning and forensics team lead as well as the north LA survey representative. He has over 13 years of experience in the Geospatial industry and works with a wide range of customers ranging from the federal government to your local

survey and engineering firms. Advanced measurement technology allows Chris to find new ways to make everyday workflows more efficient and safer for all of his clientele. One unique thing about Chris is that he is considered a hybrid at NEI. He is one of the only consultants that knows both the mapping (GIS) and survey side of the geospatial industry.

9:40 am – 10:30 am

Helical Pile Overview

Helical piles and anchors have been used in construction applications for over a century. The first recorded use of helical piles was in 1836 by Alexander Mitchell when he used helical piles to underpin the well-recognized Maplin Sands Lighthouse in England. In the last 30 to 40 years, helical piles have gained in popularity to the extent they are more frequently recommended by design professional engineers, compared to many other deep foundation types. In 2009, the International Building Code (IBC) was revised in reference to past International Building Codes and included the addition of helical piles. The first presentation, an overview, will discuss the main components of a helical pile, pile installation process, mechanical and soil pile capacities, and the methods used to determine them.

Moncef Souissi, Ph.D., joined Cantsink in March 2019, after completing his Ph.D. at Colorado State University. His thesis is titled “**HELICAL PILE CAPACITY TO TORQUE RATIO: A FUNCTIONAL PERSPECTIVE**”. His paper about torque correlation factor, K_t , is going to be published in the DFI journal. Before joining Cantsink, Mr. Souissi was working as a Project Engineer at CTL Thompson, Fort Collins, CO from 2003 to 2018. During that time, Mr. Souissi was one of the key architects in expanding CTL Thompson testing capabilities to include an Accredited Testing Lab. The lab was accredited per ISO 17025 by IAS (International Accreditation Services) in 2008, and its scope of accreditation was “Testing Helical Piles Systems and Devices per Requirements of AC358.” Mr. Souissi was running the new testing lab from 2008 to 2018. During that time, he basically supervised and witnessed hundreds of required tests (per AC358) conducted by his subordinates. Almost all of these tests were conducted for clients (Helical Pile Manufacturers) from around the world looking to obtain an ICC-ES report for their products. During his time with CTL Thompson, Mr. Souissi was also involved with the Accredited Inspection Agency within the company. The inspection Agency was also accredited by IAS, per ISO17020. The Inspection Agency was conducting on-site inspections (at the request of ICC-ES) at the manufacturing plant of the report holder. Two inspections, in accordance with AC10, were conducted per year as required. Finally, AC358 is the **Acceptance Criteria for Helical Pile Systems and Devices**. It was originally issued in 2007 by ICC-ES. Mr. Souissi was the Chairman of the Ad-Hoc Committee that worked with ICC-ES in revising AC358 both in 2013 and 2017.

9:40 am – 10:30 am

Aligning, Developing, and Advancing Virtual/Remote Workplace Talent

Virtual/remote workplace environments are becoming an accepted practice within many companies and will continue to evolve in the years ahead. This new workplace reality gives rise to a new issue, "How to align, develop, and advance virtual/remote workplace talent?" The presentation introduces the steps and provides guidance on implementing best practices for Aligning, Developing, and Advancing Virtual/Remote Workplace Talent.

Dr. Philip Zimmerman, PE, PCC is the founder and President of Engineering Leadership Design Company, a registered professional engineer, and a professional certified coach. For the past seven years he has focused on helping executives and their management teams envision and implement next generation leader initiatives to develop and advance talent at all levels. The pandemic impact on the workplace accelerated what he was preparing companies to address, flexible work/life balance for talent in a virtual/remote workplace environment.

9:40 am – 10:30 am

Improving Specification of Subsurface LID Measures

When professionally designed, subsurface storm water storage systems can be effective to comply with post-development runoff ordinances with little to no impact useable land space. A variety of systems are commercially available offering flexibility for designers and developers alike. No matter what system is selected, a fixed set of design considerations are necessary to ensure safety, performance, and long service life. This presentation looks at the various subsurface storage applications and discusses point by point the important issues to consider when designing a subsurface stormwater storage system.

As subsurface structures these systems are subject to a variety of forces impacting all sides: above, adjacent, and from below. Designs for proper loading need to address both post construction conditions as well as conditions found during construction. Accessibility is needed during and for construction. Different systems have different accessibility requirements. System selection may also be influenced by constraints from utilities, foundations, or even adjacent properties. Soil conditions and water table need to also be factored into the design. This presentation will review all of these and how they impact various systems.

The purpose of any ordinance driven storm water storage system is to capture, collect, and control its release. It is inherent that along with storm water comes pollutants. Pollutants come in many forms and are often required to be treated or captured. The influx of pollutants into a storm water storage system will, if left to build up, negatively impact its performance and longevity. Post construction maintenance is a key part to the safety and life span of the system. We explore and discuss various treatment options as they relate to specific systems as well as more universal pre-treatment and combined treatment options.

As most projects will rely on a third party for construction and installation, communication is the final step to completing a reliable system. All the details resulting from specific design considerations must be clearly noted and communicated on the plans, leaving no

room for interpretation. Details and notes should include site specific requirements in the forms of activities such as sequencing or stockpiling as well as assembly, construction, and connection details which may be unique to the selected system and the project. Attendees of this presentation will walk away with a broad understanding of the unique attributes of common commercially available systems. The aim of this presentation is instilling confidence and assurance to be able to design safe, long lasting, and reliable subsurface storm water storage systems for their clients and their communities.

Larry Salzer has served as the Director of Business Development for Contractor's Source, Inc. (CSI) since 2018. CSI is an engineered geosynthetic product supplier which has served the gulf coasts of LA and TX for over forty years. Mr. Salzer began his career in the geosynthetics industry in 1998 back in his home state of Minnesota. Working first with a regional supplier and installer of geosynthetic materials before moving onto working for manufacturers of geosynthetics in 2005. During these years in the manufacturing sector, Mr. Salzer could be found in any one of the lower 48 states and Canada, educating designers, contractors, and owner agencies on engineered geosynthetic product solutions and supporting the installations thereof. An acquisition of his employer in 2013 brought him and his wife to TX where they currently reside. By then, Mr. Salzer had served 11 years as an elected supervisor of the Stearns County Soil and Water Conservation District (Stearns SWCD) and 5 years on the board of Minnesota Erosion Control Association (MECA). Those early years correspond with the roll out of the EPA's NPDES Phase 2. Working with many of the SWCD's in the more urban areas of the state, MECA became an instrumental driver in aiding and educating municipalities to quickly guide them through to compliance. Low Impact Development (LID) strategies became the norm during this time, and everyone needed to be brought up to speed. It was much like we are seeing now in the Gulf region. Recent updates and changes in cities like New Orleans and even over in Houston have many stakeholders seeking education.

10:50 am – 11:40 am

The Seven Deadly Sins of Email

Emails are part of the oxygen of our daily professional lives. They are a primary path of communication and we use them to get things done. Yet given the litigious nature of our world, it is critical to treat this common form of communication with the attention it needs and think very carefully about what we write and why we write it. This program presents claim examples of self-implicating, weaponized emails and guidelines for writing appropriate, shorter, clearer messages.

Justin Sanders is Vice President of Alexander & Sanders, a division of BXS Insurance. For over 25 years, I have specialized in professional liability insurance and loss prevention for A/E and Surveying firms. It has also been my pleasure to conduct numerous seminars on professional liability issues for insureds and for members of various professional societies such as LES, AIA, ASCE, ACEC, GWA, ASHRAE and SDA.

10:50 am – 11:40 am

Helical Pile Design Theory and Applications

Helical piles and anchors have been used in construction applications for over a century. The first recorded use of helical piles was in 1836 by Alexander Mitchell when he used helical piles to underpin the well-recognized Maplin Sands Lighthouse in England. In the last 30 to 40 years, helical piles have gained in popularity to the extent they are more frequently recommended by design professional engineers, compared to many other deep foundation types. In 2009, the International Building Code (IBC) was revised in reference to past International Building Codes and included the addition of helical piles. The second presentation will be about design of helical pile using theoretical methods that are based on traditional soil mechanics and the well-known capacity-torque correlation, which is probably the most significant attribute of helical pile. In addition, various applications of helical piles will be presented.

Moncef Souissi, Ph.D., joined Cantsink in March 2019, after completing his Ph.D. at Colorado State University. His thesis is titled "HELICAL PILE CAPACITY TO TORQUE RATIO: A FUNCTIONAL PERSPECTIVE". His paper about torque correlation factor, K_t , is going to be published in the DFI journal. Before joining Cantsink, Mr. Souissi was working as a Project Engineer at CTL Thompson, Fort Collins, CO from 2003 to 2018. During that time, Mr. Souissi was one of the key architects in expanding CTL Thompson testing capabilities to include an Accredited Testing Lab. The lab was accredited per ISO 17025 by IAS (International Accreditation Services) in 2008, and its scope of accreditation was "Testing Helical Piles Systems and Devices per Requirements of AC358." Mr. Souissi was running the new testing lab from 2008 to 2018. During that time, he basically supervised and witnessed hundreds of required tests (per AC358) conducted by his subordinates. Almost all of these tests were conducted for clients (Helical Pile Manufacturers) from around the world looking to obtain an ICC-ES report for their products. During his time with CTL Thompson, Mr. Souissi was also involved with the Accredited Inspection Agency within the company. The inspection Agency was also accredited by IAS, per ISO17020. The Inspection Agency was conducting on-site inspections (at the request of ICC-ES) at the manufacturing plant of the report holder. Two inspections, in accordance with AC10, were conducted per year as required. Finally, AC358 is the Acceptance Criteria for Helical Pile Systems and Devices. It was originally issued in 2007 by ICC-ES. Mr. Souissi was the Chairman of the Ad-Hoc Committee that worked with ICC-ES in revising AC358 both in 2013 and 2017.

10:50 am – 11:40 am

How to Utilize Terrestrial and Aerial Mobile Mapping on Projects

In this presentation, we will explore the different types of mobile mapping platforms and discuss the types of projects in which this technology can be applied. We will review how mobile mapping with UAVs (drones) as well as terrestrial platforms, such as trucks, golf carts and UTVs, can supplement a traditional survey to increase safety and efficiency while producing a deliverable common to design engineers.

Bradley S. Holleman, PLS, EI is a licensed Professional Land Surveyor that holds a Bachelor of Science in Civil Engineering degree, with a minor in Land Surveying from Louisiana State University. He has 15 years of experience in surveying, with a specialty in advanced surveying measurement applications. Mr. Holleman is currently the President of the Louisiana Society of Professional Surveyors and Vice President of Forte and Tablada, Inc.

10:50 am – 11:40 am

Innovative Repair Failed MSE Walls Using Geosynthetic Materials in Conjunction with Strength Elements

Mechanically Stabilized Earth (MSE) and steel pile walls are commonly used throughout the United States to repair landslides and create favorable site and road prism geometries. However, when improperly designed, these structures have an associated failure rate of 5%. Post-failure reconstruction and remediation often present challenges beyond those encountered during original construction, including difficult site access and critical infrastructure maintenance, and roadway traffic.

Using case studies from five recent design/build MSE and pile wall repair projects in the Eastern United States, this presentation outlines some of the new and innovative methods available to designers. These methods are robust enough for structural repair and specific enough to prevent unnecessary impact to roadway users and critical infrastructure disruption. Relevant technologies include traditional soil nailing, reinforced architecturally sculpted shotcrete, reticulated micropile arrays, and Geosynthetically Confined Soil (GCS®) walls constructed with lightweight recycled aggregate.

The case studies for this presentation include:

- An extensive MSE wall repair below a housing development using both traditional and hollow-core soil nails.
- A tall MSE wall repair below a shopping center using hollow-core soil nails, a reticulated micropile array, and deep foundation soil improvement.
- A failed pile wall repair using a Geosynthetically Confined Soil (GCS) wall comprised of lightweight recycled aggregate built on top of a reticulated micropile array.

Will Brantley, PE is GeoStabilization's Project Development Engineer for Mississippi and Louisiana. After graduating from Mississippi State University with a B.S. in civil engineering, Will began his career at the Mississippi Department of Transportation as a project engineer, participating in implementing roadway design and construction projects. He then transitioned to a national construction material manufacturer, where he focused on promoting, supply, and installing construction products in civil and transportation markets. Will joined GeoStabilization in 2021 and provides solutions for slope stability and geohazard applications utilizing soil nails, micropiles, high-capacity steel mesh, compaction grouting, and GeoSynthetically Confined Soil® (GCS®) walls throughout Mississippi and Louisiana.

12:00 pm – 12:50 pm

Louisiana Code of Governmental Ethics

This presentation focuses on the Code of Governmental Ethics application to public servants, public servants' immediate family members, and companies that may be owned by either. The information covered during the presentation will include how the Board of Ethics has previously interpreted the laws under its jurisdiction in a variety of scenarios. The presentation fulfills the requirement in La. R.S. 42:1170 for individuals who are public servants to receive one hour of training on the Code of Governmental Ethics.

Kim Raines Chatelain, Esq., CIG, CFE, CCEP, CIGE received her law degree in 1992 from Tulane Law School in New Orleans, Louisiana and her Bachelor of Arts Degree from Louisiana State University, Baton Rouge, Louisiana in 1989. She is a practicing attorney of twenty-nine years, including fourteen years as an Assistant Attorney General for the State of Louisiana. Presently, she is the 1st Assistant Inspector General for the Jefferson Parish Office of Inspector General (JPOIG). As the 1st Assistant, Ms. Chatelain provides legal counsel and direction across all areas of operations, audit and investigation, as well as provides program oversight and administration. She is a Certified Inspector General, a Certified Fraud Examiner and a Certified Ethics and Compliance Professional. She is a Board member of the Association of Inspectors General (AIG), and she instructs for the AIG certification courses. Ms. Chatelain is also a member of the Association of Certified Fraud Examiners and Society of Corporate Compliance and Ethics Professionals.

1:00 pm – 1:50 pm

Professionalism and Ethics in Engineering

Our common purpose as professional engineers is to safeguard life, health, and property and to promote the public welfare. Professional ethics concerns the standard of professional conduct and responsibility required of a professional engineer. Our discussion will address issues like character, competency, accountability, conflicts of interest, avoiding deceptive acts, trust, and integrity.

Jeffrey A. Pike, PE, has served on the LAPELS Board since his appointment in the education position by Governor Edwards in July of 2016. He is a proven leader and mentor for over three decades. He is currently a senior lecturer of civil engineering and construction engineering technology at Louisiana Tech University. Jeff assists students in developing their critical thinking, problem solving, teamwork, and communication skills through group projects and the engineering design process. Pike's twenty-one years investing in higher education began at the US Military Academy at West Point, New York in 1995. He has served as an Assistant Professor at West Point and as Professor of Military Science at Stephen F. Austin State University in Nacogdoches, Texas. Jeff earned his bachelor's degree in engineering from the United States Military Academy at West Point, New York, and his master's degree in engineering from the University of Texas at Austin, Texas. Jeff has professional engineering licenses in Virginia, Texas, and Louisiana, and he is an active professional engineer in Louisiana. His honors and awards include the Louisiana Engineering Foundation (LEF) Engineering Faculty Professionalism Award, Louisiana Tech's F. Jay Taylor Undergraduate Teaching Award, the College of Engineering and Science Outstanding Advisor of the Year award, and recognition for Excellence and Service by the College of Engineering and Science Advisory Board. Pike served as an active duty airborne ranger infantryman in the United States Army for more than 22 years and earned the rank of Lieutenant Colonel before retiring from the armed services in 2007. Jeff is married to his high school sweetheart, Kelly. They live in the Arizona community near Homer, Louisiana. Jeff tries to be intentional about investing time and energy with his family.

2:00 pm – 2:50 pm

LAPELS Panel Discussion

Edgar Benoit, PE, F. NSPE is a registered professional electrical engineer, NSPE fellow, and life member of IEEE. He currently practices as an expert witness and presenter giving training sessions dealing with electrical codes. He received his BS in Electrical Engineering from Louisiana State University and an MBA from Nicholls State University.

Linda Hartle Bergeron, PE, F. AIChE, CCPS is a Senior Process Engineer with Occidental Chemical Corporation (OxyChem) in chlor-alkali chemical manufacturing at the Taft, Louisiana facility. She has been with OxyChem 30 years. Linda serves as a board member from the practice of industry on the Louisiana Professional Engineering and Land Surveying Board. Linda grew up in Spartanburg, South Carolina, and has resided in Louisiana for 26 years, most of that time in Des Allemands. She graduated from Clemson University with a B.S. in Chemical Engineering and has a Master of Engineering Management degree from Penn State University. Linda is a Professional Engineer in the State of Louisiana. She is also a Fellow of the American Institute of Chemical Engineers and is a Center for Chemical Process Safety (CCPS) Certified Process Safety Professional. Linda has volunteered in chemical engineering professional engineering exam development with NCEES for 12 years. She and her husband, Everett, have two daughters. Linda enjoys spending time with her family and enjoys reading and proofreading for various authors.

Connie Porter Betts, PE currently serves as the Department of Transportation and Development's (DOTD) Transportation Planning Administrator. In this role, Ms. Betts is responsible for planning, directing, organizing and evaluating all activities and operations of the statewide transportation planning and programming functions in accordance with federal and state requirements. These functions include the development and maintenance of the Highway Priority Program and the Statewide Transportation Improvement Program; the annual calculation and reporting of the State Highway and Bridge Needs and the development and implementation of the Louisiana Statewide Transportation and the Statewide Freight Mobility Plans. Ms. Betts earned a Bachelor of Science in Civil Engineering from Louisiana State University in May of 1997 and obtained her Professional Engineering License in 2002. Ms. Betts and her husband Frank reside in Baton Rouge. They have three children; two sons, Patrick and Caleb and a daughter, Franchesca.

Thomas R. Carroll, III, P.E., P.L.S. has just completed his sixth and final year on the LAPELS Board representing Government. He is a native of Opelousas and attended the University of Louisiana at Lafayette (formerly USL) and graduated in Civil Engineering in 1974. He is a Registered Professional Engineer and Land Surveyor in Louisiana and is a Life Member of ASCE. His career has included 3 years as a Hydraulic Engineer with the Corps of Engineers, 18 years in private practice primarily focused in municipal engineering and surveying, and 24 years with Public Works for the City of Lafayette/Lafayette Consolidated Government, with the last twelve years serving as Public Works Director. He is now working parttime with Sellers and Associates in Lafayette providing assistance on a variety of small projects for governmental clients as well as reviews of commercial and residential developments. He continues to serve on the Civil

Engineering Advisory Board for UL and the Lettermen Club Hall of Fame Committee. He has previously served at various officer levels and as President of both the Acadiana Branch of ASCE and the Lafayette Chapter of LES. He is a past recipient of the ASCE LA Section Government Engineer of the Year award and in 2020 received the ASCE LA Section Wall of Fame Award.

Reginald Jeter, PE is the Program Chairman and Professional-in-Residence for the Construction Engineering Technology Program at Louisiana Tech University. He received a Bachelor of Science in Construction Engineering Technology in 1981, a Bachelor of Science in Civil Engineering in 1984 and a Master of Science in Civil Engineering in 1984, all from Louisiana Tech University. Mr. Jeter teaches undergraduate courses in estimating, scheduling, heavy equipment and contracts and specifications. He also teaches the Construction Engineering Technology Capstone in Construction course. He is also serving as the faculty advisor for the Student Chapter of Associated General Contractors.

He worked more than 28 years as an estimator and project manager for several highway and heavy construction companies before joining Louisiana Tech in December 2015. Much of that time he was the chief estimator for the various companies. Mr. Jeter has been active in professional organizations throughout his career. He is a member of the American Society of Civil Engineers and Louisiana Engineering Society. Mr. Jeter is a past-president of the Shreveport Chapter of Louisiana Engineering Society and served as northwest district chairman for Louisiana AGC. He was voted Most Outstanding Professor for 2017-18 by the civil engineering and construction engineering technology students at Louisiana Tech. Mr. Jeter is a licensed professional civil engineer in Louisiana and Mississippi.

Jeffrey A. Pike, PE, has served on the LAPELS Board since his appointment in the education position by Governor Edwards in July of 2016. He is a proven leader and mentor for over three decades. He is currently a senior lecturer of civil engineering and construction engineering technology at Louisiana Tech University. Jeff assists students in developing their critical thinking, problem solving, teamwork, and communication skills through group projects and the engineering design process. Pike's twenty-one years investing in higher education began at the US Military Academy at West Point, New York in 1995. He has served as an Assistant Professor at West Point and as Professor of Military Science at Stephen F. Austin State University in Nacogdoches, Texas. Jeff earned his bachelor's degree in engineering from the United States Military Academy at West Point, New York, and his master's degree in engineering from the University of Texas at Austin, Texas. Jeff has professional engineering licenses in Virginia, Texas, and Louisiana, and he is an active professional engineer in Louisiana. His honors and awards include the Louisiana Engineering Foundation (LEF) Engineering Faculty Professionalism Award, Louisiana Tech's F. Jay Taylor Undergraduate Teaching Award, the College of Engineering and Science Outstanding Advisor of the Year award, and recognition for Excellence and Service by the College of Engineering and Science Advisory Board. Pike served as an active duty airborne ranger infantryman in the United States Army for more than 22 years and earned the rank of Lieutenant Colonel before retiring from the armed services in 2007. Jeff is married to his high school sweetheart, Kelly. They live in the Arizona community near Homer, Louisiana. Jeff tries to be intentional about investing time and energy with his family.

Byron Racca, PE is currently the General Manager of Meyer & Associates, Inc. in Sulphur, LA. In 2001, Byron was afforded the opportunity to begin his engineering career with Meyer & Associates, Inc. Currently, Byron oversees the company's wide range of design and project management activities which include, but are not limited to, highways, port/harbor facilities, airports, railroads, stormwater drainage systems, potable water systems (supply, treatment, storage and distribution), wastewater systems (collection, pumping, advanced treatment and effluent discharge), and site civil development projects for various independent, municipal, parish, state, federal and industrial clients.

Byron has been an active member of Louisiana Engineering Society since 2004. Byron served as an officer with the Lake Charles Chapter for many years and served under every position on the Louisiana Engineering Society State Board. While on the Louisiana Engineering Society State Board, Byron served as President from 2017-2018. Byron has also served for many years on the Louisiana Engineering Foundation Board and was elected President of the foundation in 2020.

Byron Racca received a Bachelor of Science Degree in Civil Engineering from McNeese State University in 2002. In 2008, Byron obtained his Louisiana Professional Engineer License. Byron is a native of Lacassine, LA and currently resides in Lake Charles, LA. Byron has been married to Christine LaVoie since 2003 and they have two sons, Jackson and Christian. Byron and his family are members of Our Lady of Good Counsel Catholic Church in Lake Charles, LA.

Chris Richard, P.E. is from Lafayette, Louisiana, and graduated from the University of Louisiana at Lafayette (formerly USL) in 1987 with a Bachelor of Science degree in Civil Engineering. He is a licensed Professional Civil and Environmental Engineer in Louisiana and a licensed Professional Engineer in Florida. Chris began his career with the Louisiana Department of Transportation and Development, in the Road Design section in Baton Rouge. In 1988, he

moved to Sarasota, Florida, after accepting a position with Bishop and Associates consulting engineering firm. Chris has been with Domingue, Szabo & Associates, Inc. in Lafayette since 1991 where he is the Chief Engineer, where he practices mainly in the area of water and wastewater infrastructure consulting and design. Chris has served the Lafayette Chapter of the Louisiana Engineering Society as President, and served in all officer positions of the Louisiana Engineering Society (LES), culminating in his Presidency in 2005-2006. He served as the President of the Louisiana Engineering Foundation (LEF) from 2008-2014 and Lafayette Chapter President of ACEC/L from 2007-2009. Chris is currently serving on the UL Alumni Council Executive Board and the Transportation Technical Committee for the Acadiana Metropolitan Planning Commission. In 2017, Chris was appointed to the Louisiana Professional Engineering and Land Surveying Board representing Private Practice.

Chad Vosburg, P.E. has just completed his 4th year of service on Louisiana Professional Engineering and Land Surveying Board representing Construction. Chad is a native of New Roads and attended Louisiana State University with a degree in Civil Engineering. Chad worked for 26 years with the Louisiana Department of Transportation and Development on a wide array of projects with a background in Design, Construction, and Operations. Through his career at LADOTD Chad worked closely with industry, local, parish, state, and federal officials throughout the Greater Baton Rouge Area and completed his career as District Administrator for the Baton Rouge District in the Office of Operations. Chad currently works for ECM Consultants as Vice President of Construction Services out of their Baton Rouge Office.

Janice Poplin Williams, P.E. is retired from a long career in state service culminating in her appointment to the Chief Engineer position at the Louisiana Department of Transportation and Development (DOTD) in March, 2014. As the engineering leader of DOTD, Williams provided guidance to a staff of more than 500 engineers, engineering technicians and support staff, while promoting innovation, continuous improvement and efficient use of resources. She was responsible for establishing engineering standards, policies and procedures that guide project delivery, construction, and preservation of all transportation-related projects and systems. In addition, Williams was accountable for the on-time and on-budget delivery of the DOTD Highway Priority Program.

Williams began her career in DOTD's Road Design Section in June of 1985, after earning her bachelor's degree in civil engineering from LSU. She served as a project and program manager for projects of all shapes and sizes including interstates, capacity improvements, large and small bridge replacements, urban systems, enhancements, and a new Mississippi River crossing. She was responsible for over 1200 projects totaling over \$2.3 billion in construction costs. Williams served in 2 different division administrator roles prior to becoming Chief Engineer.

During her tenure at DOTD, Williams became an expert in Pavement Preservation and served on national teams created by FHWA to promote pavement and bridge preservation, acceptance and implementation through the development of technical guidelines with the identification of related training and research needs.

Williams is a licensed professional engineer in Civil and Environmental Engineering. She is also a member of the American Society of Civil Engineers, Louisiana Engineering Society, and Women in Transportation Seminar.

In April 2021, Williams was appointed to a six year term of service on the LA Board of Professional Engineers and Land Surveyors by Governor John Bel Edwards.

Following her retirement in January, 2018, Williams has participated in various community service opportunities including serving on the East Baton Rouge Engineers and Surveyors Selection board representing LES-BR. Her other volunteer work includes working with local and regional animal rescue and adoption groups to promote spay and neuter programs. In addition, Williams has now fulfilled her life-long ambition to learn the art of making quilts. Since starting this challenging new chapter in her life, she has become an avid quilter who will never have enough fabric or enough time to make all the quilts she has planned.

This form is to be used in documenting Professional Development Hours (PDH) earned at this seminar. To use this form, write in your name at the top of the form. After attending a particular session, initial the appropriate block on the form. At the conclusion of the conference, total the number of PDH's and record below and sign the attested by line. This form and program then becomes documentation of attendance.

Tuesday, April 27, 2021

PDH INITIAL

8:30am-9:20am	Google AppSheet, Leveraging Remote Operations in the Wake of COVID-19 Ryan J. Fuselier, PE, PLS	1	
8:30am-9:20am	Upgrading Lagoon Based Treatment Systems to Meet More Stringent Limits for BOD, TSS and Nutrient Removal Tom Birkeland	1	
8:30am-9:20am	Sanitary Sewer Triage Josh Graham	1	
8:30am-9:20am	Pre & Post Installation Inspection of Storm Water Drainage Systems Don Conrad	1	
9:45am-10:35am	AWP—Advanced Workforce Planning As Related to the Scaffold Industry Glenn Young, PE	1	
9:45am-10:35am	Utilizing Crowd Source Technology and Big Data to Monitor and Manage Road Networks in Real Time Candler McCollum	1	
9:45am-10:35am	Standards of Practice Shawn MacMenamin, PLS	1	
9:45am-10:35am	Contracting Basics Mary Anne Wolf, PE	1	
11:00am-11:50am	7 Things You Should Understand About Quality Assurance Danny Gierhart, PE	1	
11:00am-11:50am	Enhanced Outdoor Air and Building Pressurization Strategies (COVID-19 Discussion) Jim Riendeau	1	
11:00am-11:50am	Air Valves—Proper Application and Sizing on Pump Stations and Forcemains Andy Brown	1	
11:00am-11:50am	Introduction to USDA Rural Development and Current Procedures for Funding Water and Environment Projects Tony Matlock, Community Programs Director & David Suire, PE	1	
1:30pm – 2:20pm	Utilizing the PE in the Federal GOM Warren “Rick” Farmer, IV	1	
1:30pm – 2:20pm	Navien NPE Commercial Applications Training Kevin Milazzo	1	
1:30pm – 2:20pm	Tracer Wire—Using a Complete System for More Accurate Locating Andy Brown	1	
1:30pm – 2:20pm	Equipment Warranties and Operator Maintenance Ben Humphries	1	
2:40pm – 3:30pm	Seismic Pipeline Design with Ductile Iron Pipe Allen Cox, PE	1	
2:40pm – 3:30pm	Subsurface Utility Engineering: Recent Developments & Upcoming Changes Wilfred Barry, PE, PLS	1	
2:40pm – 3:30pm	Solutions for Headworks Design Hydraulic Challenges Scott Griffith	1	
2:40pm – 3:30pm	Evaluating Wireless Communications to Enable New Technology Efficiencies Leo Holzenthal Jr., PE, Joe Brinz, & Brian Lozes, PE	1	
3:50pm – 4:40pm	Public Bid Law Brett Robinson	1	

I hereby attest that I have attended the sessions documented above.

Signature of Attendee

Print Name

This form is to be used in documenting Professional Development Hours (PDH) earned at this seminar. To use this form, write in your name at the top of the form. After attending a particular session, initial the appropriate block on the form. At the conclusion of the conference, total the number of PDH's and record below and sign the attested by line. This form and program then becomes documentation of attendance.

Wednesday, April 28, 2021

PDH INITIAL

		PDH	INITIAL
8:30am - 9:20am	Managing Your Pavement Network with Pavement Preservation Stan Williams, PE	1	
8:30am - 9:20am	Louisiana 811—Damage Prevention Cole Vanderlick	1	
8:30am - 9:20am	Building Community by Culture in Virtual/Remote Workplace Environments Dr. Philip Zimmerman, PE, PCC	1	
8:30am - 9:20am	Legislative Issues Affecting Engineering Randy Haynie	1	
9:40am-10:30am	3D Data Capture Technology Chris Cothron	1	
9:40am-10:30am	Helical Pile Overview Moncef Souissi, Ph.D.	1	
9:40am-10:30am	Aligning, Developing, and Advancing Virtual/Remote Workplace Talent Dr. Philip Zimmerman, PE, PCC	1	
9:40am-10:30am	Improving Specification of Subsurface LID Measures Larry Salzer	1	
10:50am-11:40am	The Seven Deadly Sins of Email Justin Sanders	1	
10:50am-11:40am	Helical Pile Design Theory and Applications Moncef Souissi, Ph.D.	1	
10:50am-11:40am	How to Utilize Terrestrial and Aerial Mobile Mapping on Projects Bradley S. Holleman, PLS, EI	1	
10:50am-11:40am	Innovative Repair of Failed MSE Walls Using Geosynthetic Materials In Conjunction with Strength Elements Will Brantley, PE	1	
12:00pm-12:50pm	Louisiana Code of Governmental Ethics Kim Raines Chatelain, Esq., CIG, CFE, CCEP, CIGE	1	
1:00pm-1:50pm	Professionalism and Ethics in Engineering Jeff Pike, PE	1	
2:00pm-2:50pm	LAPELS Panel Discussion Edgar Benoit, PE Linda Bergeron, PE Connie Betts, PE Tom Carroll, PE, Reggie Jeter, PE Jeff Pike, PE Byron Racca, PE Chris Richard, PE Chad Vosburg, PE Janice Williams, PE	1	

Total PDH earned through attendance at the 25th Joint Engineering Societies Conference _____

I hereby attest that I have attended the sessions documented above and that the cumulative PDH totaled above is accurate.

Signature of Attendee

Print Name

Thank You,

The JESC Planning Committee, the Louisiana Engineering Society Board of Direction, and the participating societies would like to extend a heartfelt thank you for your participation in the 25th Annual Joint Engineering Societies Conference. The success of this event is a direct result of the continued support and attendance of our fellow professionals and industry partners. Every year we strive to fill the program with new and relevant topics across all disciplines of Professional Engineering. To this end, we aim to provide you with the opportunity to fulfill your continuing education obligations while also enjoying the camaraderie of your fellow professional engineers and friends in the industry.

We sincerely hope that you enjoy the sessions and events offered at this year's conference. If you have any comments or recommendations for future topics, events, or any ideas on how we can make the JESC Conference a better experience for all, please contact the LES office at les@les-state.org or 225-924-2021.

Make plans now to join us on June 3rd at The Bluffs Golf & Sports Resort where we will offer 5 hours of PDH classes and will host an Ice Breaker and Dinner Event with keynote speaker DOTD Secretary, Dr. Shawn Wilson. All LES Members are invited to attend! The Annual LA Transportation Partners Golf Tournament will be held the next day, June 4th at The Bluffs. The tournament is raising money for our Louisiana Engineering Foundation Scholarships. We hope you will join us for a good time on the links while we raise money for a worthy cause.

Sincerely,

William L. Miller

Wm. Luke Miller, PE
LES President

