

the official magazine of

CONDON-JOHNSON & ASSOCIATES, INC.



Academy Museum of Motion Pictures – Los Angeles, CA

2016 / First Half



Welcome to the next edition of the CJA Magazine.

It's hard to believe we are already mid-way through 2016 with a new crop of P.E.'s, a cadre of summer interns, an annual meeting around the corner, CJA University about to kick off, and an ever increasing backlog of challenging projects. We would like to share some of the projects that you have built in the last year, and give you the opportunity to pick your head up from the work in front of you and take a minute to see what folks in the other districts have been building.

Last month we saw several of our younger engineers finishing up P.E. exam prep classes, nervously watching the clock as they worked through practice exams, and raid the supply closet for a rainbow of post-it tabs for their reference books as they prepared for the April P.E. exam. For those with an engineering degree, the P.E. represents the culmination of a journey that started for most with their first statics class back in college. Congratulations to those who successfully passed the P.E. in the past year: Ty Jahn P.E., Brian Kenny P.E., Dave Giwosky P.E., and Josh Hilton P.E.

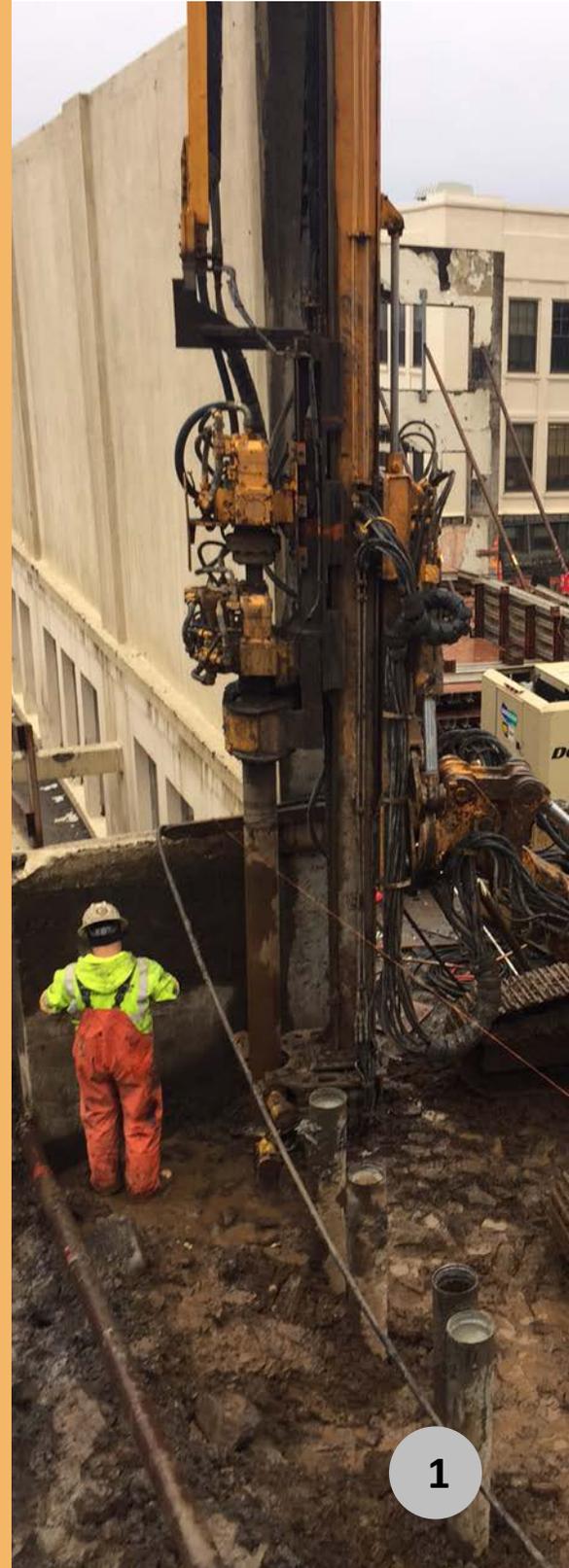
One of the key elements of our success over the years at Condon-Johnson & Associates, Inc. (CJA) has been our ability to build a team of individuals who excel at thinking critically in challenging situations. Undaunted by short schedules, tight work sites, congested urban areas, wary neighbors, and technically challenging geotechnical construction projects. The folks at CJA relish the opportunity to sit down with clients, develop an understanding of the project requirements, provide a realistic solution that meets the client's schedule, budget, and technical needs; and then make that solution idea a reality in a safe and efficient manner.

When we talk about making an idea a reality in the field, there are a lot of pieces that need to come together for that to happen. One of those pieces is the specialty equipment that we rely on every day to punch holes into the soil and rock that stand between us and the successful completion of our projects. Each year our fleet of equipment expands with more and larger drills, pumps, and cranes. Keeping that equipment in a safe, operating condition is the responsibility of everyone at CJA. The mechanics in our shops under the watch of Bob, Jeramie, Toby, Steve, and Greg; work hard up to 7 days a week to keep us turning to the right. In the world of repairs, we tend only to call the shop when something isn't right. While the more common occurrence is equipment working well, how about taking a minute to call the shop or text a photo of the rig in action. Thank the folks who spent last weekend getting the equipment ready and let them know their efforts are appreciated.

Thanks for all your hard work.

Dominic Parmantier P.E.

Regional Vice President





IN THIS ISSUE

- 03** Oakland Office
- 04** Seattle Office
- 06** San Diego Office
- 07** Los Angeles Office
- 09** Portland Office

ON THE COVER

Learn more about how CJA was a key member of the world's premier museum devoted to exploring and curating the history of the moving image on Page 7.

Oakland Office

Stulsaft Park Retaining Wall Redwood City, CA



Redwood City contracted with CJA for the construction of a 2,580-square foot sculpted shotcrete retaining wall. In addition to the wall, the project consisted of various site improvements, including road work, installation of a gutter, and general drainage improvements. The purpose of the project was to prevent the existing slope from further erosion while widening the road.

The wall was cantilevered and consisted of 27 soldier piles with wood lagging and 12" of shotcrete. CJA self-performed all of the work with the exception of rebar, sculpting and staining of the shotcrete, and fencing. Access was ¼ mile down a dirt road and became nearly impassable in heavy rain. The existing road was 16' wide and posed challenges for spoils removal and concrete trucks. Despite difficult access and 4 weeks of site closure during heavy rain, CJA finished the project nearly 4 weeks ahead of schedule.

Key Personnel: Les Smothers (Superintendent), Eddie Gordon (Foreman), Franklin Dorin (Project Manager)

SEATTLE OFFICE

Pike Place Market
Seattle, WA



Pike Place Market has been operating as a farmers' market in Seattle since 1907 and is one of the region's main tourist attractions. Located on the west side of the city, it overlooks Elliott Bay. With the planned removal of the Alaska Way viaduct and improvements to the tourist-attracting waterfront, the Market is converting an existing on-grade parking lot into its' new Waterfront Entrance. The new facility will include public space, commercial and retail space, low income housing and parking.

Condon-Johnson was hired in the spring of 2015 by Sellen Construction to install the temporary shoring required for the construction. The building excavation is on a hillside, with a 50-foot high cut at the north –east corner and no cut at the south-west corner. The temporary shoring included 17,900 square feet of lagging, 72 soldier piles and 186 tiebacks. The majority of the soldier piles were drilled with an IMT AF-18 rig. The wall of an existing parking garage along the north side of the excavation was underpinned with slant drilled piles and the installation of 2 reinforced concrete grade beams. These piles were drilled with a Soilmec SR-30 drill rig. On the east side of the site, the Desimone Bridge spans over Western Avenue which limited the overhead clearance for the installation of the soldier piles. In that area the Lo-Drill was used to excavate the holes.

Key Personnel: Rowly Stow (Project Manager), Ken Ver Hage (Superintendent), Peter Mercer (Field Engineer)

I-5/116th St. NE Interchange Improvements Tulalip, WA

In early summer 2015, Condon-Johnson was awarded a contract by Granite Construction for the installation of deep foundations and ground improvement at the I-5/116th ST NE Interchange. The deep foundation portion of the work included 18EA, 8' diameter and 10EA, 7' diameter drilled shafts ranging from 105-120' in depth. The ground improvement portion consisted of 380SY of stone columns.

The Tulalip Tribes of Washington is the project owner with oversight by the Washington State Department of Transportation. The purpose of the project was to widen the existing bridge to allow for improved traffic flow to the tribal casino and associated shopping areas. The foundation and ground improvement work commenced in August of 2015 and was completed in early June 2016.

The project was constructed in two phases to allow for demolition and reconstruction of the bridge. The initial schedule called for the installation of 11EA of the shafts during the first phase. Using modified construction methods and by working with the general contractor, Condon-Johnson was able to install an additional 10EA shafts during the first phase, shaving two months off of the project schedule.

Key Personnel: Ed Chappelle (Superintendent), Kyle Melberg (Superintendent), Mark Nissen (Superintendent, Stone Columns), Hayden Sahnaw (Project Engineer), Ryan Thorne (Project Manager)



SAN DIEGO OFFICE

Carlsbad Crossroads Carlsbad, CA

The building at 2728 Loker Ave had large cracks in the structure and a void underneath the slab. This was a result of a combination of a moving slope adjacent to the building and differential settlement. Previous measures were taken to mitigate these effects, however their success was limited. One of those measures was installing a grade beam on piles along the side adjacent to the slope which slowed vertical movement of the wall, but not the slab, and also did not prevent further horizontal movement. CJA was a key contributor in determining an effective solution to this ongoing problem. The final design included 77 micropiles drilled through and connected to the existing slab, and 18 micropiles underneath the existing building columns to prevent downward movement, contact grouting underneath the slab to fill the existing void, and a tieback anchor systems to restrain the adjacent slope.

Micropiles were installed in existing offices, bathrooms, break rooms, under stairways, etc. Performing the work, while keeping the interruptions to the tenant limited, provided its own set of challenges. The tenant, a manufacturer of microchips, required the unaffected portion of the building to remain dust free, especially their double clean room. The tenant vacated the property for a period of two weeks to allow the repairs to be constructed. The two week duration, included demolition of the surrounding walkway to expose the void beneath the slab, taping off the building interior to keep dust contained, demolition of the interior walls to provide access to all the affected areas, contact grouting underneath the slab, coring through the slab, installation of the 95 micro piles, installation of 9 column attachments to the column micropiles, floating the worst portion of the damaged slab, and then bringing the facility back to its pre-construction condition.

Key Personnel: Corey Jarnagan (Project Manager), Dario Corso (Superintendent), Dave Ross (Day Shift Superintendent), Jamie Renalde (Night Shift Superintendent)



LOS ANGELES OFFICE

Academy Museum of Motion Pictures Los Angeles, CA



The May Company Building on Wilshire Blvd was heralded as the Western gateway to the Miracle Mile in the early 1900's. Now it is under renovation and expansion to become a part of the Los Angeles County Museum of Art (LACMA) campus as the Academy Museum of Motion Pictures. This is where they will showcase their history and host future motion picture awards ceremony. CJA is under contract with the Morley + Taslimi JV to install 128 ea. – 12" diameter x 60' deep micropiles in the existing May Company Building Basement, 86 ea. – 24" diameter x 70' deep augercast piles for the new Geffen Theatre named after David Geffen, and another 224 ea. – 12" tiedown micropiles, from 40-60' in length.

Unique site challenges include the project's proximity to the La Brea Tar Pits, which required drilling into the pungent, asphalt-like Tar Sand that underlies the site. Non-Destructive testing requirements included Thermal Integrity Profiling (TIP), Pile Integrity Testing (PIT), Gamma-Gamma Logging (GGL), and Proof Load Tests. The project also required the use of full length continuous flight augers, which made installation of the low-overhead micropiles a challenge in the tar sands. The low overhead micropiles required sectional threadbar placement inside of the hollow stem augers. Once the tremie line, post grout tube, and thermal wire were added, the hollow stem auger was filled with bar, tubes, and testing equipment. This congestion made dropping the knock-out bit and removing the augers without damaging the thermal wires difficult and time consuming. It should be noted that all micropiles on the project, regardless of length, were design for an allowable tension load of 270 kips, and required tension proof testing to 450 kips.

Key Personnel: Chris Blanco (Superintendent - Micropiles), Jose Tovar (Foreman – Micropiles), Mario Garcia (Superintendent – Augercast Piles), Cole Benson (Field Engineer), Josh Hilton (Project Manager)

El Camino College Parking Structure Torrance, CA

Condon-Johnson & Associates, Inc. operated as a Subcontractor on the El Camino College Parking Structure Upgrade project. The purpose of the project is to repair and upgrade an existing parking structure on the school campus. CJA's scope of work included the installation of 104 ea., 2ft diameter CIDH piles up to 58ft in length and 36 ea., 1ft diameter Micropiles 46ft in length. Working in and around the existing parking structure proved challenging. The majority of CJA's work was performed in a narrow corridor approximately 17ft wide and nearly a half mile long while other piles were installed in low overhead conditions with approximately 8.5ft of headroom. The limited work space required extra attention to the sequencing and staging of the work. With only one access point at each end of the half mile long corridor, work had to progress systematically so as not to prevent access for subsequent

tasks. The reinforcing cages for the corridor piles had to be staged and secured on top of the parking structure's second level deck for the entire length of the corridor. Adding to the challenge was the groundwater that was encountered in all of the shafts. The standard CIDH piles were installed with a Geax DTC50 and the low overhead piles were installed with a Tescar 2.5. The micropiles were installed with a modified Klemm 803 using sections of continuous flight auger.

Key Personnel: Chris Blanco (Superintendent), Jose Tovar (Superintendent), Aaron Mueller (Project Manager)





Patriot Hall Astoria, OR

The Patriot Hall Redevelopment Project is a major renovation of an existing gymnasium and activity center at the Clatsop Community College in Astoria, OR. Built on an old basalt rock quarry, Patriot Hall originally housed Astoria High School but was repurposed as a College in 1958. The renovation includes temporary shoring on three sides of the site to enable the General Contractor, P&C Construction, to expand the building into the hillside. After consulting with several shoring contractors, P&C and their design consultants knew conventional soldier pile shoring would struggle to overcome the challenging basalt rubble but were no closer to finding a solution.

Condon-Johnson was asked to help the structural engineer developed a retaining wall system that was suited to the site. The final design used pairs of micropiles acting as soldier piles with tiebacks and shotcrete facing. As the excavation started, the boulders encountered were much larger than anticipated. Boulders as large as 15' in diameter were uncovered in the face of the shoring wall. The boulders had to be line-drilled and split before shotcrete could be installed. The shoring included 4 rows of tiebacks with 4' shotcrete lifts for a total of 3000 square feet.

Key Personnel: Spark Johnston (Project Manager), Chris Fritz (Superintendent), Griffin Lowe (Project Engineer)



SAFETY CREW OF THE MONTH - JUNE 201