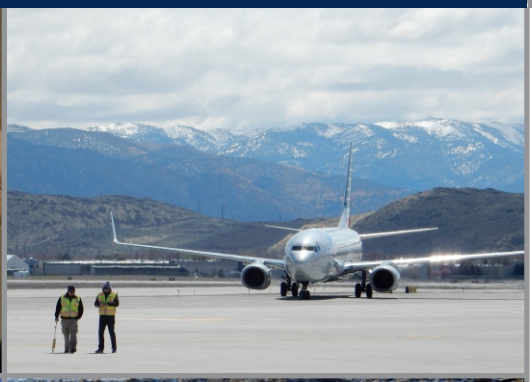
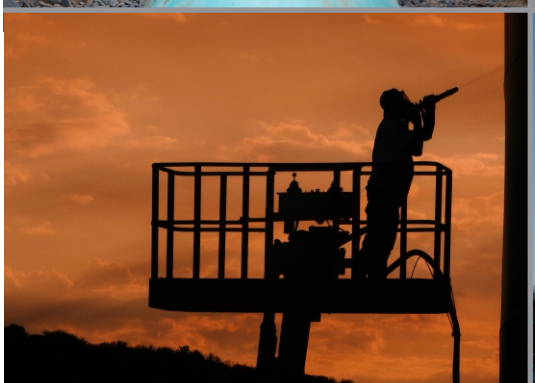









CME CONSTRUCTION MATERIALS ENGINEERS, INC.

Construction Administration

Materials Engineering

Project Inspection

Materials Testing

Geotechnical Engineering

2019

Introduction

Construction Materials Engineers, Inc. has operated in northern Nevada for more than 40 years and provides a full range of geotechnical engineering, construction administration, project inspection, materials testing, and materials design. We provide professional services throughout Nevada and northeastern California in both urban and rural areas.

CME works with local agencies, contractors, and consultants to ensure the successful completion of all project types including roadways, bridges, airports, buildings, mining, power, development, environmental, water and sewer, storm drainage, erosion control, and more. We have a large staff of certified testing and inspection personnel (ACI, ICC, NAQTC, Caltrans, and AWS), as well as licensed Professional Engineers and Geologists.

CME has an AASHTO accredited on-site laboratory at our office in Reno, and we are certified to provide testing of hot mix asphalt, soils, aggregate, concrete, and cement. Additionally, we have complete mobile laboratories for providing services on-site, as well as various specialized equipment.

With four decades of providing professional services, our clients can be assured of our ability to provide high quality services regardless of project type or location. Our professionally trained and certified staff, accredited laboratory, extensive local experience, and desire to provide outstanding and accurate services makes CME a leader in the profession.

Leadership

CME offers our clients longevity, stability, and reliability. The leadership of CME has worked together as a unit for many years and a large number of our inspectors and technicians have been with the firm for over ten years. Key team members include:

Team Member	Position	Years in Local Office	Years in Local Area	Total Years of Experience
Marty Crew, PE	President	41	41	41
Verdie Legg	Vice President	21	36	36
Jon Del Santo, PE	Project Manager	20	22	22
Roger Corkill, PE	Project Manager	17	22	22
Katie Weagel, PE	Project Manager	6	6	6
Randy Reynolds, PE	Senior Geotechnical Engineer	29	39	39
Stella Hardy, PE	Geotechnical Eng/Project Mgr	6	12	12
Mike Weber	Technical Coordinator	30	37	42
Art Legg	Field Coordinator	17	31	31
Russ Allen, RG	Field Coordinator	18	30	43
Steve Vineis	Laboratory Manager	15	31	31

Marty Crew, PE is President of the firm and has 41 years of experience in Nevada and northeastern California, including the Tahoe Basin. He is a licensed Professional Engineer in Nevada and California and acts as Project Principal on all project types to ensure CME's resources are utilized effectively for the successful completion of all projects undertaken by the company.

Verdie Legg is Vice President of the company and has been with the firm since 1998. He has provided quality control on hundreds of projects and is very experienced in construction techniques and requirements in Nevada and California. He provides project management, coordination, and specialized expertise on all project types and is ACI and NAQTC certified.

Jon Del Santo, PE is a Project Manager and has been with the company since 1999. As a licensed Professional Engineer in Nevada and California, he has overseen all types of projects in rural and urban areas including Lake Tahoe. He has been the Engineer-of-Record or Construction Administrator on numerous development and infrastructure projects, in addition to providing management.

Roger Corkill, PE is a Resident Engineer and Project Manager with 22 years of local experience. He is a licensed Professional Engineer in Nevada and California, as well as being ACI, NAQTC, and Caltrans certified. Additionally, Mr. Corkill has attended both the Caltrans and NDOT Resident Engineer Academies.

Katie Weagel, PE is a Project Manager at CME with six years of experience. She is a licensed PE in Nevada and California and has an MS in Environmental Engineering and a BS in Civil Engineering. At CME, she is responsible for managing a variety of projects and ensures accuracy, provides documentation, creates reports, provides scheduling, and attends meetings.

Randy Reynolds, PE is CME's Senior Geotechnical Engineer. He has been with the company for 29 years and has 39 years of geotechnical experience. He is familiar with the geotechnical conditions and appropriate construction methods unique for Nevada and the eastern California area, allowing him to provide cost effective design solutions based on the site-specific geotechnical conditions encountered. He is a licensed Professional Engineer in Nevada and California.

Stella Hardy, PE is a licensed Professional Engineer in Nevada, California, and Utah, as well as being a Certified Erosion Sediment and Storm Water Inspector and a Qualified SWPPP Practitioner. She has extensive geotechnical and engineering experience in the Lake Tahoe area, as well as completing a variety of project types in rural and urban areas of northern Nevada.

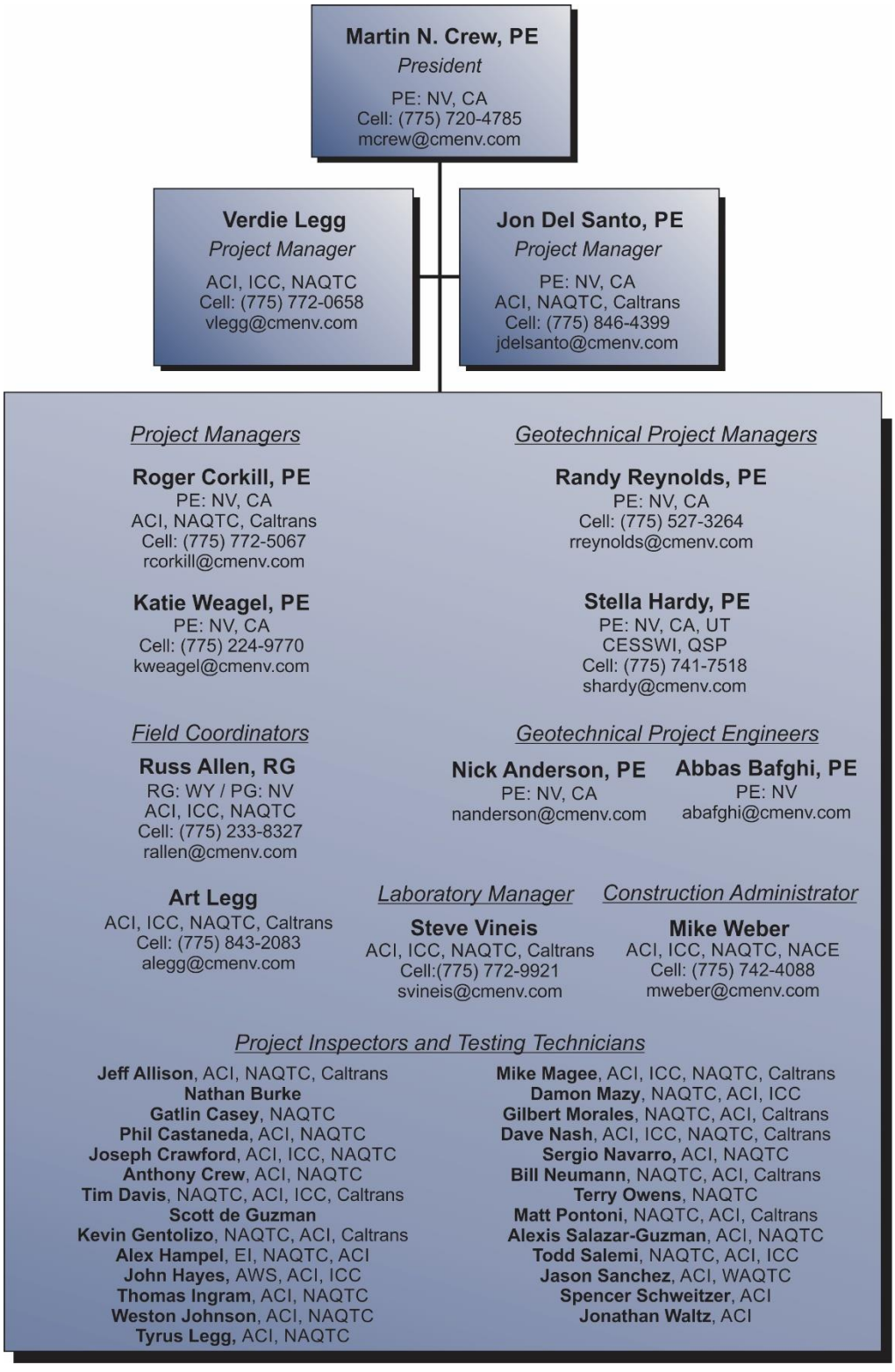
Mike Weber is a Technical Coordinator for the firm and is ACI, ICC, NAQTC, and NACE certified. He provides project coordination, construction inspection, and materials testing, as well as oftentimes completing production facility audits. He has been with the firm for 30 years and has dedicated his career to construction administration, testing, and inspection.

Art Legg is a Field Coordinator responsible for supervision of technicians, as well as inspection and testing on the full range of project types. He is NAQTC, ACI, ICC, and Caltrans certified and has been with the firm for 17 years. In addition to supervision, he has provided staff training, crew management, scheduling, and budget review.

Russ Allen, RG is a Field Coordinator and Geologist with 43 years of diverse experience in geologic exploration, construction quality assurance, project inspection, and materials testing. He has an MS and BS in Geology, is a Registered Geologist in Wyoming, a Professional Geologist in Nevada, and is ACI, ICC, and NAQTC certified. Prior to coming to CME in 2001, Mr. Allen was an exploration geologist for 24 years providing field investigations and data analysis on mining projects worldwide.

Steve Vineis is CME's laboratory manager and is responsible for management, coordination, review, and testing of our accredited on-site and mobile laboratories. He is Caltrans, NAQTC, ACI, and ICC certified with 31 years of experience. He has hands-on expertise in the testing of soils, aggregates, asphalt, concrete, masonry, fireproofing, reinforcing steel, mortar, and geomembrane systems.

Organizational Chart



Service Capabilities

For four decades, CME has built a solid reputation of service and satisfaction by delivering a wide array of general engineering projects on time and within budget. Our group has the demonstrated knowledge and skills to assume either full project quality assurance responsibility or provide the necessary quality control support to complete a project team. CME is capable of providing the following services in-house:

- Construction Administration
- Project Inspection
- Materials Engineering
- Field and Laboratory Testing
- IBC Special Inspections
- Contractor Quality Control
- Geotechnical Engineering
- Asphalt Concrete QA/QC
- Prestress Concrete Inspection and Testing
- Concrete and Asphalt Mix Designs
- In-Situ Concrete Maturity Testing
- Aggregate Source Qualification
- Portland Cement Concrete QA/QC
- Geologic Determinations

Service Sectors

Our professional and technical staff provide services on construction projects of all types including:

Transportation

- Roadways – highways, arterials, local
- Airports – airside and landside
- Bridges and interchanges
- Railroads
- Transit

Utilities / Environmental

- Stormwater collection and conveyance
- Erosion control facilities
- Wastewater collection and treatment
- Water treatment and distribution
- Wetlands restoration
- Dams

Energy

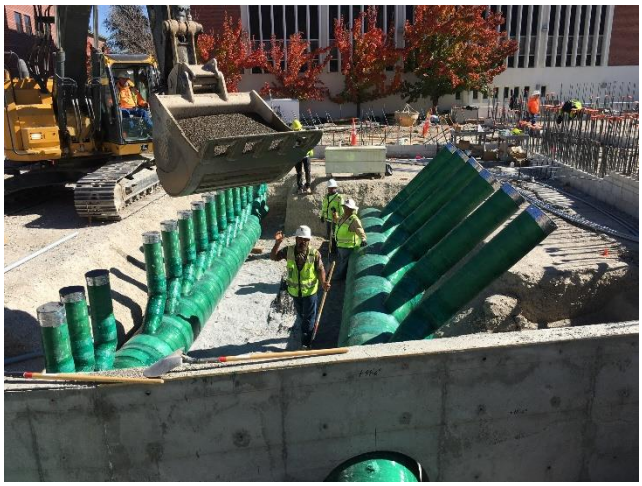
- Generation plants
- Transmission facilities
- Solar
- Geothermal
- Fuel and gas pipelines

Buildings

- Educational and cultural
- Warehouses / industrial / research
- Commercial / office / retail
- Justice
- Hotel / casino / resort
- Seismic isolation and retrofit
- Parking structures

Mining

- Aggregate mining and production
- Precious metals processing and facilities
- Mine infrastructure



Military

- Airport facilities
- Buildings
- Infrastructure
- Roadways

Geotechnical Engineering

CME has provided geotechnical services in Nevada and eastern California continuously for more than 30 years. Our geotechnical library contains approximately 2,000 geotechnical investigation reports for previously completed projects in the region. CME's geotechnical engineers and geologists are skilled in defining and executing field exploration programs to provide cost-effective solutions to geotechnical challenges. Our goal is to provide practical design recommendations for safe and stable structures, and oftentimes we are able to recommend innovative options for your project. We provide geotechnical services on a variety of project types including roadways, buildings, airports, bridges, pipelines, dams, power plants, industrial structures, towers, tanks, and transmission lines. CME's professional staff can provide the following geotechnical services:

- Soils investigations
- Slope stability
- Geologic mapping
- Geologic sampling
- Field exploration and in-situ soil testing
- Deep and shallow foundation design
- Settlement analysis
- Seismic analysis
- Earthwork and grading recommendations
- Retaining walls and lateral bearing
- Expansion soil analysis and mitigation
- Vibrating machinery pad design
- Foundation distress analysis
- Pavement design

Construction Inspection

CME provides complete inspection services encompassing a service range from full project quality assurance responsibility to quality control programs to spot inspections. Our field personnel are ACI, ICC, NAQTC, Caltrans, and AWS certified to perform specific levels of construction inspection. Our extensive, diversified staff allows us to provide the appropriate personnel at the required proficiency to satisfy the demands of the project. Numerous agencies and firms utilize the expertise and experience of CME's staff to perform services which include:

- Complete soils quality control programs from laboratory material qualification testing through field placement and compaction. Our in-house geotechnical staff can provide professional oversight for quality assurance.

- Complete asphalt quality control programs from materials qualification testing and structural section design to rehabilitation, including batch plant inspection through field compaction. Our familiarity with challenging volcanic raw materials found in the area is essential for providing proper design controls.

- Complete concrete quality control from testing of raw materials to the testing of finished concrete products. We have written customized software for in-plant analysis of ready mix concrete production and own specialized equipment unique to the area including rapid chloride permeability test equipment, FACE Dipstick floor profiler, MIT-SCAN2-BT dowel bar sensor, various concrete maturity meters, and more.

- Complete roadway inspection programs for new construction, rehabilitation, reconstruction, and roadbed modification projects. Services have included select rotomilling determination, subgrade preparation, monitoring cement treated base placement, checking controlled fill placement and embankments, observing placement of roadbed geotextile fabrics, AC and concrete mix design monitoring, aggregate plant production compliance, AC and concrete batch plant inspections, AC and concrete placement monitoring, and monitoring curing methods.

- Complete IBC Chapter 17 Special Inspection programs including structural concrete, prestressed concrete, precast concrete, reinforced gypsum concrete, soils, reinforcing steel, structural welding, high strength bolting, bolts in concrete, structural masonry, spray-applied fireproofing, moment-resisting concrete frame, insulating concrete fill, shotcrete, and special grading, excavation, and filling.

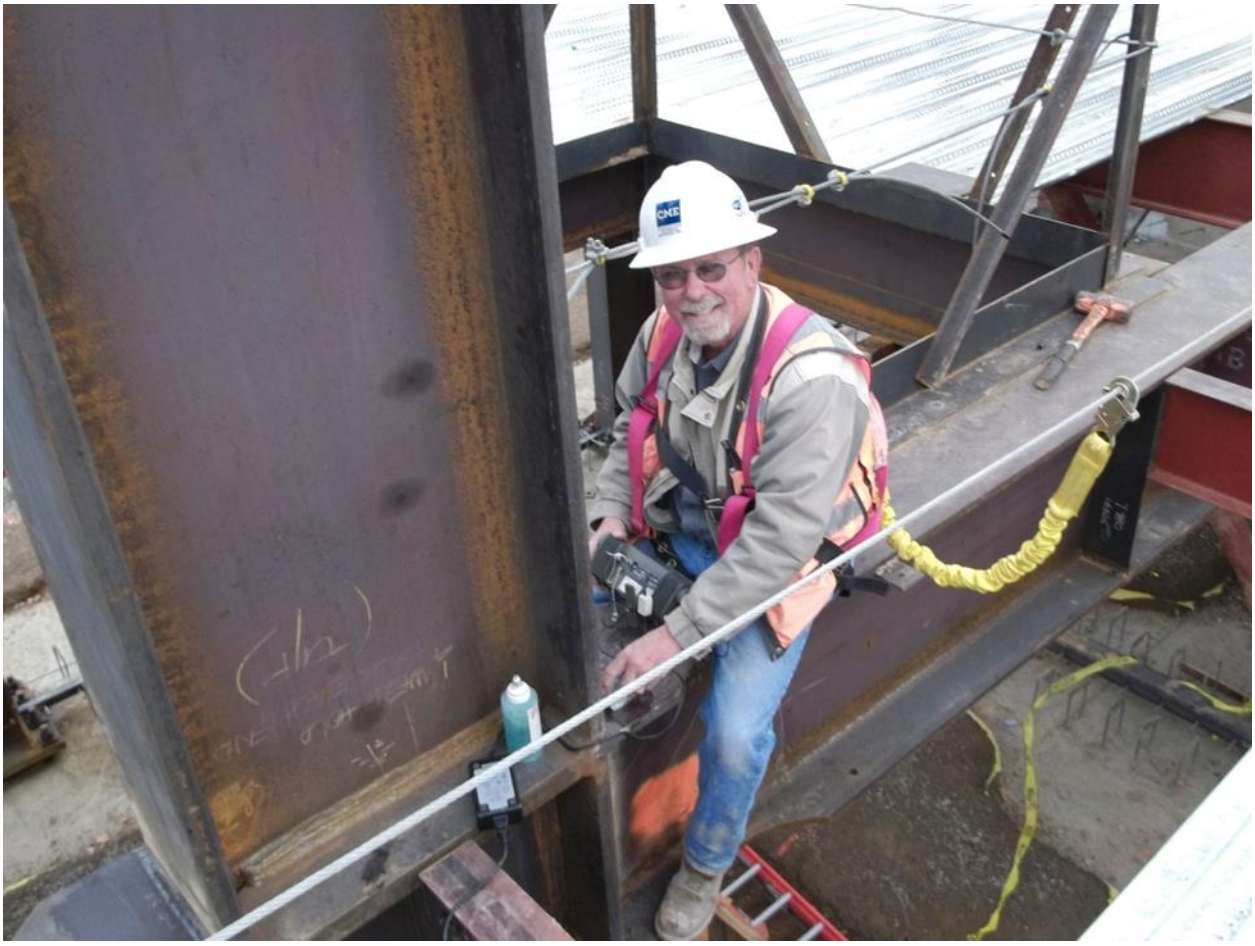
- Complete AWS steel quality control programs encompassing a scope of tasks from audit of fabrication plants to completion of welding and bolting inspection during erection.

- Complete audits and inspections for production facilities of all types. Audits and inspection programs have included manufacturers of precast architectural concrete, high density polyethylene pipe, reinforced concrete pipe, steel cylinder pipe, concrete masonry units, structural and architectural steel, pressure vessels, rubber products, and seismic isolators.

IBC Special Inspections

In addition to the agency building department inspections required by the International Building Code, projects constructed under the auspices of the IBC are required to have the owner employ one or more special inspectors to provide inspection of the following items during construction:

- Reinforced concrete
- Bolts in concrete
- Moment-resisting concrete frame
- Reinforcing steel
- Prestressing steel tendons
- Welding
- High-strength bolting
- Structural masonry
- Reinforced gypsum concrete
- Insulating concrete fill
- Spray-applied fireproofing
- Piling, drilled piers, and caissons
- Shotcrete
- Special grading / structural fill



Materials Testing

CME maintains one of the largest materials testing laboratories in the region. We are accredited by the American Association of State Highway and Transportation Officials (AASHTO) and the Cement and Concrete Reference Laboratory (CCRL) and we continue to participate in their proficiency sample testing and accreditation programs. Our laboratory is currently certified for the testing of hot mix asphalt, soils, aggregate, concrete, and cement.

CME's laboratory test results are accurate to national standard requirements. We have been certified to perform inspections and materials testing for the US Army, US Navy, US Air Force, Caltrans, and the Nevada Department of Transportation. CME also complies with ASTM E329 and ASTM D3666 for tests of concrete, steel, and bituminous materials; ASTM D3740 and ASTM E543 for testing and inspection of soils, rock, and non-destructive; and ASTM E548 for all work not in connection with the above. CME's materials testing technicians are certified by ACI, NAQTC, and Caltrans.

Rapid turnaround of materials testing has always been a priority at CME. Without timely and accurate results, field operations can be delayed. CME has maintained a solid reputation for quick laboratory turnaround. Regularly, when materials testing must be expedited, test results can be obtained within a few hours. Computerized results allow for quick calculation and retrieval of results of most of the testing completed in our lab. Results are reviewed by a licensed Professional Engineer for accuracy and compliance with the applicable specifications prior to release.

In addition to our standard laboratory equipment, CME owns and operates specialized equipment including:

- MIT SCAN2-BT Dowel Bar Sensor System
- Wildcat Dynamic Cone Penetrometer (DCP)
- DAQlink-III Refraction Microtremor (ReMi)
- Germann Instruments Rapid Chloride Ion Permeability Test Equipment

- Proceq Profometer Rebar Locator
- FACE Dipstick 2272 Floor Flatness Profiler
- GM USM32X Ultrasonic Weld Testing Equipment
- Aker Core Rig (with augers)
- Concrete Maturity Meters
- Geocomp Shear Trac II Shear Apparatus
- Geocomp Load Trac III Consolidometer
- Hogentogler Tumbler
- Los Angeles Abrasion Machine

Mobile Testing Facilities

CME is fully capable of providing on-site testing facilities for projects if required. Testing on most projects can be completely performed in these mobile facilities. Computer connections from the mobile laboratories allow the remote facilities to maintain instant access to the resources of the home office. With our five mobile testing laboratories, CME has provided site-based testing for numerous projects.

Materials Engineering

CME regularly designs construction materials including structural concrete, concrete pavement, asphalt pavements, and manufactured aggregates. Our staff of experts can assist with materials consultation and engineering services on a host of projects including highways, airports, buildings, parking garages, industrial developments, power plants, military installations, dams, and pipelines.

Our materials engineers and geologists have assisted aggregate producers in pit development and product suitability studies for ready-mix concrete, asphaltic concrete, aggregate base, slurry seals, cement-treated bases, asphalt permeable base, open-graded asphalt, and backfill materials.

For many years, CME has provided Contractor Quality Control Programs monitoring materials production and testing. We have met the requirements of federal, state, and local agencies for CQC monitoring and documentation. Services have included:

- Concrete Mix Designs and Analysis
- Asphaltic Concrete Mix Designs
- Gradation, Specific Gravity, Absorption, Los Angeles Abrasion, Fractured Faces, Angularity, R-Value, Plasticity Index, Moisture-Density
- Rapid Chloride Permeability Testing
- Admixture Compatibility
- In-Situ Concrete Maturity Testing
- Aggregate Source Qualification
- Contractor Quality Control
- Forensics Investigations
- Professional Witness

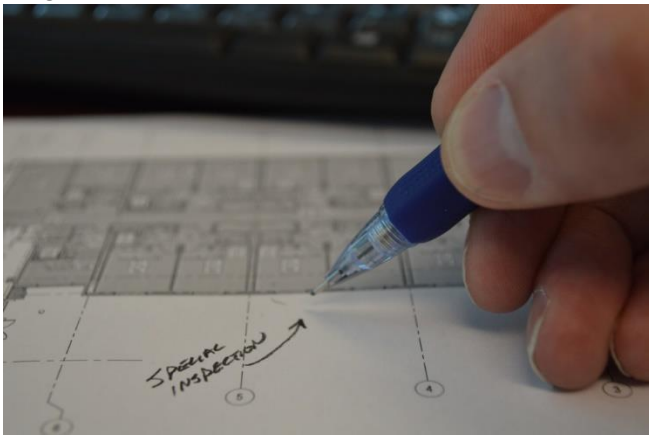
Construction Administration

With over three decades of extensive local experience, CME understands and shares the Owner's vision, actively engaging at all levels of the project to address design conflicts, changed conditions, coordinating and/or expediting required third-party work, and communicating project needs. CME's experienced staff anticipates difficulties, articulates issues, and brings solutions forward to keep the project moving. Services include:

- **Contract Administration and Change Management**
  - Constructability review
  - Bid processing and contractor selection
  - Administer contracts
  - Coordinate and run preconstruction and weekly meetings
  - Coordinate among agencies having jurisdiction
  - Resolve, negotiate, and document changes
  - Perform dispute resolution and claims analysis

- **Quality, Documentation, and Inspection**
  - Quality assurance, control and audits
  - Maintain records of materials and accepted work
  - Monitor contractors' activities for compliance with contract document and permits
  - Coordinate with utilities, agencies, and property owners/tenants
  - Utility reviews and relocation management
  - Evaluate and oversee traffic control
  - Construction engineering and inspection
  - Resident Engineer/project management
  - Coordinate and manage material testing

- **Reporting, Controls, and Project Scheduling**
  - Analyze and monitor baseline and project schedules
  - Submittal/shop drawing review
  - Cost assessment and management
  - Analyze payments
  - Reporting and forecasting
  - Close-out services



Quality Assurance

CME compiled the *Corporate Construction Quality Assurance Manual and Quality Control Procedures* many years before it became required practice. The manual controls all aspects of our construction inspection and materials testing.

The manual contains all of the essential operations, functions, qualifications, and procedures of CME. The system is constantly reviewed for compliance with the latest requirements of the International Building Code (IBC), American Welding Society (AWS), Society for Non-Destructive Testing (SNT), American Society of Mechanical Engineers (ASME), American National Standards Institute (ANSI), American Water Works Association (AWWA), American Plumbing Institute (API), American Concrete Institute (ACI, American Society for Testing Materials (ASTM), and the American Institute of Steel Construction (AISC). Manuals are updated periodically and all holders of controlled copies are given updated materials.

Inspection and testing projects administered by CME are assigned project control numbers in accordance with manual requirements. Personnel are qualified as Level I, II, or III depending on education, training, and experience in accordance with the provisions of Quality Control Procedures (QCPs), which parallel the requirements as specified in ANSI 45.2.6.

Local Knowledge

With over 40 years in the local area, CME has extensive experience and knowledge of northern Nevada and northeastern California, including the Lake Tahoe Basin and High Sierra areas. We have provided geotechnical engineering, field and laboratory testing services, and project inspection for many years on projects including water lines, erosion control, roadways and highways, utilities, bridges, ski facilities, development, parking garages, residential, airport, and casino projects. CME is knowledgeable of the special requirements, construction issues, and environmental challenges such as Lake Tahoe and the Sierra.

In northern Nevada, CME has provided professional services for every agency and every type of project in Reno, Sparks, Washoe County, Carson City, Fernley, and the surrounding areas. As well, CME has provided professional services in the remote desert areas of northern, eastern, and central Nevada including mining, highway, public works, power, and other projects. In northeastern California, CME has worked for Caltrans and numerous local public agencies and contractors.

CME understands the special issues inherent to our area including construction techniques, requirements, and materials. With both severe winters and hot summers, Nevada and the Tahoe Basin have special challenges that require a firm that is experienced in our unique climate and landscape.

In 1978, several public agencies desired the ***Standard Specifications for Public Works Construction*** be created. CME (previously as SEA and Stantec) were integral in the development of the materials and construction specifications in the publication. CME staff members remain as technical advisors to the Orange Book committee, although our local knowledge extends well beyond that. We were recently contracted with the Nevada Department of Transportation and the Federal Highway Administration as technical experts for high performance concrete, conducting research to improve the quality and longevity of local concrete mixtures. We currently provide mix designs to most of the major concrete suppliers throughout the region, and most of the asphalt producers, as well as a majority of the materials qualification testing for large aggregate producers in northern Nevada. CME regularly provides contractor quality control programs on Caltrans highway projects and military and FAA construction contracts. CME has a demonstrated knowledge of local processes, specifications, and materials.

Project Experience

RTC Southeast Connector – Sparks, NV (2010-2018)

CME has been involved in many phases of the proposed Southeast Connector for over a decade. We completed preliminary, Phase 1, and Phase 2 geotechnical investigations and provided construction testing and inspection for Phases 1 and 2 of the new roadway and bridge. The new six-lane major arterial extends from the intersection of Greg Street/ Sparks Boulevard, over the Truckee River, to the intersection of South Meadows/ Veterans Parkway and provides a much-needed connection from east Sparks to south Reno. The project was built in two phases, taking over three years to complete. Phase 1 began in February of 2013 and involved the construction of a bridge over the Truckee River and the roadway from Sparks Boulevard to just south of Clean Water Way. Phase 2 was completed in July 2018 and completes the roadway from Clean Water Way to Veterans Parkway.

RTC Pyramid/McCarran Intersection Improvements CM – Sparks, NV (2016-2017)

CME was the prime consultant responsible for Construction Administration for this intersection improvement project completed in late 2017. The much-needed project to accommodate the heavy traffic experienced at this busy location includes: a free right turn lane from southbound Pyramid Way onto McCarran Boulevard, triple left turn lanes from eastbound McCarran Boulevard to Pyramid Way, a dedicated right turn lane from westbound McCarran Boulevard to Pyramid Way, a through lane in each direction on Pyramid Way, and a multi-use path, new sidewalks, landscaping and privacy screens with decorative walls featuring Pyramid Lake and outdoor activity themes. CME also provided CA services for phase 2 of the demolition portion of the project.

North Truckee Drain, Phases 1-3 – Sparks, NV (2014-2017)

CME has provided materials testing and project inspection for all phases of the new North Truckee Drain in east Sparks. The project is slated to be completed in three phases and extends from the existing North Truckee Drain near Sparks Boulevard to the Truckee River east of Larkin Circle/Vista Boulevard.

Phases 1 and 2 involved the installation of 3,314 lf of two 10'x14' parallel reinforced concrete box culverts and involves extensive earthwork, as well as PCC paving on both Vista Boulevard and Larkin Circle. CME also provided MIT dowel scanning of the new roadway paving. Additional construction work included installation and relocation of sanitary sewer including piping and a lift station, installation and relocation of water mains, and demolition and replacement of utility service lines and conduits.

Phase 3 involves 3,280 feet of twin 14'x10' and 8'x8' box culverts, as well as 3,261 feet of storm drain. Inspection and testing are being completed for soil backfill, reinforcing bar, structural concrete, asphalt concrete pavement, and underground utilities. CME is providing full-time inspectors for the 52-week on-going project and daily field reports are submitted to the City that include work completed, bid item quantities, construction personnel on site, construction equipment on site, official visitors on site, weather, problems encountered, and any accidents, with a final report of the project to be submitted at completion.

Additionally, CME completed a backfill settlement investigation on the North Truckee Drain to determine the scale of the problem and provide repair recommendations. Backfill soil settlement issues began after the Truckee River flooding event on January 8 and 9, 2017, when several isolated settlement areas were observed along the edge of the box culvert and along the south side of Larkin Circle. Exploration included ground penetrating radar, a general forensic investigation, and exploratory borings, as well as laboratory testing. After completion of exploration and testing, CME provided a report including likely causes and repair recommendations.

Reno-Tahoe International and Reno-Stead Airports – Reno, NV (2009-present)

CME provides a variety of services at both Reno airports including geotechnical, materials testing, and construction inspection for taxiways, aprons, runways, and facilities. In addition to specific projects, CME also provides services for the yearly landside and airside pavement repairs and rehabilitation contracts, yearly pavement management programs, as well as yearly apron rehabilitation/reconstruction projects. In addition to the yearly airport contracts, following is a partial list of Reno airport projects:

- Reno-Stead Airport Runway 8-26 Reconstruction – 2018
- RTIA GA West Pavement Investigation – 2017
- Stead Airport NVARNG Access Roadway QA – 2017
- Reno-Stead Airport Taxiway D Rehabilitation QA – 2016
- Reno-Stead ARNG Access Roadway Pavement Rehab Geotech – 2016
- RTIA Deicing Materials Storage Facility – 2016
- RTIA Sand Storage Facility Modifications – 2016
- RTIA Atlantic Aviation Reno Ramp Replacement – 2015
- RTIA Taxiway C and Connectors Reconstruction – 2015
- RTIA Construction Management and Testing as Ordered – 2015
- RTIA Central Disposal Facility Upgrade – 2015
- Reno-Stead Airport Taxiway C Reconstruction – 2015
- RTIA Federal Inspection Services Building Remodel – 2014
- RTIA Runway 16L-34R Touchdown Rehab – 2014
- RTIA Taxiway C Emergency Repair – 2013
- RTIA Taxiway Q – 2013
- RTIA Air Cargo East Leasehold Geotech – 2012
- Reno-Stead Airport Terminal Emergency Operations Center – 2013

- RTIA Terminal Consolidated Security Checkpoint – 2012
- RTIA Parking Area Pavement Investigation – 2012
- RTIA Terminal Refurbishment and IT Communications – 2012
- RTIA Taxiway C Extension – 2011
- RTIA Snow Removal Equipment Building – 2011
- Reno-Stead Airport Runway 8/26 – 2010
- RTIA Reno Fueling Facility Expansion and Upgrade – 2010
- RTIA Apron Expansion – 2010
- RTIA Taxiway Q Geotech – 2009
- RTIA Control Tower – 2009

UNR University Arts Building – Reno, NV (2017-2018)

CME provided project inspection, IBC Special Inspections, and materials testing services for this new $23.8M facility located on the UNR campus. The multi-level, 42,545sf masonry and steel structure includes a 300-seat recital hall, art museum, acoustics laboratory, rehearsal spaces, faculty offices, a recording studio, and a skywalk to the Church Fine Arts building. CME's services included IBC Special Inspections for structural earthwork, reinforced concrete, structural steel, high-strength bolting, welding, masonry, precast concrete, bolts and dowels in concrete, and spray-applied fireproofing. Project inspection included soils, aggregate base, concrete, asphalt, and trench backfill. CME also provided materials testing services.

Glendale Avenue Testing – Sparks, NV (2017)

CME provided project inspection and materials testing services for the reconstruction of Glendale Avenue (SR648) from Kietzke Lane to McCarran Boulevard, a distance of 2-1/2 miles. The project involved removal of 18" of old pavement and roadbed, recompaction of the roadway base, and 6" of new asphalt. Concrete intersections were added at the Rock Boulevard and Galetti Way intersections. Additionally, new sections of sidewalk were added, along with improved ramps and pedestrian crossing buttons. The project cost was $14M and improves Glendale for the 14,500 daily vehicles using the roadway, including heavy truck and commercial vehicles.

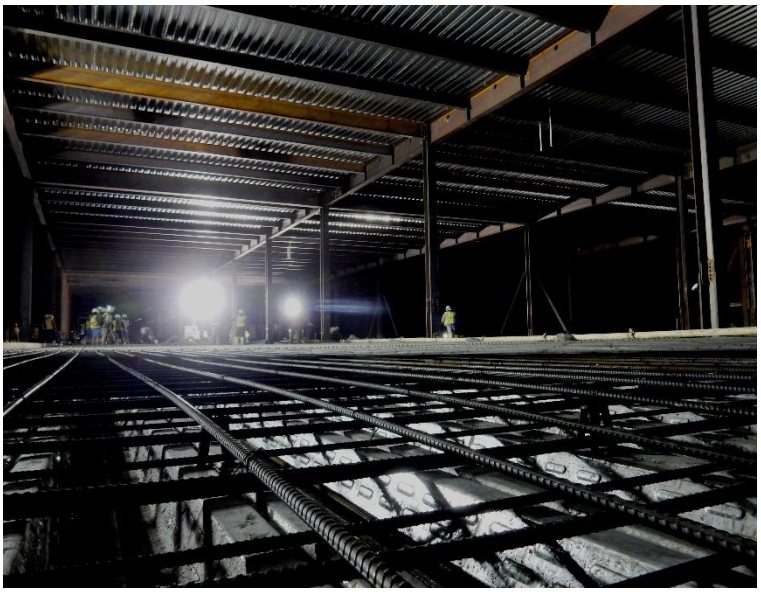
Churchill Detention Center – Churchill County, NV (2016-2017)

CME provided materials testing, construction inspection, and Special Inspections for this new jail facility located in Fallon. The new $17M center is 39,000sf and initially includes 120 beds, state-of-the-art control room, visitation area, detox cells, padded cells, medical resources, and staff lockers. CME's services included materials testing and inspection for geopier reinforcement installation, utility bedding and backfill, aggregate base placement, and asphalt concrete placement; Special Inspections for earthwork grading, concrete reinforcement and PCC placement, masonry, and structural steel welding/high-strength bolting; and laboratory testing of materials. The project began in July 2016 and completed in October 2017, which was two months ahead of schedule.

Tesla – McCarran, NV

(2014-present)

CME has been providing professional services at this lithium-ion battery production facility since it broke ground in 2014. The factory, owned by a prominent electric car manufacturer, plans to produce an annual battery production of 35 gigawatt-hours. The $5 billion facility plans to reach full capacity by 2018. The building has a current footprint of 1.9 million square feet, with 4.9 million square feet of usable space across several floors.

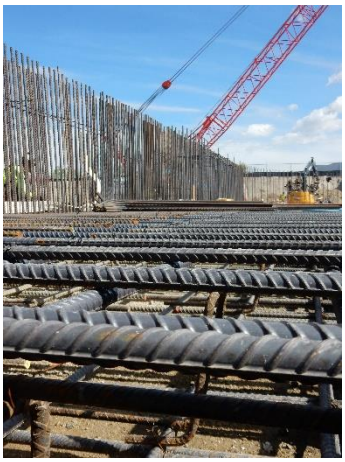


Kings Beach Gateway to the Core Improvement Project – Placer County, CA (2016-2017)

CME provided materials testing services utilizing Caltrans-certified personnel for this roadway project. The project provides improvements at each end of the Kings Beach Commercial Core project, near Highway 267 at one end and Chipmunk Avenue at the other end, and includes roadway improvements, advanced stormwater treatments, sidewalks, bike lanes, and general streetscaping. The majority of the project is located within Caltrans right-of-way.

Carson City Water Resource Recovery Facility Improvements Phase 1A Inspection/ Testing – Carson City, NV (2016-2017)

CME provided materials testing, construction inspection, and IBC Special Inspections for this two-year project. Services included project management including engineering support, review of submittals related to Special Inspections and materials testing, assisting with project submittal reviews, preparation of monthly progress reports, and professional review of daily field reports and materials testing reports; pre- and post-construction services including pre-construction review of project plans and specs, attendance at the pre-construction conference, and preparation of the final report for submittal to Carson City; IBC Special Inspections; and materials testing.



UNR EL Weigand Fitness Center Special Inspections – Reno, NV (2015-2017)

This $46M project broke ground in June 2015 and was completed in 2017. The facility consists of a 150,000sf fitness and recreation facility on four levels including multi-use courts, strength training, locker rooms, fitness rooms, and a 1/8-mile indoor running track, as well as 85 parking spaces located on the first floor. The building is a structural steel frame with composite metal deck floors and a 4-inch nominal brick veneer fascia. Concrete slabs on grade at the first floor were placed over a vapor barrier, with a

metal deck roof with rigid insulation and membrane roofing. CME provided project inspection, IBC Special Inspections, and materials testing services. IBC Special Inspections included structural earthwork, reinforced concrete, fabrication and erection of structural steel, high strength bolting, welding, masonry, precast concrete, post-installed bolts and dowels in concrete, standard and intumescent spray-applied fire resistive material, and review of fabricator quality control programs. Site inspection and testing included non-structural soils, aggregate base, site concrete, asphalt paving, trench backfill, and other ancillary items necessary to complete the construction.

Project Mills – Patrick, NV (2012-present)

CME has provided Special Inspections, materials testing, and construction inspection, as well as geotechnical investigations, for this new facility located at the Reno Technology Park approximately ten miles east of Reno/Sparks on I-80. The project will consist of 16 separate buildings and an office/ administration building, as well as generators, twelve 50,000-gallon water storage tanks, sanitary sewer leach field and storm drain detention basin, paved entrance road, parking area, drainage ditch, and a perimeter roadway. CME was responsible for compaction testing and laboratory materials testing during mass grading and construction of underground utilities, parking areas, buildings, and site work; materials testing of structural concrete and site concrete including slump, air content, and concrete compressive strength; materials testing of asphalt concrete for the parking area; floor flatness/levelness testing for each building; and IBC Special Inspections of soils, structural concrete reinforcement, structural concrete placement, structural steel welding and bolting, and epoxy bolting.

Dayton Septic Elimination Project – Dayton, NV (2015-2016)

CME provided materials testing services for this project consisting of the installation of sanitary sewer mainline and service crossings, the abandonment of septic tanks for homeowners, and the complete reconstruction of ten failed roads within the subdivision. CME's scope started out with nuclear density testing for bedding and backfill lifts on the mainline and crossings. As the reconstruction of the roads using a cement-treated base method began, our scope expanded to providing full quality control inspection of the process. Our services included verifying grinding depths, classifications of the underlying materials, areas needing CTB as opposed to areas only needing over-excavation, verifying in-place cement percentages and moisture ratios, and proper and complete blending of soils and cement. CME also provided quality control inspection and materials testing during asphalt paving of the new roads, a total of 15,000 tons of new AC.

UNR Pennington Student Achievement Center Testing and Inspection – Reno, NV (2015)

CME provided construction testing and inspection for this new $44M facility located on the UNR campus. The building was constructed on the footprint of the former Getchell Library after it was demolished in 2013. The new facility involved construction of buttresses inside portions of the existing Getchell Library basement. The new building is approximately 20,000 sf, four stories, and includes a partial daylight basement. CME provided materials testing, construction inspection, and Special Inspection services for steel, welding, and structural bolts. CME also provided geotechnical engineering and construction recommendations. This project was the recipient of the ASCE Project of the Year for Geotechnical Engineering award.

UNR New Residence Hall at Cooper Court, Peavine Hall – Reno, NV (2014)

This new dorm encompasses approximately 118,000 sf in five stories. The structure consists of a rigid, reinforced concrete and structural masonry frame, with select structural steel supporting elements. Floors are precast structural concrete planks. The roof framing is steel truss covered with steel sheathing. Underground utility installation included storm drain, gas, electrical, and domestic water on-site and in existing city streets. This project was designed with the intent of attaining LEED Gold certification upon completion. CME provided project inspection for the building structure and site civil improvements. Project Special Inspections included soils, reinforced concrete, structural masonry, precast concrete, structural steel, high strength bolting, and welding. Civil inspection

included mass grading of soils, underground utilities, site concrete, and asphalt paving. The project also included improvements to City of Reno streets.

5-Mile Reservoir and Divide Reservoir Lining Project – Storey County, NV (2014)

CME provided testing and inspection services for the installation of polyethylene liners at two reservoirs located in Storey County. Improvements included site fencing, electrical, SCADA, and controls for the $600,000 project. CME's services included laboratory and field testing of concrete and soils during construction.

Reno-Stead Airport Terminal Emergency Operations Center – Reno, NV (2013-2014)

CME provided materials testing and building inspection services for this project located at the Reno-Stead Airport. The new 12,000 sf facility includes terminal space to support general aviation activities, a dedicated space for emergency operations, and leasable space for commercial opportunities. The new building includes the emergency operations center, administrative office, commercial conference room, and a pilot's lounge. IBC Special Inspections included foundations, steel erection, welding, roofing, and fireproofing. Materials testing included earthwork, concrete, asphalt, and masonry.

Plumb Lane Reconstruction, Ferris to South McCarran – Reno, NV (2013-2014)

CME provided geotechnical engineering and construction materials testing services for the reconstruction of Plumb Lane. Geotechnical services included field exploration, geotechnical report, and recommendations for construction. The objectives of the geotechnical study were to determine general soil and groundwater conditions pertaining to design and construction of the proposed improvements, to provide recommended structural sections for the roadway design, and to provide recommendations for construction of the roadway. The Plumb Lane reconstruction included approximately 5,300 linear feet of roadway including two travel lanes, a bike lane, and two separate retaining walls.

Equipment List

Concrete, Cement, and Masonry

Laboratory Equipment

- Shrinkage Beam Test Equipment
- Germann Instruments Rapid Chloride Permeability Apparatus
- HIPERPAV Paving Analysis Software
- Forney Universal Compress Machine (400,000 lb)
- Flexural Testing Machine (with calibrated linear and traverse load application)
- Portable Flexural Testing Apparatus
- Moist Curing Room
- Portable Curing Tanks (with circulating pumps, heaters, and digital computer interfaced temperature monitors)
- Controlled 50% Humidity Curing Room
- Unit Weight Measures
- 9cf Concrete Mixers
- Masonry Shrinkage Apparatus
- Masonry Block Oven
- Mortar Flow Table
- Concrete Cut-Off Saw
- Concrete Consolidation Vibrators
- Hobart 5qt Mixer

Field Equipment

- Mobile Laboratories
- Concrete Maturity Meters
- Concrete Differential Temperature Meters
- Evaporation Rate Monitors
- Schmidt Rebound Hammers
- Windsor Probe
- Slump Cones
- Kelly Balls
- Pressure Meters (air content)
- Shotcrete Molding Boxes
- Roll Meters (air content)
- Portable Curing Boxes
- Concrete Beam Molds
- Concrete Cylinder Molds
- Proceq Profometer Rebar Locator
- MIT-SCAN2-BT Dowel Bar Sensor System
- FACE Dipstik 2272 Floor Flatness Profiler
- Portable Concrete Trailer with Compression Machine (250,000 lb) and Diesel Generator

Asphalt

Laboratory Equipment

- Hveem Stabilometer
- Ignition Ovens
- Rice Specific Gravity Apparatus (with vibrating table, vacuum system)
- NDOT Rice Specific Gravity Sets
- Centrifuge Extractors
- Reflux Extraction Apparatus
- Ashing Ovens
- Automatic Marshall Compactors
- Manual Marshall Compaction Apparatus
- Lottman Breaking Heads
- Marshall Stability Machines
- Constant Temperature Water Baths
- Pressure Manometers
- Hobart 5qt Mixer
- Hobart 20qt Mixer
- Cox Kneeding Compactor
- ELE Versatester

Field Equipment

- Mobile Laboratories
- Thin Lift Nuclear Gauges
- Acker PT-22 Pavement Coring Rig (with large core and depth capabilities)
- Portable Coring Apparatus

Structural and Mechanical

Laboratory Equipment

- Universal Compression/Tension Machine (testing through #11 bar)
- Fireproofing Drying Ovens

Field Equipment

- Skidmore Wilhelm Bolt Tension Sets
- Torque Wrench and Multiplier
- GM USM32X Ultrasonic Weld Testing Equipment
- Film and Paint Thickness Gauges

Soils and Aggregate

Laboratory Equipment

- Harvard Miniature Compaction Apparatus
- Proctor Compaction Sets
- 12” Sieve Sets
- 8” Sieve Sets
- Specific Gravity Sets
- Maryann Sieve Shakers
- Rotap Sieve Shakers
- Large Sieve Shakers (with coarse sieves)
- Sample Splitters
- Sand Equivalent Test Sets
- Manual SE Shakers
- Automatic SE Shakers
- Digital Platform Scales
- High Capacity Digital Scales
- Medium/Low Capacity Digital Scales
- Low Capacity/High Resolution Digital Scales
- LA Abrasion Machine
- Sulfate Soundness Bath
- R-Value Kneading Compactor and Stabilometer
- California Bearing Ratio
- Geocomp Load Trac III Consolidometer
- Geocomp Shear Trac II Automated Direct Shear Apparatus
- Miller Box Laboratory Soil Resistivity
- Liquid Limit Devices
- Hydrometer Analysis Sets
- Caltrans Angularity Device
- Caltrans 216 Proctor Mold
- Large Forced Air Ovens
- Medium Ovens
- Small Ovens

Field Equipment

- Mobile Laboratories
- 12” Sandcone Apparatus
- Sandcone Sets
- Nuclear Moisture/Density Gauges
- Vibroground Soil Resistivity Set
- Plate Bearing Set
- Wildcat Dynamic Cone Penetrometer (DCP)
- DAQlink-III Refraction Microtremor (ReMi)
- Aker Core Rig (with augers)

Services:

Geotechnical
Construction Administration
Materials Engineering
Project Inspection
Materials Testing

Project Sectors:

Airports
Roadways
Bridges
Rail
Transit
Buildings
Water/Wastewater
Environmental
Mining
Power
Telecommunications
Recreation







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