

The Commonwealth Quarterly

News from around the circuit.

Winter 2017/2018



Commonwealth Electric Company
of the midwest

INSIDE THIS ISSUE

Tanya Wegner – Our new Office Manager for the Kearney Branch Office

Commonwealth Des Moines Improves its Service Department

Iowa Ortho is Operational in Pella, Iowa

Automation

Commonwealth Electric Prefabrication Shop - Omaha

Dignity Health Group St. Joe's Hospital

Commonwealth Electric Company Receives Workplace Safety Award

Blank Children's Hospital Festival of Trees and Lights

Omaha's 2nd Annual Chili Feed

Commonwealth Teams Up with Audio Labs for Des Moines' River Center

Is Technology Your Friend?

Tanya Wegner – Our new Office Manager for the Kearney Branch Office

Kevin Dart - Service Manager

The office personnel in Kearney held a vote on the final three candidates and Tanya won unanimously. Once you meet her, you will understand why. Tanya has worked in the accounting field and construction business for many, many, many, many years. (She's quite young so drop one of the many). She is involved in social activities, such as the Polar Express for young children in Kearney. This means spending hours tying strings on bells to hand to the children taking a ride on the Kearney Christmas trolley. She is also actively seeking a way to protect turkeys crossing the road on 30th street. Yes, she called the Kearney Police Department requesting a turkey crossing sign to be posted. They have indicated that the turkeys are presently being caught and released in another area, probably close to Coleen's home.



Tanya has two children, Maddie and Luke. With her engagement to Barry there will be an additional 3 girls. If she can handle that many kids, she can handle anything that will come her way at the Kearney office.

Tanya is going to be great as an office manager. She is organized, a self-starter, motivated, smart, detailed, thoughtful, witty, bright.....

Seriously, we are glad to have Tanya as a part of the Commonwealth family. WELCOME TANYA!

Commonwealth Des Moines Improves its Service Department

Lisa Steenhoek - Service Coordinator & Ashley Huinker - Project Coordinator

The Des Moines location is excited to announce the addition of a few new faces in the service department. Combined, our new team brings nearly 77 years of experience in the construction industry.

Jeff Hoover has transitioned from a field foreman and joined our team as Service Manager. Jeff brings more than 30 years of experience in the electrical service and construction industry. His experience managing crews in the field will serve him well as he manages a dozen of our service drivers.



Commonwealth Des Moines Service Department – From left to right: Mark Hollingworth, Jeff Hoover, Jeff Hutchison, and Lisa Steenhoek

continued on page 2

Service Department continued from page 1

Jeff Hutchison has signed on as an Assistant Service Manager. Jeff, with more than 28 years of experience in the electrical service industry will be a vital asset to our team in terms of customer services and growing our customer base.

Partnered with Jeff and Jeff, Lisa Steenhoek has joined the team as Service Coordinator. Lisa comes to us from the general contractor industry with more than 19 years of experience in construction, accounting, and customer service. Her knowledge of the industry and expertise in construction will prove to be instrumental in the day to day processes that drives our Service Department for success.

Mark Hollingworth may not be a new face, but his role as Service Estimator will be more important than ever as we strive to build and expand our service department on all fronts.

The continued development of our people and Commonwealth Des Moines as a whole, is a goal that we aim to achieve and maintain every day. We are beyond excited for Jeff, Jeff, Lisa, and Mark as they look to grow and improve Des Moines' Service Department. We are gearing up for another busy year and this team will undoubtedly serve our customers in the best possible way.

Iowa Ortho is Operational in Pella, Iowa

Dylan Busby - Project Engineer



Outside view of Iowa Ortho Pella facility

The Des Moines' office is proud to announce the completion of another Iowa Ortho facility. The Pella facility, located directly west of the Pella Regional Hospital, is almost a direct replica of the Ankeny, Iowa facility. This facility is approximately 10,000 square feet spanning over two stories with the top story being a lease space for a Pella Regional Health Center Therapy Services. Construction start was delayed from September 2016 to April 2017 for the construction crews to utilize good weather. The scope of work for this project was similar to that of the Ankeny facility consisting of a 480-volt distribution system, low voltage lighting controls, nurse call & xray call systems, voice/data system, and a complete fire alarm system. The only change in scope from Ankeny is an LED lighting solution for Pella.

This design-build facility houses two operable x-ray rooms, 12 patient exam rooms, along with other patient care services on the first floor. The PRHC Therapy Services space on second floor allows them to effectively treat all their patients' conditions. Everything from athletic training to individual therapy treatments are accomplished with the use of an open exercise space, five exam rooms, six treatment beds, and a photo therapy booth.

The CECM management team consisted of Nate Findlay as Project Manager, Dylan Busby as Project Engineer, Clint Bailey as Low Voltage Project Manager, Ashley Huinker as Project Coordinator and Marijo Bosilijevac as the Lead Engineer and BIM Coordinator. Brad Ramsey was the foreman for the project. He was previously a service electrician but jumped on the opportunity to run the Iowa Ortho Pella project. Ryan Companies was the general contractor. The Des Moines office is happy to have completed yet another design-build project with Iowa Ortho, continuing our great relationship with Ryan Companies.

"Commonwealth has done it again! Our new building in Pella looks and operates beautifully! It is always a pleasure working with Commonwealth Electric. ALWAYS responsive to our request and ALWAYS professional."

– Marvin Gribbins Facilities Manager



Main floor lobby of Iowa Ortho Pella facility

Automation

Scott Ragland - Automation and Controls Manager

Automation: The technique, method, or system of operating or controlling a process by highly automatic means, as by electronic devices, reducing human intervention to a minimum.

January 2017 Commonwealth Electric (Lincoln) took steps to the future with automation. An automation division was started to offer another service to Commonwealth's customers.

With new technology appearing in manufacturing the role of an electrician is changing. An electrical company is expected to be able to service and build more advanced electrical controls than ever before. Customers are using VFDs (variable frequency drives), PLCs, operator interfaces which include touchscreens and SCADA (Supervisory Controls and Data Acquisition). As the electrical contractor's roles change, not all contractors are able to take the steps needed to provide the customers with the services needed. Commonwealth Electric has taken steps to put them in a premier position among contractors.



As 2017 has progressed, electrical technicians are being trained and brought up to speed on technology. They are getting hands on experience with programmable controllers, managed ethernet switches, VFDs and various types of networks. The training starts out with legacy controllers and communications such as SLC 500 and DH485 networks. It then progresses to the new controllers and technology; for example - ControlLogix and Ethernet networking. As the technicians are becoming more comfortable with the technology, they assist our customers and provide a needed service.

As we progress through the year we are continuing to expand. We have an engineer on staff and he is currently implementing projects involving SCADA software. We are designing systems using IGNITION software to monitor plantwide systems. These systems are monitoring production lines and the customers can sit at any desk and monitor the production line. The customers can monitor who stopped the line, packages per minute and efficiency.

This is just the start and one small step to bringing Commonwealth Electric to the forefront of electrical contractors. As we proceed into 2018, there are goals that we are striving to reach and we took the first steps recently. We built a control panel shop in late 2017. We are in the process of becoming a UL 508 panel shop by early 2018. This will allow us to design and build control panels that can be installed in any state and Canada.

Our control panels are designed in AutoCAD electrical. This allows us to provide documentation and copies of schematics and panel layouts as a file that can be stored and backed up for our customers.

Machine safety is another important aspect of automation. As we automate equipment and process the safety changes, we can work with customers and assist in risk assessment and design of safety controls. The safety system can be as small as an emergency stop circuit or a complex system that requires muting and light curtains that are controlled with a safety processor.

With the support from Commonwealth Electric, we have grown by leaps and bounds. Continuing to grow and change as our customer base changes by training and improving our process is going to allow us to grow and reach to the future as manufacturing and processing changes. As technology changes we will continue to change and grow with technology and our customers.

Commonwealth Electric Prefabrication Shop - Omaha

Troy Savich - Manager

We started the new prefabrication shop in our location across the street from our main office in August, 2015. With almost 8000 square feet of space we were able to set up a facility that supports the needs of our jobsite.

In the front area of our shop we have an office area with print tables, desks, and data connections with large wall mounted screens that allows a superintendent or foreman to come in and review projects before they start. This also allows time to pre-plan any type of prefabrication that will be used on that project.

In the back area of our shop we can use entry level apprentices and construction workers to achieve a low labor rate in addition to exposing them to the basic electrical knowledge prior to them going to the jobsite. We specialize in prefabrication for large projects such as HDR and UNMC. We are also able to do specialized items such as large conduit bending and threading (2½" up to 5" Rigid, aluminum, and EMT) as well as odd sizes of J-boxes. One of our most successful and time saving items is the ability to make repetitive items such as trapeze hangers and stud mounted box assemblies in a very fast paced manner. This process saves time on-site and helps the workers achieve almost impossible deadlines.

Another area that stands out with our new facility is the light fixture division. We are set-up to receive a large shipment of light fixtures for a specific project and unbox them, relabel, install whips, inspect for damage, and repack them in a manner that reflects the installation order that the project requires. This process saves an extreme amount of time by eliminating the excess waste on-site and the hassle of trying to locate a specific fixture in a sea of pallets.

We also have a small area of the shop set up for welding so that we can fabricate supports or other items a job might need.

Our shop is set-up with versatility in mind. We have several large work tables that are capable of being arranged in a manner to accommodate an assembly type line or all pushed together to handle large equipment. We are also able to help our service division by taking daily orders of items ranging from emergency conduit bending to assembling specialty control cabinets prior to installation. We also have a designated area of our shop with a mock up wall that we can use to demonstrate how the prefab wall assemblies would layout in a wall. We will work with engineering and the foreman prior to placing an order and they can see what they will be getting on-site and make any final adjustments before production starts.

Lately we have been converting Conex storage containers into very nice job-site office/break areas that include heat, air conditioning, insulated walls and a large print table. They have a separate entry door just behind the exterior doors for extra security. We are very proud of our new facility and excited to see it continue to grow and excel in every aspect of the electrical field.



Dignity Health Group St. Joe's Hospital

Joe Wall - Director of Business Development

CECM Phoenix was awarded the expansion and remodel of the SJHMC Vivarium Lab, along with multiple other medical center and related area renovations.



This project consists of renovations and additions to the existing basement area, approximately 4575 SF of existing basement lab space to accommodate a larger population of mice for research purposes.

The new classroom building involves providing a new electrical distribution system, new lighting and lighting control systems, new branch circuit installations, raceways for telephone/data and security systems, as well as a modification of the fire alarm system.

The project schedule for Phase 1 was six months and Phase 2 is set to begin in the first quarter of 2018.

Located in the St. Joe's Medical Center Campus, this scope consists of the relocation of the NRU staff and offices to the second-floor bridge area. This includes the renovation of existing office space and the conversion to the new NRU offices.

There will be redistribution of the lighting, HVAC, power and communications, as well as the modification of existing kitchens, restrooms and rehab areas.

These two main projects, along with projects like Norton's Thoracic Institute, Brain and Spine Renovation, the Ryan House, the lobby administration, kitchen and dining room redo's have added up to well over one million dollars and counting.

These projects are being estimated and managed by our Sr. Project Manager, John Silvas.

Commonwealth Electric Company Receives Workplace Safety Award

Ruben J. Bera - Corporate Safety Director

On Nov. 30, 2017, Commonwealth Electric Company, Lincoln, Nebraska, was presented the Spirit Award by Nebraska Lieutenant Governor Mike Foley during the annual Nebraska Safety Council Conference and Trade Show Awards luncheon which was held on October 11, 2017, at the Cornhusker Marriott Hotel in Lincoln, Nebraska.

The Workplace Safety Award Program is designed for Nebraska Safety Council member companies that encourage and promote the prevention of occupational injuries and illness in their workplaces and have achieved superior results in the success of their safety programs. This is the fifth year Lincoln has won this award. Commonwealth Electric has always been recognized as a leader in workplace safety. Being recognized by your peers and the community where you work is a testament of our commitment to employee safety. Congratulations to all!

The Associated General Contractors of America (AGC) recognized Commonwealth Electric with a Certificate of Commendation for our 2016 excellent safety record. This award was given to us for having an incident rate below the national rate for our division. Another testimony from a nationally recognized organization.

Receiving awards are nice and appreciated; however, our goal is not to line the shelves with awards but rather to provide our employees a safe work environment. Our employees have embraced our safety culture and we all continue to work safe. Safety is our #1 priority.

Our Safety - we Promote it, sell it and are Proud of it!

Blank Children's Hospital Festival of Trees and Lights

T. Michael Price - Senior Vice President

For the 5th straight year, Commonwealth Des Moines sponsored the annual Blank Children's Hospital's Festival of Trees and Lights fundraising event in Des Moines. Over 60 Commonwealth employees donated over 500 hours during the Thanksgiving holiday weekend to help unload crates, setup the electric train, assemble over 80 Christmas trees and put up holiday decorations. Additionally, we helped with tearing down, loading, and repacking after the event was over.

A record \$600,000 dollars was raised during this year's Festival to support the Child Life Program and the Center for Advocacy & Outreach at Blank Children's Hospital in Des Moines. Commonwealth has a long history with Unity Point Health and Blank Children's Hospital. We were thrilled to be part of the event again this year and look forward to the many more years of service to Unity Point and Blank Children's Hospital.

"Festival is an amazing event! The Unity Point Foundation staff does a fantastic job. Working with them and our employees for such a great cause is a true pleasure. "

-Mike Duffy, CECM Festival Drill Sargent

A big thank you to all the Commonwealth employees and their families that volunteered for this very special and worthwhile event. A special thank you to Michael Duffy for coordinating our efforts, to Trevor Schmidt for leading the train crew and Dianna Merritt for keeping us all on track! We really made a difference this year! Great Job Everyone!



Foundation President, Dennis Linderbaum, thanking all our Commonwealth volunteers during Festival of Trees setup



Festival tree decorated by Commonwealth employees, Dianna Merritt and Ashley Huinker

Omaha's 2nd Annual Chili Feed

Cheryl Keyes - Office Manager



We held our 2nd Annual Chili Feed on November 8th. This year's winner was Dan Maca from The Data Comm Division. Dan wins the awesome trophy and bragging rights for the year. Dan's entry was different from the rest – It was delicious and with the warm buttered bread, it received the most votes!

We had a variety of chili's – all together there were 10 entries. Our winner last year entered with Hormel Chili and added tomatoes! That entry did not help defend his title and bragging rights for another year!

What will it take next year to top this year's winner? Never too early to start testing recipes now!

Commonwealth Teams Up with Audio Labs for Des Moines' River Center

Kevin McCarty - Low Voltage Project Manager

Over the past few years Commonwealth Communications has developed a solid relationship with Audio Labs, a top audio video company in the Des Moines area. This relationship has provided unique opportunities for Commonwealth Technicians/Electricians to think outside the box and use years of installation expertise to fulfill customer's needs.

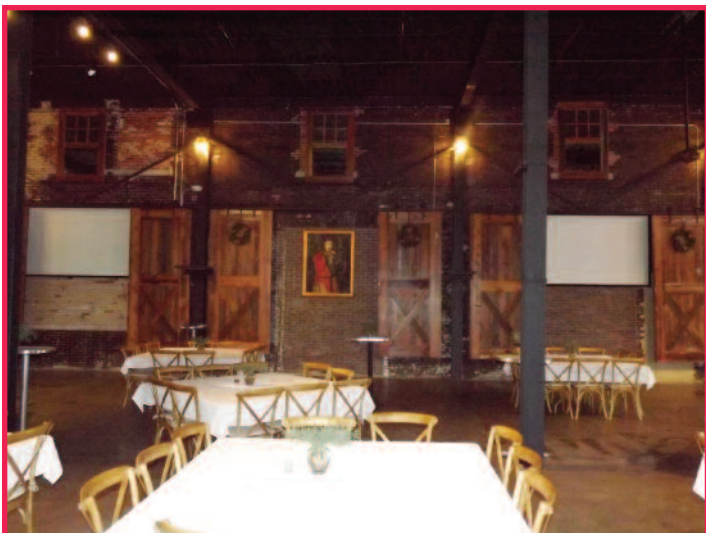
This past fall, Commonwealth Des Moines and Audio Labs teamed up on a project for River Center, a new venue in downtown Des Moines specializing in wedding receptions and large scale corporate parties. River Center was in desperate need of a solution for their sound and display capabilities. Portable speakers and projectors caused too much of a headache and the setup time was too great for the large number of events they were hosting. A permanent and effective solution was obvious. After meeting with Jim Nelson with Audio Labs and Jake Miller, owner of River Center, they devised a plan even Colonel Hannibal Smith would be proud of.

To organize and store all the audio video equipment efficiently, we installed a 2'x4' audio cabinet behind the venue's bar. From the cabinet, we installed a category 6 cable to each of the two projectors that we mounted from the exposed ceiling. As this wasn't your typical projector installation, we had to customize the projector mounts using Unistrut and tapping new holes in the projector poles to reach the required height. Once the projectors were installed, two 100" fixed frame screens were hung behind rustic barn doors. To facilitate the audio-visual needs of these screens, we added 1" conduit from the exposed ceiling to typical outlet height in between the screens and installed a 3.5mm audio cable and an HDMI cable. This would allow the presenter to easily hookup their laptop or smartphone to the audio video equipment. Finally, we installed six 12"x24" JBL 3-way premium audio speakers in the exposed ceiling; making them virtually impossible to see. Kevin Harris was the Service Electrician on the project. He was assisted in the office by Kevin McCarty, Low Voltage Project Manager.

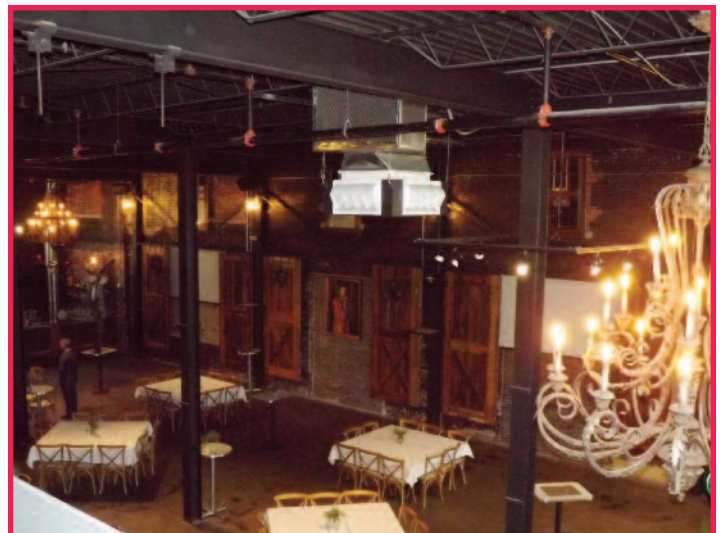
"This setup sounds so good, it makes me want to go back on tour with Metallica."

– Kevin Harris, Service Electrician

The teamwork between Commonwealth and Audio Labs proved instrumental in the success of this project for River Center. The planning and execution is something both parties can certainly be proud of. As always, CECM enjoys working with Audio Labs and their team and anticipates many more successful projects with them in the future.



Projector screens installed alongside rustic barn doors



Upper view of River Center

Is Technology Your Friend?

Marijo C. Bosiljevac - Electrical Designer

It should be on your jobsite. The HDR Office project team of John Randall, Aidan Colling, Marijo Bosiljevac, Edgar Tello, Megan Morse, Matt Burnham and Ryan Roetman is taking advantage of the technology available to us. Here are the top six strategies the HDR project team are implementing to keep everyone in the loop and reduce wasted efforts and re-work.



#1. Use Bluebeam to do more. We are using the auto-label and auto-slip sheet functionalities to update and hyperlink the drawing set. This feature labels the page with the name of the sheet and stacks new drawings on top of old drawings, marking the old drawing 'Revised.' Bluebeam's ability to batch process makes updating drawing sets incredibly easy. Bluebeam also has an overlay feature that color codes changes between revisions. We use the dimensioning and counting features daily to keep work moving along.

#2. Host Drawings in the cloud. Everyone from the office to the field have access to a Dropbox folder that syncs to local PCs and tablets. Bluebeam markups can easily be shared with the whole team immediately with this method.

#3. 3D Modeling. The entire project has been modeled in 3D using Revit. Each trade modeled their own work and models were loaded into Navisworks (shared software platform) to detect conflicts. The BIM team worked floor-by-floor, along with the project manager and field superintendent, to resolve any issues. The resulting 'locked' models were used to generate layout drawings for feeders, cable tray, branch conduit racks, data racks and identify code clearances for equipment that we knew would work.

#4. Large TV in the trailer. The jobsite trailer has a large TV mounted above the plan table that is used to review 3D models and compare prints. With an HDMI cable or wireless connectivity anyone in the trailer can display their screen for all to see. It's incredibly helpful to 'fly' through a model before beginning work in a congested area.

#5. Field Workers have iPads. The job has 15 field workers and 4 iPads. They have access to the same cloud drawings and can view coordinated models one floor at a time with the BIM360 app.

#6. Robots! The HDR office building has over 54,000 ft. of conduit in the slab for lighting, fire alarm, data and power for over 400 floor boxes. We used the Trimble to layout floor boxes and conduit stubs, both up and down, as well as collecting as-built information regarding conduit locations. We also used the Trimble to layout site trenches and to confirm locations of pull points.

These are the top six things that have helped our team stay connected and productive, but we are always on the lookout for the next idea that will make the process even better.