

The Commonwealth Quarterly

News from around the circuit.

Fall 2014



**Commonwealth
Electric Company
of the midwest**

INSIDE THIS ISSUE

UNO Community Arena - Omaha, NE

**AK-Chin Him-Oak
Museum and Site**

**VA Hospital
Improvements
Keeping Des Moines
Office Busy**

**UNL City Campus
Central Utility Plant
North Cooling Tower
Replacement**

Safety Update

**MUD SCADA Upgrade
Project**

UNO Community Arena - Omaha, NE

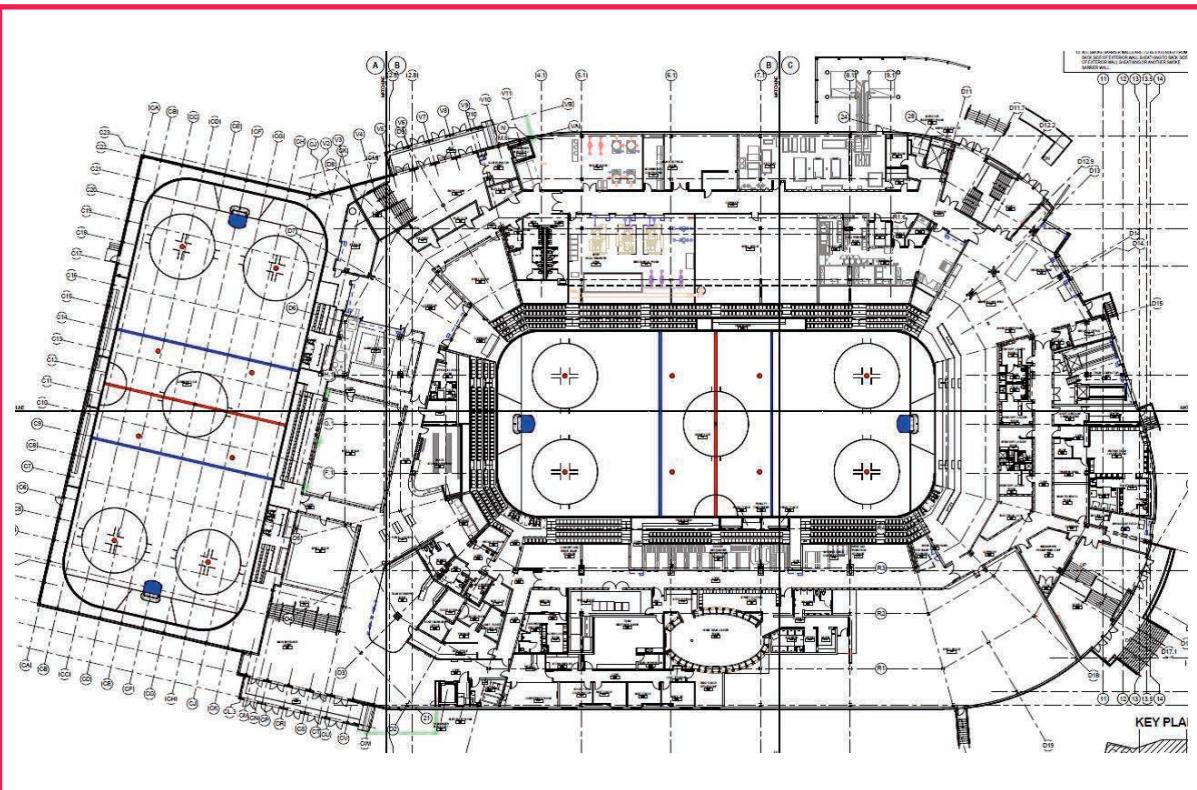
Dan Cahalan - Project Manager



Commonwealth Electric has partnered with Kiewit Building Group and HDR in constructing a 200,000 square foot hockey arena for The University of Nebraska Omaha. This facility will house two ice arenas. One of which will be used for both community and practice use, and the main ice will be the new home for the UNO Maverick's hockey team. The main ice will be roughly 85 ft. x 200 ft. and seat 7,500 spectators. The arena has been de-

signed to convert easily for housing various other sporting events, concerts, graduations, and community gatherings.

CECM's project team consists of Senior Project Manager, Troy Deats, Project Manager, Dan Cahalan, BIM Modeling Engineer, Doug Coleman and field General Foreman, Jon Schafer.



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Back Row - Left to Right Don Kopecky, Jon Schafer, and Ryan Roetman

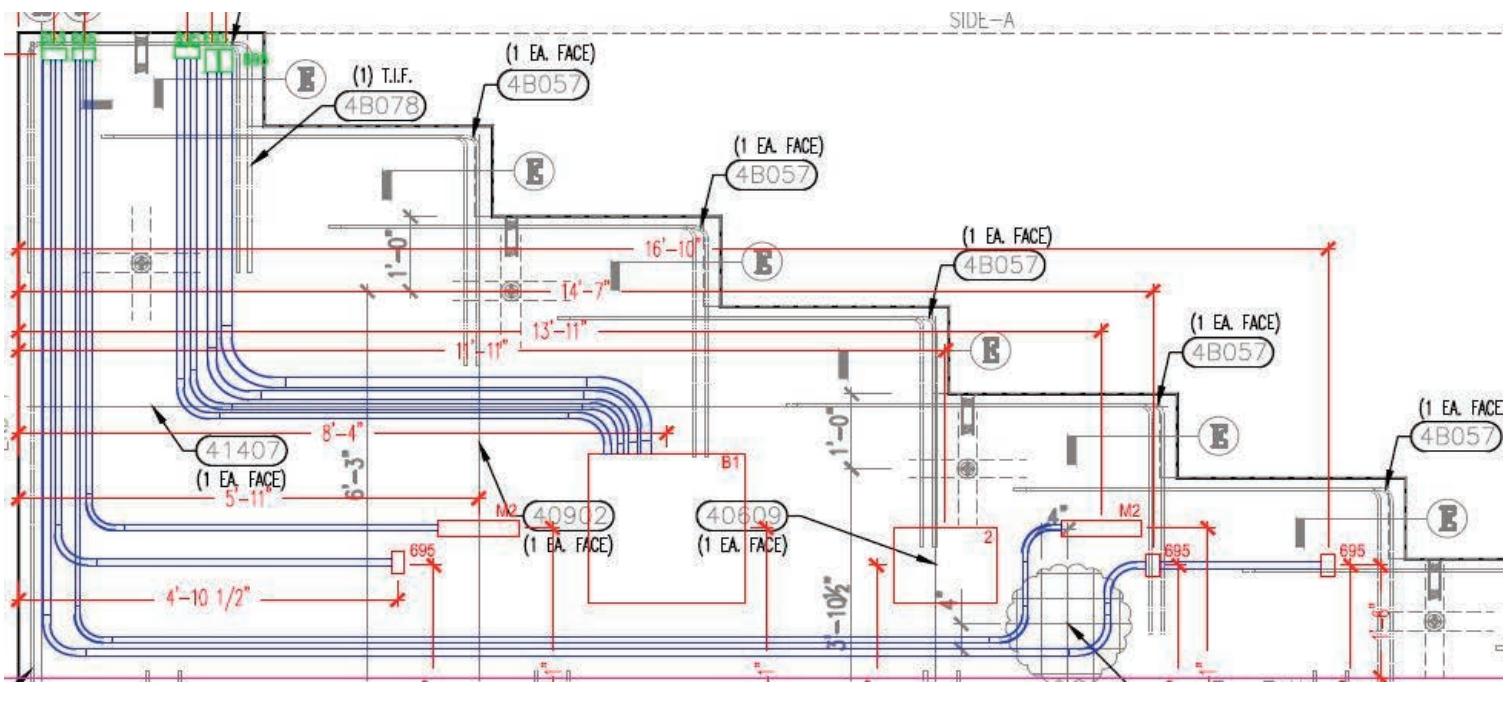
Front Row - Left to Right Mark Ritterbush, Jared Gable, Arnie Strong, Heath Schneider and Bob Bergamine

The Arena is very unique and has various challenging aspects we are currently working on. Here are just a few:

Precast: Majority of the structure's seating and stair egress is precast concrete. The electrical design layout process is key for precast construction. Many of our lights, and misc. devices are recessed into the precast structures. Consequently man hours of design by our CECM's engineering division (Eric Hoge, Doug

Coleman, and Josh Muench) have been working side by side with Jon Schafer and Foremen Jared Gable and Ryan Roetman to help facilitate the install of the electrical raceways at the precast plant in Minnesota. CECM just installed electrical in the first two wall pours last week in Minnesota and so far everything is running smoothly. Attached is a typical detail our engineering department creates to show electrical precast rough-in locations for our installers in Minnesota.

Trimble: CECM Omaha has purchased a wireless GPS layout device called Trimble for our use at the Arena. This device ties directly into our BIM modeling GPS coordinates and allows us to lay out just about anything with laser guided accuracy. To date we have shot over 1,000 points on site for various items such as blue bangers in metal decking, the elevations of duct banks, quazite boxes, generator/transformer pads, receptacle/TV/Floor/Data/AV and security boxes, light poles, bases and much more. Having this accurate of a layout in the field allows us to run a majority of our branch circuit conduits in the slabs versus overhead, saving the owner time and money. CECM is also using its capabilities to red line exact depth and locations of our utilities for close out purposes. This amount of detail for the owner will be very helpful for facility management personnel in the future.



Left Alex Sluga is shooting a point in one of the electrical rooms.



Inside of the Arena there are over 4,000 light fixtures which include state of the art LED sports lighting. There are four main levels in this building along with a large catwalk system. Part of the lighting package includes Musco sports lighting which will be installed at over 60' above the main ice, off of the catwalk structure. This will require accuracy and experience in order to properly hang these fixtures to meet design aiming requirements.

Currently we are finishing underground rough-in on the main event level and in the next few weeks all concrete slabs will be topped out. Kiewit hopes to have the building enclosed by the beginning of winter. Substantial completion for this project is September 24, 2015 and UNO's first home hockey game will be held in October.

CECM Omaha is very excited about this project and very thankful to be a part of it. Go MAVS!



Ak-Chin Him-Oak Museum and Site

John Silvas - Project Manager

CECM Phoenix was recently awarded and began work on the expansion and remodel of the existing AkChin Him Oak Museum in Maricopa, AZ, with A.R . Mays Construction.

The project consists of renovations and additions to the existing museum, numerous site improvements and construction of a new 7,351 sq. ft. classroom building adjacent to the museum.

The existing museum will include replacing the existing track lighting in the museum and Veteran's Hall. There will also be new lighting and branch circuits added in the new storage areas. Site improvements include new lighting for pathways, Ramada's and the parking lot. A new water feature will be part of the site improvements as well.



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 and a complete new design build fire alarm system.

The project schedule is six months and the original contract value is \$ 282,500. CECM's Project Manager is John Silvas and our Project Superintendent is Caleb Graham.

VA Hospital Improvements Keeping Des Moines Office Busy

Ashley Huinker - Project Coordinator



Robin Pearson, Project Foreman, working on the VA MRI project

Commonwealth Electric is currently working on several projects at the VA Hospital in Des Moines. One major project consists of repairs to the VA hospital pharmacy, including relocating and adding new furniture, as well as providing new receptacles and voice/data in the new locations.

Another large project is a replacement of the hospital's existing MRI unit with a new Siemens magnetom unit. Commonwealth is also installing new LED cove and accent lighting in the scan room, plus remodeling the control room and waiting room.

In addition, Commonwealth is working to relocate the hospital's histology lab to a new location. This project includes new lighting, power, voice/data, fire alarm, and security.

Covenant Construction Services, LLC is taking on the general contracting duties on these projects. The Commonwealth team includes Mark Ramsey as Project Manager, Robin Pearson as the Project Foreman and Matt Temple as an un-indentured apprentice.

"Commonwealth has worked with Covenant Construction on several projects at the VA Hospital. We really enjoy working with Cody and his superintendents."

-Mark Ramsey, Project Manager

Commonwealth is thrilled to be a part of these exciting VA Hospital improvements, which will undoubtedly support and benefit the brave veterans that served our country. All three projects are scheduled to be completed this coming fall.

UNL City Campus Central Utility Plant North Cooling Tower Replacement

Micah Edson - Project Manager

As the campus at the University of Nebraska-Lincoln has grown so has its utility demands. Foreman Derek Behne recently completed a project lead by H&S Plumbing and Heating. The UNL City Campus Central Utility Plant North Cooling Tower Replacement project increased the existing cooling capacity to meet the rising utility demands of the campus. The project kicked off at the beginning of this past winter when the cooling demands were lowest and was successfully back up and running when the weather turned warmer this spring. We completed the project by installing a lightning protection system to protect the new equipment and existing structure. Harger Lightning & Grounding provided training, design, and assistance for this system.



UNL's Utility Management was impressed with what Harger and Commonwealth teamed up to provide. In turn we were asked to design and install a lightning protection system for the adjacent West Cooling Tower. Derek Behne provided leadership onsite for a successful project with the assistance of Jeff Scheel, Paul Thompson, and Matt Hosch.

A big thank you to the team for a project that was on time and accident free!

Safety Update

Ruben J. Bera - Corporate Safety Director

Working together with general contractors has many positive results. Especially when it comes to safety. At one of our locations we are working with a local large general contractor. Safety is a top priority on these job sites. Recently our electricians were awarded gift cards for bringing safety concerns to the GC. The GC recognized the attention to safety that our employees demonstrated. This is not a matter of pointing blame on someone else but recognizing safety concerns that could prevent someone from being injured. An injury on any job, regardless of the craft, affects the entire site. Working together to help prevent injuries leads to a successful job.

In other news, Commonwealth Electric again was recognized for our safety efforts from our insurance carrier. We were given an award of merit. This award reflects the commitment that all employees have demonstrated to working safe and preventing injuries.

Changes are coming. We all know that the Hazcom standard is changing to the GHS system. Our containers we use will be labeled differently. Our MSDS will change to SDS. We will need to train and educate all employees on how to read and the need to understand the new system.

Major changes are coming to NFPA-70E. This is another area where we need to educate our workers who may be exposed to potential arc flash hazards.

Safety at Commonwealth Electric is constantly staying ahead of changes and making sure all employees are aware of these changes by providing the education to stay on top of these changes. A big part of our safety education is on-site observation. It's one thing to send out information to the field but it's just as important to observe the workers demonstrating what was learned.

As we look ahead to 2015 we see the importance of safe work practices. Owners and GC's are demanding more and more safety awareness and practices. At Commonwealth Electric we are prepared to meet these challenges by staying informed and keeping our employees updated.

MUD SCADA Upgrade Project

Cerone Thompson - Project Manager

Commonwealth was selected as the Electrical Contractor for the MUD SCADA Upgrade project. The project is located at MUD's Florence facility which services most of the Metropolitan area. The project spans more than a mile and in addition to the SCADA Upgrade, the project involves upgrades in more than 8 buildings around the site as well as an upgrade to the site fiber network (see picture below). The unique aspect of this project is that we are the General or Prime Contractor for this upgrade and Huffman Engineering is our main subcontractor along with several others. We recently completed a similar project with Huffman for MUD at their Platte South location, which is very similar to this one.

Jason Burnham and Paul Jaksich are the Superintendents on the project. The challenging aspect of a project like this is that since this is an active site, we are not able to shut down services to complete the electrical work. This makes phasing particularly difficult because the network and services have to stay up and running so temporary connections are often needed. The project is scheduled to be completed in late spring of 2015.



