

# ST. LOUIS CHAPTER MISSOURI SOCIETY OF PROFESSIONAL ENGINEERS

# ST. LOUIS ENGINEER

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# MSD Project Clear – Maline Creek

**Abstract:** Project Clear is a \$4 billion dollar Metropolitan St. Louis Sewer District (MSD) initiative to improve water quality throughout St. Louis City and County. The Maline Creek Tunnel is the third Project Clear storage project to be constructed, and will be the first large diameter chamber to store combined sewer water. The underground cavern is 175 feet below the ground surface, constructed through a 50' diameter circular shaft excavation supported by secant piles. Drill and blast techniques were used to excavate the cavern in an urban setting under a USACE floodwall. A mobile form carrier and 41' long segmental form is used to cast the 28' diameter cavern concrete liner. The three drop shafts have been drilled and excavated, along with the five vent shafts. A world record was set by Kiewit Foundations Group for the 11' diameter rock drill used to excavate the larger drop shafts. The excavations have adapted to 100 year flooding, water main breakages and flooding, overhead and underground utilities, and varied groundwater conditions. The presentation will summarize the construction progress, methods, and challenges to date.

**John Deeken** is a geotechnical engineer for Black & Veatch residing near St. Louis, MO. John has over 14 years of professional experience in the US and 6 foreign countries, involved in construction and design of numerous power generation and transmission projects. As a geotechnical specialist he is a member of several ASCE, DFI, and AISC groups. He is currently the Resident Engineer for the Maline Creek CSO project.

**Kevin Nelson** is a civil engineer and construction manager for Black & Veatch in St. Louis, MO. During his 29 year career, he has been involved in the design and construction of numerous water and wastewater system projects throughout the United States. He is currently the Construction Manager of a program consisting of construction of five tunnels and three large relief sewer projects for the Metropolitan St. Louis Sewer District.

**Time, Date, Location:** 11:30am to 1:00pm, June 20th , 2019, at the Engineering Center, 4359 Lindell, St. Louis 63018. Registration starts at 11:30am and lunch is served at Noon. The program will begin promptly at 12:15pm. One (1.0) PDH is available.

Cost: \$20/person, students and members in transition \$5

**Registration:** Please register and pay online using the link below for reservations by Friday before the event @ 5:00 PM. Please cancel by Friday before the meeting or we may have to charge you for the meal: <u>https://mspe.org/event-3344359</u>

#### **Contacts:**

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#### RESIDENT'S Ρ MESSAG Ε

MSPE St. Louis Chapter – February 2018 President's Report



I recently had the opportunity to attend a presentation at Missouri S&T given by a Mr. Paul F. Boulous Ph.D., BCEEM, Hon.D.WRE, Dist.D.NE, Dist.M.ASCE, NAE. Mr. Boulos is the founder of Innovyze, Inc., former President of Stantec and current CEO of Digital Water Works, Inc. With these impressive credentials he seems well placed to speak on his chosen topic as to why certain Engineering firms are successful while others are not. Based upon his presentation it seems Mr. Buolos credits successful companies with having a culture that is willing to change and adapt. He also discussed the role of leaders in creating such a culture and provided several lessons on leadership that I summarize below:

- "Believe in the magic of your dreams!" ٠
- Change is inevitable and the only constant in life. So never stop learning.
- Work hard. Hard work on a consistent basis is a requirement for success. ۲
- Deliver on your commitments, it builds trust and confidence. ٠
- To be an effective leader it cannot be about you. It is all about those around you. ٠
- Be a person of character, always maintain honesty and integrity. ٠
- Power is empty, collaborating means you get to share success. ٠
- Focus on the success of others. ٠
- Find reward in other's success, it is exciting and energizing. ٠
- Egos get in the way leave them at home, but do not confuse ego with self-confidence. ٠
- Actions speak louder than words. ٠
- Know your strengths and use them everyday. ٠
- Give credit to others for success, use "we" not "I" except when taking blame. ٠
- Love what you do, it is contagious. Build a life not a resume.
- To attain status do what is best for the team and display "goodness." ٠
- Be kind and use your words properly, they have the power to change the world. ٠
- Live these values everyday by example.
- Leadership requires willingness to sacrifice and an ability to induce followership.
- And help build a better world for the greater good. ٠

Our own upcoming June luncheon, outlined in this newsletter, will include the installation of Officers and Directors for the upcoming year. Please join us at the luncheon as we recognize those that have volunteered their time talent and treasure to lead our local Chapter for another year. In addition this lunch will include an exciting presentation of large deep tunnel work ongoing her in St. Louis. So come recognize our incoming officers and learn about what is underneath your own feet! If you have questions or wish to become more active in MSPE please call or email me.

#### Yours respectfully,

Michael T. Buechter, PE, D.WRE, F.EWRI, 314-768-2772 or mtbuec@stlmsd.com.

	Vice Pres Eric Haves EI (636) 53	8-2772 Adam Zuroweste, P.E.   4-3225 Mike Rademacher, E.I.   8-6294 Jeremiah King, P.E.   2-2966 Erin Jearls, P.E.	<u>St. Louis State Directors</u> Breck R. Washam, P.E. Jeff Hoevelmann, P.E. Tom Ratzki, P.E.	
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### Missouri Society of Professional Engineers - St. Louis Chapter

### 2019 Calendar

May-19								
S	М	Т	W	Т	F	S		
			1	2	3	4		
5	6	7	8	9	10	11		
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Jun-18							
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23	24	25	26	27	28	29	
30							

Chapter/Foundation Board Meeting

Newsletter Deadline for Article Submittals, President's Message, Program Information, Etc.

Tentative Program Dates

#### Potential Programs, potential 3rd Thursday of the month:

May: Tour - Enterprise Center (Hollman) June: Lunch - MSD Tunnels (Ratzki)/ New Officer Installation

# **MSPE Educational Foundation Building**

On July 13, 1994, Kansas City civic leader Jerome Cohen and his wife, Jeannette, donated the building and property at 200 East McCarty Street in Jefferson City, Missouri to the Missouri Society of Professional Engineers Educational Foundation, Inc.

By gutting the facility, the professional design/construction team of Pellham, Phillips, Hagerman of Springfield, Missouri and Ludwig Associates of Jefferson City transformed the building's plain and unassuming original structure into a design that projects the technical and professional image of engineering in a classic way.

The donation of a building is an asset to further the purpose of the MSPE Educational Foundation, which was established January 15, 1968 under the General Not for Profit Corporation Law, Chapter 355 RSMo, as a way for the member engineer or their family to make charitable contributions to the profession.

The Foundation Activities

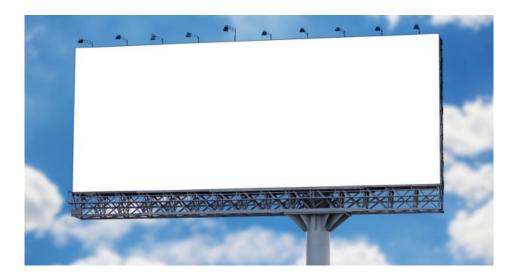
- Fund a MSPE Chapter Grants Program to promote STEM activities with community
- Promote the study of engineering through quality STEM programs like the highlyacclaimed MATHCOUNTS, Project Lead the Way and FIRST Robotics programs for K-12 grades.
- Develop sound investment strategies and enable the building to become a revenue producing asset while encouraging and enhancing access to excellent engineering education curriculums and successful engineering careers.
- Donations and estate planning for the MSPE Educational Foundation are welcome from any supporters of the foundation.



Please go to <u>https://mspe.org/Educational-Foundation</u> to Donate or Learn More.

Thank you in advance!

# **ADVERTISMENT OPPURTUNITY!**



Are you looking to advertise your business in the St. Louis area to a focused group of Engineers?

## Look no further than the MSPE—St. Louis Engineer Newsletter!

Your company or message will be directly connected to hundreds of Engineers in the Greater St. Louis Area in various companies and industries.

If you are interested, contact Adam Zuroweste at azuroweste@burnsmcd.com



# Job Opportunity



#### POSITION SUMMARY

We are currently seeking a Manufacturing Engineer. With minimal supervision, the Manufacturing Engineer will work with engineering, operations, and project management to develop technical manufacturing solutions for new programs.

### WHO IS LMI?

LMI is a world-class leader in designing, building and manufacturing aerospace structures, systems and components for commercial, business and regional, and military aerospace customers. We employ engineering, manufacturing and testing experts throughout the United States and the rest of the world.

#### ESSENTIAL JOB RESPONSIBILITIES

Develop technical manufacturing options.

Perform research, design, and development of manufacturing processes.

Consult with vendors to determine product specification sand arrange for purchase of product.

Applies statistical methods to estimate future manufacturing requirements and potential requirements.

### EDUCATION AND EXPERIENCES

Requires 4-year degree in Engineering.

4 years minimum years related experience.

Aerospace industry knowledge is required.

Working knowledge of 3D CAD systems required. CATIA v4, v5 is preferred.

Experience in sheet metal fabrication is required.

Assembly engineering experience is desired.

Excellent oral and written communication skills.

#### For more information please go to:

https://lmiaerospace.wd1.myworkdayjobs.com/en-US/LMI\_Careers/job/Washington-MO/ Manufacturing-Engineer\_R0005564

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### MSPE Amendment to be Considered at MSPE Convention

This announcement serves as official notice of a proposed amendment to be considered by the membership during the annual convention at Lake Ozark on Monday, June 17 at 2:30 PM. The amendment proposes condensing the MSPE Board of Directors from 30 to 24 directors by allowing each chapter to have a single board representative that has weighted voting.

President Michael Purol and President-elect Bob Becnel asked the Bylaws Committee, chaired by Ross Kasmann, to consider the amendment. MSPE currently has the largest Board of Directors among the state societies across the nation.

The "weighted voting" concept reduces the Board size while allowing each chapter to keep their respective voting power. For example, the Ozark Chapter would name one person as their Board representative who will attend Board meetings and carry three votes. The Jefferson City Chapter would send one person and carry two votes. This way the Board is smaller and more manageable but chapters are not being harmed by taking away any voting power.

The amendment is modeled off of how the NSPE House of Delegates works. Each state/ territory has one person in the HOD and they have different votes based on their membership size.

Pursuant to ARTICLE XVII, Section 3, the Bylaws Committee has brought this amendment forward. Because the proposed amendment is a "governance" change, the process to approve is to present the amendment to the membership in writing with 30 days' notice (published in the Spring Missouri Engineer) and at the convention's membership meeting members can vote to approve or disapprove. The changes must be approved by a 2/3 majority of members at the meeting to prevail.

Go here to see the proposed changes to ARTICLE V- Board of Directors (Governance):

https://mspe.org/resources/Documents/MSPE%20Bylaws.pdf

