

Mott Electric GP

WATTS NEW

ISSUE 09 · August 2015



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President's Message

With the end of summer fast approaching, I trust everyone has enjoyed our exceptional warm weather and hope we can all look forward to an equally enjoyable autumn.

For those of you who were able to attend the Abbotsford Air Show, I heard it was an outstanding demonstration of avionics and a fun day for all. My apologies for not attending but those summer family weddings take priority!

We are optimistic that the strong work picture will continue and that the transition from Marine Gateway to Brentwood will enable steady work to continue. Many other projects are underway and manpower transfer and fluctuations are a reality. We are cognizant of the challenges of daily travel and make decisions on bidding certain work so that we can mitigate the drive and cost to all of our employees. We do our best to limit that exposure but are not always in control of the choices. We applaud those of you who car-pool and take transit to ease the costs and lessen the stress in limited parking scenarios.

Win a \$500 night on the town!

We are very proud of this quarterly newsletter and we hope that you enjoy and appreciate our efforts to communicate important and interesting issues to everyone.

My request is to send me an email with your thoughts and comments for future newsletters or ideas that you have that can improve the company as a whole and your duties within it. I am also asking you to contact me because I am curious to see how much readership our newsletter receives. So, if you send me an email, with comments or even just a 'hello', your name will go into a draw for a dinner and one night's accommodation in Vancouver worth \$500. Send it to: djmott@mottelectric.com

I look forward to hearing from you and enjoy the rest of the summer in beautiful British Columbia.

Cheers,
Danny Mott



Mott Downtown Office:
419 West Hastings, Vancouver

MANAGER'S CORNER:

Howard Smith, Downtown Tenant Services Manager

Summer in the City? It's Busy!

Here are a few highlights:

Project Manager Troy Henderson has been awarded a project for two floors in Bentall's new building located at 745 Thurlow while PM Gord Denham and Foremen Brian Lawson and Ryan Zeitner are just completing work on multiple floors in Oxford's new MNP building at 1021 West Hastings. Rasti Maymandi and Lee Marcinkow are tackling the very challenging separation of the power distribution for the new TELUS building at 555 Seymour. Some of the critical work has already been completed. Phil Marks reports he and his crew have just wrapped up three floors for CPABC at the SFU Harbour Centre.

Also this summer, Project Manager Grace Kao has just completed a lighting and tenant upgrade for the Sinclair Centre, a downtown heritage building that is home to Services Canada passport office.

Mike Murray, Henry Siemens and Rick Corness Jr. are just starting on unit-sub upgrades at 1050 W Pender for Cologix who is expanding their Data Centre in the building. PM Brad Dimock and recently married foreman Eugen Jukic have just finished new digs for OEBL.

Meanwhile, the tenant work has started at Marine Gateway and a crew led by Mark Wilson is taking care of Winners and other tenant work at the site. Service Managers Eugene Sawka, Doug Foley and Lori Robertson have been keeping our service techs busy on the trucks and electric bikes with steady work.

And congratulations to new parents! The downtown group continues to be a baby machine. Most recently Mike Murray and wife Natalie welcomed their son Robbie, 7lbs 13oz; Stephanie Howe & husband Steve had Alexander James, 8lbs 13oz, and Ryan Zeitner and his wife, Ashley had a baby girl, Penny, born on July 8, weighing 6 lbs. 2 oz. Everyone is healthy, happy and sleep deprived.

Who's New?

Bryan Lennox

started with Mott Electric on July 6/15 as a Site Project Coordinator for the Brentwood Town Centre redevelopment project.

Juan Cisneros

started on August 4/15 as a Site Project Coordinator for the Ruskin Dam project.

Quotable Quotes:

"If you are too busy to laugh, you are too busy."

"Success is getting what you want and happiness is wanting what you get."

"If you don't know where you are going, you will end up someplace else!"

"For what a man has, he may depend on others; what he is rests with him alone."



MTI, Division 8 and Division 9 earn share of \$4 Billion TELUS Investment in BC Infrastructure

TELUS, the Vancouver-based telecom provider has spent \$47 billion on its infrastructure in British Columbia since 2000.

The company has promised to enhance its wireless networks and boost broadband coverage with a further investment of \$4 billion in additional infrastructure projects through 2018.

The plans include upgrades to every wireless site in the province to 4G LTE, expand its wireless coverage in BC's healthcare facilities, and build infrastructure to support both its 700 MHz wireless spectrum and AWS-3 wireless spectrum. The spectrum was previously used for analogue TV broadcasts before Canada switched to digital broadcasts in 2011. The frequency offers a stronger signal but phones must be capable of transmitting and receiving 700 MHz signals for it to be of any use. The company will also complete construction of its new head office, TELUS Gardens tower in downtown Vancouver. MTI Division Manager Peter Kuyvenhoven adds, "We have had a crew at TELUS Gardens for over a year now. The scope of this project has expanded well beyond what was originally anticipated. We continue to provide TELUS with high level support as they refine their coverage needs within the building."

Kuyvenhoven reports MTI has earned numerous jobs in communities helping bring 4G LTE cellular services to customers previously only serviced by 3G UMTS. He said, "We are nearing the tail end of this stage of the project. Crews are currently working in Hope and Vancouver, and have been in Kelowna, Kamloops, Cranbrook, Penticton, Creston and many of the small towns in between."

Foreman Flavio Kataro has been working on these projects since January 2015, "The TELUS Voice Over LTE (voLTE) Upgrade project started at 120 various sites all over the province. We anticipate completion by the end of August. We are tasked with the

installation of new cellular equipment, new fiber optic lines and upgrading some of the existing radio units on towers. voLTE will enable TELUS to launch a number of new services like high-definition voice and video calling over the existing LTE network. This service will place calls on an IP level and is far more efficient than the present 3G-voice system currently being used."

Access to some remote cell tower site locations has been challenging. Kataro said, "Many are on mountain tops. We have worked on many mountains all across BC, including Mount Midgeley, located 31 kilometers from Creston, Mount Moyie that is 29 kilometers from Cranbrook and Mount Jarvis near Hope. Jarvis was the most difficult as this site can only be accessed by helicopter. Another roadblock to these projects are delays caused by equipment backorders."

Kataro adds, "It's been a team effort... a big thank you to everyone who worked hard for many long days to meet TELUS' expectations and making this project a success, namely: Mike Buss, Jason Margarit, Mike Smith, Tim Braun, Pat O'Neill and Josh Plankeel."

Division 9, managed by Elisha Mott, has been working on the TELUS Falcon Project with lead Foreman Dave Netik. Falcon delivers FTTH (fiber to the home) in MDU's (multiple dwelling units) across the province. They have completed installations in five cities (Creston, Hope, Kelowna, Quesnel and Williams Lake) serviced over 6,000 units in 300 buildings. The proposed five-year project will move into the lower mainland in 2016. Elisha Mott said, "I like the idea of this being a very young team. The project has created the opportunity for over two-dozen young apprentices to get experience with fibre, providing niche knowledge of leading industry technology. Ken Swansburg and Josh Lennax have been crucial to the success of the project."



Safety First!

Perry Harvey, Health and Safety Coordinator

Approved Method for Removing Bolt-on Covers from Live Electrical Equipment



The use of suction cups when handling bolt-on covers has been approved

The common practice for removing bolt-on covers to expose live electrical accessories is to physically secure the cover while removing the bolts and carefully, with the hands, pulling the cover away from the live equipment.

Unfortunately, many electricians would claim that it is not practical to wear rubber-insulated gloves and leather protectors while performing this task. Such gloves are required to protect workers from possible shock, electrocution or arc flash that may occur by dropping the cover, accidentally contacting the cover with a live conductor, and initiating a fault from vibration or accidental impact.

Using suction cups when handling these covers will allow the worker to wear rubber insulated gloves and leather protectors without making removal awkward or cumbersome.

The Joint Occupational Health and Safety Committee have approved the use of suction cups to remove bolt-on covers. This procedure protects the well being of workers, prevents property damage and complies with WorkSafeBC regulations.

Working on live electrical equipment and the use of suction cups involves developing a safe work procedure. Contact Perry Harvey for assistance.

Asbestos Conduit Putty

Conduit putty is commonly used to seal ducts. Prior to 1990, this type of putty contained asbestos. As a safety precaution, it is important to reference the hazardous material inventory before disturbing any materials that could contain asbestos.

Before disturbing any asbestos building products there are many requirements that must be completed. These include: a proper risk assessment and procedures, training, coordination with the Owner or Prime Contractor and a Notice of Project for Asbestos Work must be submitted to WorkSafeBC.



Conduit Putty may contain asbestos



Electrical Pit in a Receiving Station

Is this a Confined Space?

The WorkSafeBC definition for a confined space does not specify a depth or dimension to classify a work area as a confined space.

This electrical pit in the photo (left) is approximately eight feet deep, beyond any atmospheric exposures that may build-up in the space (i.e. carbon dioxide). In this situation there would be an obvious difficulty in removing a worker from the space if they became incapacitated.

Generally, 3 1/2 - 4-foot deep pull boxes are not considered a confined space, unless the owner of the space has classified it as a confined space.

Common Trip Hazard in Public Areas

Extension cords are a common trip hazard and should be made safe by removing them. A simple, yet effective solution to prevent tripping injuries are t-bar clips that can be used to secure an extension cord overhead.

These t-bar clips can be purchased at Home Depot.



Extension Cord Suspended with T-bar Clips

Featured Projects



BC Centre for Disease Control Generator Upgrade

Project Manager/Estimator Mike Wood and Foreman Kevin Selesky are in the midst of a generator upgrade at the BC Centre for Disease Control in Vancouver at Cambie and 12th. Phase 1 of the project began in April and has an estimated completion date of October 2015.



Pipework made for difficult access to wiring!



Patio excavation was required before the slab was poured for the generator. Kevin Selesky, Foreman on the project said, "It's a challenging site... we have to work in some very crowded mechanical spaces."

Mike Wood describes the project, "We're installing a 500kW back-up generator that will handle the growing demands of this complex facility. It will be installed in its own enclosure outdoors, but the transfer switch and switchgear will be located in the top floor (penthouse) electrical room. This means we need to get the feeder cables up to the top of the building. In addition, we are re-feeding various HVAC loads, electrical panels, and motor control centers (MCC'S) from the new generator. This will allow the old generator to control the life-safety portion of the building and the new generator will handle the important fridges, freezers, special equipment and HVAC loads that are essential to the labs in this facility. Because of the weight of the new generator we have had to install steel beams under the foundation of the new site, and excavate the outdoor patio to pour a new slab to handle the load," Wood said. "The biggest challenge is getting the feeder wires up to the top of the building 7 stories up! We checked possible routes by x-raying the building and found obstacles in every direction. The solution is to run cables up one of the columns on the outside of the building. The change order includes scaffolding giving sheet metal workers access to remove zinc panels on the column. We will then build supports into the column and run the cables to the top of the building."

"Foreman Kevin Selesky is doing a great job and is skillfully managing to co-ordinate the work being done with the onsite maintenance team and the technicians in the laboratories."



Mott installs New CT Scanners for Vancouver General, UBC and Lions Gate Hospitals

It is complicated work. "On most of these installs, there is an existing CT scanner that must be removed first and then we do a renovation on the CT room to suit the new equipment," said Wood. "The electrical system also needs to be removed and upgraded too because new technology requires a larger power source. They need a larger transformer to power the distribution system and a new electrical panel in the CT room with a shunt-trip breaker controlled by an emergency stop button. We raised the transformer up through the access hatch.



The transformer was raised through the access hatch.

"We built cradles to house the transformers, cut the access hatch and hoist them up into the existing position."

Wood said, "We must learn and follow proper infection control techniques including the use of infection control tents and maintaining negative air pressure in all sensitive areas. We also have to ensure that the rooms are properly grounded with the use of patient/room reference grounding and obtain CSA Z32 certification for the room from a certified testing agency."

"I have had several foreman run these jobs including Andrew Azar, Arvinder Rooprai and Dustin Freeman. They have all done an excellent job in getting the projects done on a tight schedule and delivering a high quality install," said Wood.

The job at Vancouver General included installation of a 600v-480v step down transformer on a mechanical floor. Dustin Freeman adds, "We had to install a parallel run of 2 1/2" EMT from the transformer to the CT room electrical panel. Various EMT runs in the floor below from 1 1/2" up to 3", were required to run all the Siemens cabling for the CT scanner." He said, "Working in a busy hospital and dealing with Infection Control can be challenging. Preparation and planning is key in moving forward efficiently."

We Keep Good Companies!

Here are some client comments we have received about our people and projects:

"On behalf of TRIUMF, a sincere thank you to Kon, Paul, Bob, Kyle and the rest of the Mott staff for the Herculean effort yesterday that lead late into the night to the connection and energization of the e-linac switchgear. It was indeed a long day from the early start of 5:30 AM to 1:00AM the following day.

This is the first milestone in the long road to fully realize the e-linac accelerator and one that, over and over again, proves that when people work together and commit themselves to a project, milestones are met and success can be achieved."

Franco Mammarella, Group Leader,
ARIEL Infrastructures and Power Systems Engineering Division, TRIUMF

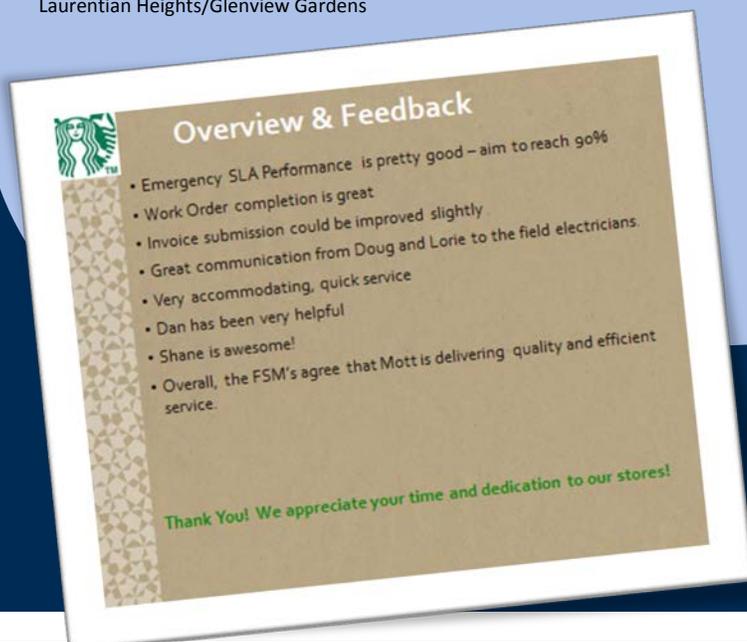
"I'd like to confirm the weekend power cutover went really well with all systems coming back online with no failures to report. A big Relic thank you to Gord, whose team worked 18 hour days to make sure cutover went smoothly. They have been a great help throughout this project and I'd like to official say Mott Rocks!!

Also, I'd like to extend my thanks and appreciation to everyone involved in getting us to this point. Considering the short timelines, changes, red tape and great expectations from our side you were all awesome and I thank you!!"

Gavin Russell,
Relic Entertainment

"The part of the install process done by MTI at the 5 buildings I manage has been awesome. They made sure to contact me ahead of time and always gave notice to keep people aware of what was coming next. They put out notices and had sandwich boards outside buildings to keep people in the know. The guys from MTI are professionals and the tenants and I had no concerns with them. There was no mess left behind and they were very accommodating. Thanks!"

Janet Krienke, Property Manager
Laurentian Heights/Glenview Gardens



Lynda Miller, Facilities Representative
Starbucks Coffee Canada

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