

TJC
and ASSOCIATES, Inc.

Message from the President

Employment Opportunities

TJCAA News - Walnut Creek Office

TJCAA's Business Certifications

- Alameda County Small, Local Emerging Business
- Bay Area Green Business Program, Green Business
- City of Oakland Local Business Enterprise
- California DGS Micro Business (SB (micro))
- Port of Long Beach SBE
- Port of Oakland LIABE/SBE/VSBE
- San Diego County Water Authority SBE
- SoCal Network SBE
- CA PUC WBE
- Sacramento Municipal Utilities District (SMUD)

winter The TJCAA Quarterly

www.tjcaa.com

2016

Message from the President, Gianna Zappettini



Around this time of year, there are a prolific number of articles on how to reign in your eating habits to prevent an expanding waistline. While some times expansion is an unwelcome

consequence, other times it is grounds for celebration. TJCAA is experiencing one of those celebratory times with an expansion into a new office in Walnut Creek, California slated to open in early 2017. We could not have continued to grow without support from and collaboration with our wonderful clients. We raise our glasses to toast a terrific year gone by and send our best wishes for a successful year ahead. Happy Holidays!

Employment Opportunities

TJCAA is looking for qualified engineers to work on great projects with great people. To view and apply for open career positions, visit our website at www.tjcaa.com.



TJCAA News - Walnut Creek Office

Yes, we are opening a new office! Our Bay Area offices will include not only an Oakland office in the landmark Cathedral Building, but also an office in Walnut Creek, a location that many of our TJCAA staff members have called home over the years.

Walnut Creek Office

TJC and Associates, Inc.
2890 North Main Street, Suite 303
Walnut Creek, CA 94597-2738
Phone [925] 357-2676
Fax [800] 948-5604

We are delighted that this new Walnut Creek office is near many of our long-time partners, and we look forward to continued successful work together in the years to come. Come visit us!

In addition, we are relocating our Sacramento office to the Gold River area, which is adjacent to Folsom and the beautiful American River. This office, which will emphasize engineering services, is in a location near many restaurants, other local businesses, and amenities such as the American River Parkway.

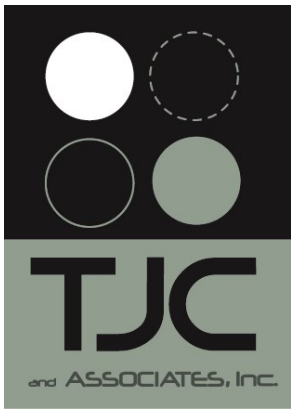
Sacramento Office

TJC and Associates, Inc.
2356 Gold Meadow Way, Suite 250
Gold River, CA 95670-4471
Phone [916] 853-9658
Fax [800] 948-5604

Please update your address information for this office, and make plans to come see us there when you are in the area.

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New Employee

Did you know?

**New Employee -
Raphael E. Okubo, Electrical
Design Specialist**



TJAAA welcomes new employee Raphael Okubo to the family! Raphael is an Electrical Design Specialist who will be working with our Instrumentation, Controls, and Electrical group in the Bay Area. A graduate of San Jose

State University (Electrical Engineering), Raphael brings to us his familiarity with relay logic, microprocessors, and equipment programming and his experience with design and analysis of systems that support the transportation (railway) industry. He is experienced with power systems and requirements and with control equipment programming using ladder logic and template-based programming software. He also developed data migration strategies for transferring project information between dissimilar systems.

Raphael will be working out of our new Walnut Creek office. Interestingly, his previous employer was also the previous tenant of our new Walnut Creek office, so we anticipate that he will feel at home there! What great timing—a new office and a fantastic new team member—welcome, Raphael!

Did you know?

Do you know what an arc flash is, and why you should care? (Hint: It is not

electrical shock!) Arc flash is arcing energy (plasma) released during an arc fault, and it can present a significant hazard. When an arc flash occurs, electric current leaves its intended path (e.g., wire) and travels through the air. The Workplace Safety Awareness Council cautions that for humans near an arc flash, serious injury or death can result.

TJCAA performs Arc Flash studies, which help our clients enhance their safe work environments by meeting the National Fire Protection Association 70E and OSHA requirements for protection from arc flash. The requirements include a continuous program of analysis, training, labeling, and documented procedures. Proper arc flash labeling is an important step to improve safety and meet Code requirements.

WARNING	
Arc Flash and Shock Risk	
Appropriate PPE Required	
6 in 0.20 cal/cm ² 480 VAC 42 in 12 in	Flash Hazard Boundary Flash Hazard at 18 in Shock Risk when cover is removed Limited Approach Restricted Approach
Location:	DIS-BP-001
TJCAA and Associates, Inc. 1615 Broadway, 4th Floor, Oakland, CA 94612 (510) 251-8980	
Job#:	115057
Prepared on:	05/26/16
By:	TJCAA
Warning: Changes in equipment settings or system configuration will invalidate the calculated values and PPE requirements.	
Note 1: Valid for normal/utility system configuration only; contact city engineer under generator operation.	
Note 2: Follow all LOTO procedures prior to performing any work.	

Arc Flash Label completed by
Lee Meyers

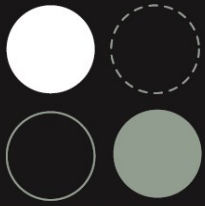


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Protection from electrical faults isn't just for water and wastewater treatment plants, though! Homeowners can also help to make their environments safer from the dangers associated with electrical faults. Perhaps you have noticed those special receptacles (outlets) at your hardware store, or you were required to put them in a new home or a remodel. The special outlets include both arc fault circuit interrupters (AFCIs) and ground fault circuit interrupters (GFCIs).

AFCIs, which can be installed as outlets or circuit breakers in a panel, are designed to protect your home's wiring from faults that could start electrical fires. (nfpa.org)

GFCIs, on the other hand, help protect people from receiving shocks from an electrical system. The National Electrical Manufacturers Association points out, "The function of the GFCI is to protect people from the deadly effects of electric shock that could occur if parts of an electrical appliance or tool become energized due to a ground fault." (AFCISafety.org)

GFCIs monitor the current flow and if there is an imbalance in the expected flow from hot (ungrounded) to neutral (grounded), the GFCI de-energizes the circuit. NEMA adds, "AFCI and GFCI technologies can coexist with each other and are a great complement for the most complete protection that can be provided on a circuit."

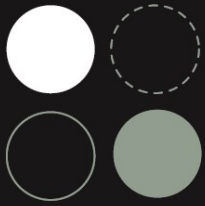
Where should AFCIs and GFCIs be installed? The NFPA summarizes its residential requirements like this:

AFCI protection is required by the 2014 [National Electrical Code® \(NEC\)](#) for 15 and 20-amp circuits that serve outlets and devices in all areas of new residential construction, excluding bathrooms, garages, and outside areas. In addition to new construction, when receptacles are replaced in areas where AFCI protection is now required, the replacement receptacle must have AFCI protection.

GFCI protection is required by the 2014 NEC for newly installed and replacement 15 and 20-amp receptacles on kitchen countertops, in bathrooms, outdoor areas, unfinished basements and crawl spaces, garages, boathouses, laundry areas, and within 6 feet of sinks, bathtubs, and shower stalls. GFCI protection is also required for certain appliances that have a history of being a shock hazard. Drinking fountains, vending machines, dishwashers, and boat hoists are examples of appliances that require GFCI protection.

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Entertainment News

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Entertainment News - New Venue in Sacramento

Sacramento has a new arena! The 17,500-seat Golden 1 Center in downtown Sacramento opened on October 4 in grand style with a concert by Sir Paul McCartney. Home to the Sacramento Kings basketball team, the Golden 1 Center has been awaited eagerly by sports fans and music fans alike.

Kelvin Gooden, son of Jennifer Farmer, the Administrative Assistant in our Sacramento office, was the first in the TJCAA family to see an event at the new facility. He attended the Kings-Pelicans game with friends and he shared his impressions with us.

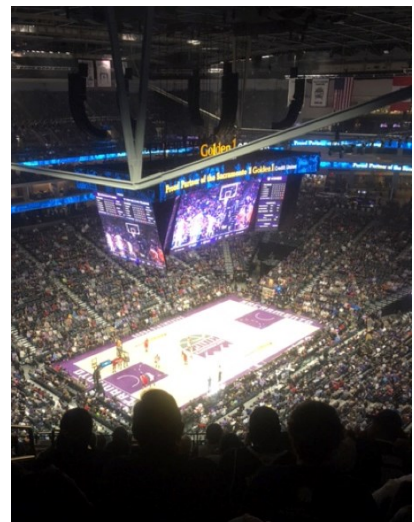
The Golden 1 Center is a big improvement over the old Arco Arena, he tells us, and the entry area, with its expansive windows and large sculpture, is eye-catching. Entering the building required airport-like security, Kelvin notes. His overall impression was that the facility was "large and clean, and it felt like a good environment."

The Golden 1 Center was indeed designed and built to be a good environment. It is the first indoor sports venue to earn a LEED Platinum certification. TJCAA Structural Engineer Daisy Yu, S.E., a LEED Accredited Professional, explains that LEED-certified buildings are resource efficient and are designed to provide a healthier environment for occupants. LEED Platinum is the highest rating a project can achieve under the LEED rating system.

Kelvin pointed out several favorable features of the arena, including good views throughout the seating areas, an enormous video scoreboard (84 feet long!), and a variety of food choices. While he didn't sample the food during this latest visit, he hopes that event-goers will still be able to get the delicious garlic fries that were offered in the Kings' previous home.

The Golden 1 Center does not offer on-site parking, but Kelvin explained that parking was easy. They reserved a spot in advance using an online service, and were able to park very close to the arena and get in and out easily, with no traffic hassles. The arena is also served by transit.

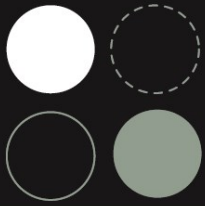
It was a good evening all-round, says Kelvin, who not only got to see a Kings victory, but also received a game towel as a souvenir, directly from Kings center Willie Cauley-Stein!



View of the court from Kelvin's seat

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Dates to Note

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Dates to Note

December 21	The Winter Solstice
January 1, 2017	California Building Code in Effect
January 2	The Rose Bowl
January 4	Junius Courtney Big Band at Yoshi's in Oakland juniuscourtneybigband.com
January 16	TJCAA 19th Anniversary
January 20	45th Inauguration Day
January 28	Chinese New Year
February 5	Super Bowl LI (51)
February 26	The Daytona 500
March 26	Formula 1 68th Season Opens in Melbourne, Australia

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