



Timeline Photography

# TOWER OF CHANGE

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## News from the Cuyahoga County Juvenile Justice Center Project

### Let There Be Light

**G**ood lighting is important in any structure, whether a home or a commercial building. With a large structure of nine floors and one below ground, the Juvenile Justice Center (JJC) requires plenty of good lighting for courtrooms, offices, hallways, two gyms and other areas.

Most of the external work on the JJC is complete. Skilled tradespersons are currently working inside the building installing plumbing, lighting, fixtures, flooring and cabinetry.

In this March issue, we highlight the electrical trade and Lake Erie Electric, the company handling the lighting needs for the JJC.

### Electricians Light the Way

**W**e don't see or think much about the inner workings of the electric lines and conduits in our own homes. Yet we count on these to enable us to flip a switch and have lighting, heat food in our microwave, and use our computers and TVs, among other things. If our electricity doesn't work, it may be due to a power outage in the area. If that's not the case, the problem is within our own house. That's when it's time to call an electrician.

Electricians are an important part of the building team when a structure is built. They usually start their work by reading blueprints, which are the technical diagrams that show the locations of circuits, outlets, the load center, panel boards and other equipment.

They specialize in installing, operating, repairing and maintaining electrical systems. These systems include wiring, using circuit boards, and electronics.

Comprehensive training is required to become an electrician. Apprenticeship programs usually last four years. Each year consists of at least 144 hours of classroom instruction that includes electrical theory, blueprint reading, mathematics, electrical code requirements, and safety and first-aid practices. Apprenticeships also require 2,000 hours of on-the-job training under the supervision of experienced electricians.

#### Quick Fact

Lake Erie Electric will use more than 1.5 million feet of building wire and more than 3,500 lighting fixtures.

### Meet Pedro Ortiz

**P**edro Ortiz is an electrician with Lake Erie Electric. He has always enjoyed working with electrical and mechanical things and with his hands. "When I was a kid I would take things apart and put them back together," he said. He recalls dismantling and re-assembling bikes, car engines, TV sets, and radios. "Every once in a while, I ended up with an extra part, but it all worked out," he said laughing.



Pedro Ortiz

Eric Benson

Pedro has been an electrician since 1983 and has worked with Lake Erie Electric for the past five years.

**Daily Duties:** I've been mostly working on the fire alarm system on all the floors of the Juvenile Justice Center. The system includes smoke detectors for the air handling system and "pull" stations. The "pull" stations are the red fixtures where people can pull the lever to activate the fire alarm. There are at least 15 pull stations on each floor.

**What He Likes About His Job:** I'm proud to be an electrician. I've always liked the variety which gives you the opportunity to use your mind. I've also enjoyed the chance to meet some of the other electricians at Lake Erie Electric who I haven't worked with in the past.

**Biggest Challenge at the JJC Project:** It's putting it all together without having any problems. All the trades have to work together. For example, the fire alarm system that we're working on has to work with the elevator system in case of fire.

**His Thoughts on the JJC Project:** I think it's good for the neighborhood. There will also be new houses.

**When He's Not Working:** I enjoy spending time with my family and two boys, ages 9 and 7. I also enjoy traveling back to Puerto Rico, the Caribbean, and in the United States.

**Best Advice You've Received:** Always choose your friends wisely. My mother used to say, "Tell me who your friends are, and I will tell you who you are."

**Your Best Advice:** If a project is overwhelming, just take it one step at a time and remind yourself that you can't do the whole project in one day.

If you lose your copy, you can always find it online at [CuyahogaCounty.us](http://CuyahogaCounty.us)

"There are two ways of spreading light: to be the candle or the mirror that reflects it." – Edith Wharton

# Lake Erie Electric Powers Up

Lake Erie Electric (LEE) has been on the job at the Juvenile Justice Center (JJC) Project since March 2008, providing power distribution for the entire building.

"We were on the site right from the beginning to provide temporary lighting and power and to install underground conduits and feeds for electrical wiring," explained Armando Francisco, vice president of operations for the company's Cleveland office. "We're doing all the electrical installation, including the lighting; the security, fire alarm and intercom systems; and the power for mechanical equipment, including air handling units, exhaust fans, miscellaneous pumps and the overhead doors for the loading docks," he noted.

It's Francisco's job to oversee LEE's electrical work on the JJC Project. "I have weekly meetings with my project manager, often on site," he said. "I also do a comprehensive monthly walk through to check on the progress of every aspect of what we're doing. In addition, I meet with our field project managers to review the schedule and see if there are any issues that need to be addressed." An example of one such issue was the

location of smoke dampers, Francisco explained. LEE needed to make sure they coordinated the locations of the dampers with the mechanical contractors. "We worked with them and agreed on the locations, and it didn't present any problems," he recalls.

On average, LEE has 24 electricians on site. "There was a peak time that lasted about nine months," he explained. "That could have been a challenge for us, but it wasn't a concern because we carefully coordinated our staffing needs from the start to make sure we had enough employees there at all times."

Francisco noted that the project hasn't presented any significant problems for LEE. "We're playing a major role in the project, so we're making sure our work is on schedule and running smoothly, and that's going very well," he noted. "Our project team has worked well together to resolve any concerns before they become issues, so we haven't had many real problems overall."

"Lake Erie Electric is proud to be working on the JJC Project in the Fairfax neighborhood," Francisco said. "We definitely wanted to be part of this project because it's going to be a signature building for the development of Cleveland's east side."



Electrician James Sawyer places light fixture supports



Pedro Ortiz installs fire alarm devices



Erica Ferguson, electrician, performs lighting wire pulling

## What's Up? The Buck Hoist!

**Question:** How do construction workers and materials get transported up to the floors of the ten-story Juvenile Justice Center?

**Answer:** A buck hoist. A buck hoist is an elevator that is temporarily installed on the outside of a building that's under construction. It takes materials and workers up to the floors they're working on.

According to Luis Gaitan, OTVJ's superintendent for the JJC Project, the hoist is installed once the exterior wall is completed. "It has two doors, one facing outside and one facing the inside of the building. Workers, materials, and equipment go into the hoist through the outside door," he explains. "Workers get out through the inside door at the floor they're working on." For safety purposes, there is always a worker who remains inside the hoist to operate it.



The buck hoist travels up and down the building

## Contractors Working on the Court Interiors

Company	Specialty
Breckenridge Kitchen Equipment & Design	Kitchen Equipment
ESI Inc.	Electrical
Fox Fire Protection Inc.	Fire Suppression
Gorman-Lavelle Corporation	Plumbing
Marous Brothers Construction Inc.	General Trades
Smith & Oby Company	HVAC

The Tower of Change is a monthly publication of Cuyahoga County. For comments, suggestions and story ideas, please contact Montrie Rucker Adams at 440-684-9920 or info@visibilitymarketing.com

"Let your light shine. Shine within you so that it can shine on someone else." – Oprah Winfrey