

Christopher A. Ridley, PE, GE

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Professional Experience

2008 - Current
Rollo & Ridley, Inc.
1997-2008
Treadwell & Rollo, Inc.
1996-1997
Webcor Builders

Education

B.S., Civil Engineering, California Polytechnic
State University, San Luis Obispo, 1996

M.S., Geotechnical Engineering,
University of California, Berkeley, 1999

Professional Registrations

Civil Engineer in California, 2000
Geotechnical Engineer in California, 2005

Certifications

40-hour Health and Safety Training per 29
CFR 1910.120

Confined Space Entry Training per
CFR 1910.146 and 8CCR 5157

8-hour Radiation Safety Training Course
(State of California)

Low- to High-Angle Rescue 30-hour Training

Affiliations

American Society of Civil Engineers,
1996-present

Mr. Ridley has more than 25 years of professional experience in performing and managing geotechnical investigations and construction observation services for various projects throughout the San Francisco Bay Area. His experience includes project management and supervision during investigations for 1) commercial, retail, and residential developments, 2) schools, universities, and museum facilities, and 3) offshore structures including bridges and piers. As a project manager, his experience includes directing subsurface investigations, evaluating foundation systems, performing engineering analyses, and directing field personnel. Mr. Ridley has performed engineering analyses to determine the settlement behavior of soil under loading, bearing capacity for foundations, lateral and vertical pile capacity, slope stability including landsliding potential, and seismic hazards including liquefaction potential. His projects have included 1) installing and testing driven piles, drilled piers, rammed aggregate piers, stone columns, various auger displacement piles and micropiles, 2) observing and testing temporary and permanent tiebacks, soil nails, rock bolts, and tiedowns, 3) observing and testing the compaction of engineered fill, 4) installing shallow foundations (spread footings and mats), 5) constructing various shoring and retention systems including soldier-beam-and-lagging systems, soil-mix shoring walls, and rock bolt and shotcrete systems, and 6) monitoring compaction and chemical grouting projects. His project experience includes:

Lumina, 201 Folsom Street, San Francisco

Principal Engineer during the design development, geotechnical investigation, the engineering and design and construction phases of the project. Completed in 2017, the project built 655 to 725 residential units in 2 towers (42- and 37- stories each) and 2 midrise buildings (8-stories each). All four buildings are underlain by three basement levels primarily used for underground parking. We recommended the structure be supported on a mat foundation with portions gaining support on improved ground. During final design, submittals relating to the cutter-soil-mix shoring wall with below groundwater tiebacks were reviewed and approved. Our services during construction included observing the installation a soil-mix shoring wall (CSM panels), testing tiebacks, improvement of subsurface soil conditions under a portion of the site, and approving the mat subgrade.

30 Otis Street, San Francisco

Principal Engineer during the design development, geotechnical investigation, the engineering and design and construction phases of the project. Completed in 2021, the building varies in height between 10- and 27- stories and is underlain by two basement levels (below Otis Street) which corresponds to three basement levels below Chase Court (north property line). We recommended the structure be supported on a mat foundation. During final design, submittals relating to dewatering, soil-cement mix shoring walls, slant drilled underpinning piles and jet-grouting with below groundwater tiebacks were reviewed and approved. Our services during construction included observing the installation of shoring/underpinning, testing tiebacks, and approving the mat subgrade.

The Exploratorium, Piers 15/17, Port of San Francisco

Lead the investigation consisting of vertical and lateral pile load tests on existing piles for re-use, Cone Penetration Tests (CPTs), and soil borings from the pier deck into the underlying soil deposits below San Francisco Bay. In addition to foundation recommendations, the geotechnical investigation report detailed seismic design criteria. In addition, Mr. Ridley oversaw foundation strengthening including the installation of 5-foot diameter, 135-long steel pipe piles.



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LinkedIn, 222 Second Street, San Francisco

Rollo & Ridley Inc. performed a geotechnical investigation and published the geotechnical report for the project. In addition we provided plan review services during final design and completed special inspection (construction observation services) during shoring and foundation installation. Completed in 2014, the project is a 26-story commercial office building over two basement levels.

San Francisco Bay Area Schools & Universities

Involved in geotechnical investigations and the construction observation of many schools & universities in the San Francisco Bay Area. Projects include new campus buildings for The Urban School of San Francisco, San Francisco Day School, San Francisco Friends School, The San Francisco School, Tenderloin School, and Drew College Preparatory School; underground gymnasiums/theaters for the Hamlin School, Schools of the Sacred Heart (Stuart Hall High School), Crystal Springs Uplands School and Sacred Heart Cathedral High School; and additions at St. Stephen's, Serra High School, St. Thomas More, St. Catherine of Siena, Covent of the Sacred Heart, the Brandeis Hillel Day School, and the International Schools. Projects at the University of San Francisco (USF) include the Sobrato Residential Complex, the Center for Science and Innovation, the Kendrick Law Library, Campion Hall, University Center, and the McLaren School of Business. In addition, we completed a project for the University of the Pacific (UOP) School of Dentistry in downtown San Francisco.

Mira, 160 Folsom Street, San Francisco

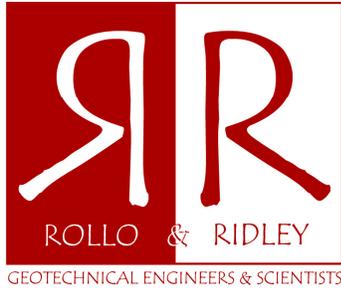
Principal Engineer during the design development, geotechnical investigation, the engineering and design and construction phases of the project. Completed in 2020, the project built 391 residential units in a 40-story tower and 8-story interconnected midrise building. The Tower and midsize are underlain by three basement levels primarily used for underground parking. We recommended the structure be supported on a mat foundation with portions gaining support on augercast piles. During final design, submittals relating to the cutter-soil-mix shoring wall with below groundwater tiebacks were reviewed and approved. Our services during construction included observing the installation of augercast piles, a soil-mix shoring wall (CSM panels), testing tiebacks, and approving the mat subgrade.

Moscone Center Expansion, San Francisco

As part of our As-needed Geotechnical Engineering Services contract with the San Francisco Department of Public Works (SFPDW) we assisted Geotechnical Consultants, Inc. (GTC) during the geotechnical investigation, design development and construction phases. The project included expanding Moscone Center by excavating two regions under Howard Street to a depth of approximately 40 feet between Moscone North and South buildings creating a larger underground convention area below Howard Street and interconnecting the two buildings. In addition, the project included designing and constructing new foundations to support new four-story additions along the above-grade, Howard Street frontages of the Moscone North and South buildings. Lastly, plans included relocation of the truck loading ramp along the 3rd Street side of Moscone South.

1699 Market Street, San Francisco

Principal-in-Charge during the geotechnical investigation, design development and construction phases for the soon to be completed 9-story structure (over 160 units) over one basement level residential structure. The primary geotechnical issues for the site were: 1) the selection of an appropriate foundation system to support the proposed



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building, 2) the proximity of the site to the adjacent MUNI tunnel managed by BART (beneath Market Street), and 3) the proximity of the site to adjacent buildings founded on shallow foundations. Due to sloping foundation bearing layers and varying building depths including a complex array of car stackers pits, foundations consisted of both micropiles and mat foundations.

The Landing, 1395 22nd St/790 Pennsylvania Ave, San Francisco

Principal Engineer during the design development, geotechnical investigation, the engineering and design and construction phases of the project. Completed in 2019, the project built 81 residential units in an 8-story building constructed into a hillside. Rockbolts, rock anchors, micropiles and augercast piles all secure the building into the eastern side of Potrero Hill in the Dogpatch neighborhood of San Francisco.

Piers 1½, 3 and 5, Port of San Francisco

Project Manager for the conversion of the existing maritime piers to office and retail space. The circa-1910 structures underwent a full seismic strengthening including the addition of new piles. Mr. Ridley was in charge of overseeing the extensive field work (including pile testing, CPTs and exploratory drilling), engineering analysis, and preparing a detailed geotechnical report presented to the Bay Conservation and Development Corporation (BCDC) which was approved. During construction, Mr. Ridley provided day-to-day oversight and consultation during the installation of piles from barges.

Illinois Street Bridge, Port of San Francisco

Conducted a geotechnical investigation for the construction of a new bascule bridge at the Islais Creek Channel in San Francisco, California. The bridge is designed to support pedestrian traffic, two automobile lanes, and one railroad line and is about 540 feet long. Our investigation evaluated subsurface conditions to provide parameters for the design of the pile foundations. Mr. Ridley performed various analyses to determine the axial and lateral capacity of pile groups, settlement at the abutments, and lateral earth pressures on abutment walls. Lateral pile analyses included providing vertical and lateral stiffness curves. He also provided construction services including reviewing RFIs and managing staff during pile and sheetpile installation.

1868 Van Ness Avenue, San Francisco

This eight-story midrise building with two basement levels houses 35 luxury condominium units. An average excavation on the order of 30 feet was completed to construct the basement levels and shoring and underpinning was installed. Rollo & Ridley performed a field investigation and detailed engineering analysis. Recommendations for a shallow foundation system, shoring design and seismic hazards were provided. In addition, R&R provided shoring and underpinning recommendations to support the surrounding streets and adjacent apartment building, including consulting with CALTRANS regarding their jurisdiction of Van Ness Avenue. During construction, we provided special inspection services as required by code, observing the shoring, underpinning and foundation installation.

The Olympic Club, Sutter Street Facility and Post Street Clubhouse Renovation

Project Manager during the geotechnical investigation, design development and construction phases. The project included the demolition and removal of the existing two-story parking structure (Olympic Garage) and the construction of a new seven-story, steel-framed building above four below-grade concrete levels. The building was interconnected with the rear of the existing Post Street Clubhouse. An excavation of approximately 61 feet below street level grade was

required to construct the basements. Shoring and underpinning included approximately 100 hand-mined underpinning piers, slant drilled underpinning piles, soldier beams, and several levels of tiebacks. In addition, Mr. Ridley provided geotechnical services during the renovation to the existing historic Post Street building. Foundation improvements included a new mat foundation to support a central core shear wall and a micropile-supported shear wall. Shoring and underpinning were installed to allow access to the existing foundations, constructed in the 1910s, up to 20 feet below the existing lowest basement level.

Jessie St. Garage (Jewish Museum), San Francisco

Provided geotechnical services for this deep excavation project in which a parking garage structure was built (completed in 2005) that supports the Jewish Museum. The excavation extended approximately 45 feet deep below Mission Street and included excavations adjacent to three luxury high-rise hotels as well as an historic brick church structure. The project also included the preservation of an approximately 200-foot-long, 40-foot-high historic brick façade (former PG&E substation). The wall was supported on a steel trestle and pier system as the deep excavation was advanced beneath it to the 45-foot excavation depth. In addition, the project included installing 200-kip micropiles (tiedown anchors) to hold down the structure against hydrostatic uplift forces.

AT&T Park (Formerly known as SBC Park and Pacific Bell Park)

Observed deep concrete pile, compaction grout, and stone-column installation for the San Francisco Giants baseball stadium. The site is underlain by liquefiable fill and highly compressible Bay Mud deposits. The ballpark facilities include a playing field, a 40,000-seat outdoor stadium, a ferry landing and a multi-level office structure.

Pier One, Port of San Francisco

Provided construction observation for the installation of four-foot-diameter steel pipe piles for the pier adjacent to the Ferry Building along the San Francisco waterfront. The piles were 140 feet long and were installed using a vibratory hammer. The development included seismically strengthening the 90-year-old pier to convert its use from maritime activities to commercial office space, while preserving its historical landmark status.

Broadway Rockslide

Worked as the Project Engineer for the mitigation of a rockslide on Telegraph Hill in San Francisco, California. Stabilization efforts included rock scaling, deep rock anchors, net anchors and gabion mesh, and tie-backed shotcrete walls.

Adobe Systems Headquarters, Tower III

Performed a geotechnical investigation and managed the construction observation for an 18-story tower over underground parking constructed in downtown San Jose, California. Recommendations for a mat foundation, soil cement shoring of adjacent structures and dewatering were given.

San Francisco International Airport Expansion

Observed the installation soil-cement (Geo-Jet) piles for the West Field improvements, which included construction of a 135,000-square-foot underground retention structure.

Oracle World Headquarters

Part of the construction management team that built a nine-story high-rise on soft compressible Bay Mud soil for the Oracle Software Company in Redwood City, California.