



VENDOR NAME: CJL Engineering

BUYER: David H Pauline

SOLICITATION NO.: CEOI 0603 ADJ2500000011

BID OPENING DATE: Sept. 11, 2024

BID OPENING TIME: 1:30pm Est.

FAX NUMBER: 304-558-3970



DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

(Printed Name and Title) Mark F. Sotosky, Director | Business Development

(Address) 232 Horner Street, Johnstown, PA 15902

(Phone Number) / (Fax Number) P: 814.536.1651

(email address) marksotosky@cjlengineering.com

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation/Contract in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; that I am authorized by the Vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on Vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.

CJL Engineering

(Company) Mark F. Sotosky

(Signature of Authorized Representative) Mark F. Sotosky, Director | Business Development 9/9/2024

(Printed Name and Title of Authorized Representative) (Date) P: 814.536.1651 F: N/A

(Phone Number) (Fax Number) marksotosky@cjlengineering.com

(Email Address)

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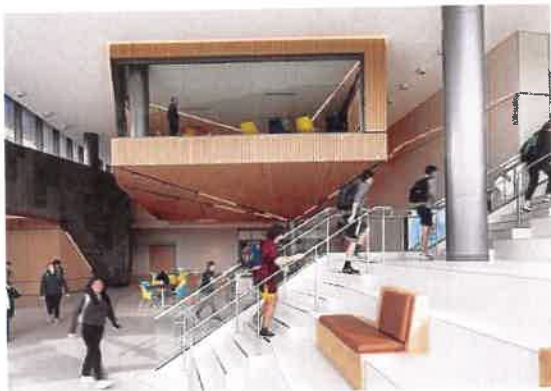
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STATEMENT OF QUALIFICATIONS

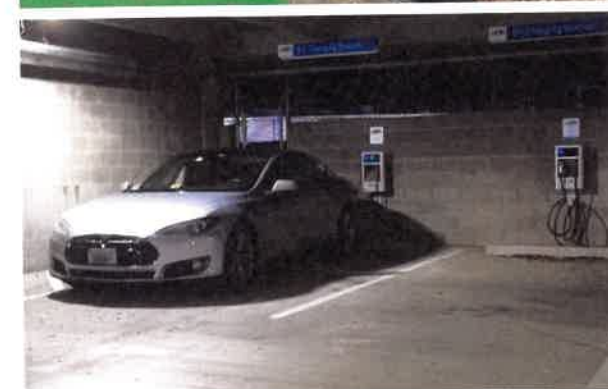
STATEMENT OF QUALIFICATIONS

CJL Engineering is pleased to submit our proposal for the State of West Virginia Multi-Site EV (Electric Vehicle) Charging System Design project. CJL has provided MEP/FP design for numerous Electrical Vehicle Charging Stations. They have either been stand alone EV Stations for Municipals or part of an overall project.

CJL Engineering has seven regional offices and 150+ employees, of which 35 are registered professional engineers; so our bench is deep. Our firm has more than 85 years' experience designing MEP/FP systems for government/municipal projects. We have a reputation for technical expertise, on-time deliverables and budgetary compliance. The more challenging and complex the project, the more likely it will come to our door. Our team of professionals is the most talented in the region. Over 95% of our projects come from repeat customers and referrals. We believe our client's success is our success. Which means at CJL, we dig deep to assess accurately and plan comprehensively. Then we listen to be sure we completely understand our client's objectives and aspirations. We design for both present requirements and future possibilities. We work hard to make life easier for our clients. We work hard so our clients shine and enjoy a job well done.

We have assembled a team of professionals with appropriate project experience and ability to complete these projects. We have included the services of Paradigm Architecture of Morgantown to provide Architectural services. Paradigm's wealth of expertise in the State of West Virginia make this the obvious choice to bring a consolidated and dedicated team to the table.

We hope the following information will give you insight into our team and process. We also trust this information will help you understand why we are the right team to partner with for the upgrade project. We look forward to the next step in your selection process and the opportunity to expand on the ideas included in this document.



FIRM OVERVIEW

Established in 1938, CJL Engineering is a full service, mechanical, electrical, plumbing, fire protection, and civil/structural consulting engineering firm known for mastering the most challenging projects in the region. With offices in western Pennsylvania, eastern Ohio, northern West Virginia and Maryland, our super-regional focus has enabled us to become one of the preeminent MEP firms in the industry, proudly serving a wide range of specializations and clients.

Our West Virginia office is located at 1097 Chaplin Road, Morgantown, WV, 26501. CJL has 8 Licensed Professional Engineers in the State of West Virginia. CJL was the MEP/FP Design Professional for the new WVU Medicine Children's Hospital, the new West Virginia University Business and Economics Building and the new Marshall University Brad D. Smith Center for Business & Innovation Building.



Range of services:

- Engineering Analysis
- Engineering Design
- Building information modeling (BIM)
- Energy modeling
- Detailed construction documents
- Construction phase services
- Building commissioning
- LiDAR 3D Scanning



More than 150+ personnel, including:

- 35 Professional Engineers
- 20 LEED® Accredited Professionals
- Certified Energy Manager (CEM)
- Lighting Certified Professionals [LC]
- NICET Fire Protection
- Healthcare Facility Design Professionals (HFDP)
- Certified Healthcare Constructor (CHC)
- Commissioning Authority (CxA)
- Certified Data Centre Professionals (CDCP)
- Certified Commissioning Professional (CCP)
- Building Energy Assessment Professional (BEAP)



A broad range of clients

- Education - Colleges, Universities, Trade Schools, K-12
- Green Buildings, Science, Laboratory and Research Facilities
- Apartments, Dormitories and High Rise
- Sports Facilities, Ice Arenas and Hotels
- Performing Arts Centers, Museums, Theaters and Libraries
- Central Plants, Energy Facilities and Utility Distribution Centers
- Healthcare - Hospitals, Urgent Care, Medical Centers and Labs
- Corporate, Commercial, Office
- Buildings Industrial - Light and Heavy
- Manufacturing, Warehousing
- Government and Secure Facilities
- High Tech Buildings/Mission Critical
- Data Centers
- Historic and Adaptive Retrofit
- Master Planning and Design



Specialization

- HVAC Systems
- Electrical Systems
- Fire Detection and Protection
- Plumbing Design
- LEED® Green Building Design
- Commissioning
- Energy Modeling Solutions
- Civil / Structural Engineering
- Architectural Lighting and Controls
- Telecommunications
- Life Safety Systems
- Voice/Data/Audiovisual
- Security Systems
- Power System/Quality Evaluations
- Life Cycle Analyses
- Retrofit Evaluations
- REVIT® / BIM



BY THE NUMBERS

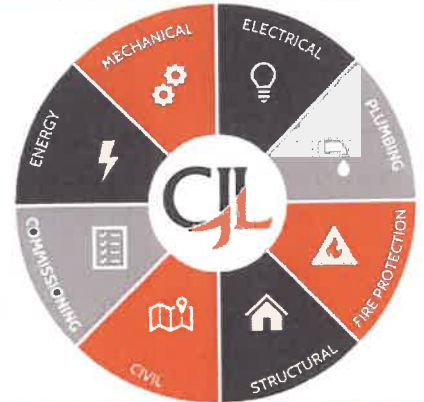
7 Regional Offices

1. Pittsburgh, PA
2. Johnstown, PA
3. Youngstown, OH
4. Frederick, MD
5. Erie, PA
6. Morgantown, WV
7. Baltimore, MD



86

Years of
Engineering
excellence



We have

350+

LEED

projects



150+ employees, including:



35 Registered Professional Engineers (PEs)

20 Engineers-in-Training (EITs)

licensed in **40** states

3 Net Zero Buildings



18 LEED Platinum Projects



30 LEED Gold Projects



National leader in the design
construction and commissioning
of LEED buildings with
20 LEED-Accredited
Professional® staff



Other

Licenses/Certifications:

ASHRAE, ASCE, ASHE,
SPE, BEAP, CDCP, CPMP,
CSI, CEM, CxA, HDFP,
ICC, IES, NICET,
NCQLP, WELL AP



- 2024 MEP Giants - Ranked Nationwide in the Top 100
- 2024 Building Design + Construction - Ranked Nationwide in the Top 50
- 2023 TOP WORKPLACES - Pittsburgh Post Gazette
- 2022 Top 100 Organizations - Pennsylvania Business Central

Connect with us:



86
YEARS
STRONG



WHAT WE DO

CJL engineers roll up their sleeves and get right in there with clients, creating a trusted professional partnership based on strong collaboration and communication, engineering experience and quality technical documents.



Visualization Tools | Survey Equipment

CJL has led for over 10 years in the use of Building Information Modeling (BIM) as an important design capability within the AEC industry. We use the newest version of Autodesk Revit. We regularly employ sophisticated technologies, including Digital Virtual Reality, Thermal Imaging, and 3D Laser Scanning as part of our advanced engineering toolkit.



STAFF QUALIFICATIONS

Geoff Ford, P.E., CDCP, LEED® AP, BD+C
Partner | Electrical Engineer

Contact Information

☎ 412.262.1220

✉ gford@cjlengineering.com

PROFESSIONAL SUMMARY

Geoff Ford is a Partner at CJL Engineering with over 18 years of electrical engineering experience. He is not only responsible for managing projects but is also responsible for the design of power distribution, telecommunication, security and lighting systems for various types of facilities. Geoff has worked on LEED® green projects ranging from high tech facilities and data centers to hospitals and schools, and has incorporated sustainable and energy efficient design into these projects. He also has experience utilizing SKM Software to perform short circuit analysis, power distribution studies, and arc flash studies/analysis.

REPRESENTATIVE PROJECTS

Potomac Green Condominium Units, EV
Charging Station Infrastructure, Ashburn, VA
Marshall University School of Business,
Huntington, WV

- Brad D. Smith Schools of Business
- Institute for Cyber Security (In-Design)

PNC Moon Township Branch Bank,
Charging Stations, Pittsburgh, PA

PNC St. Clair Branch Bank, Charging
Stations, Pittsburgh, PA

Pittsburgh Lower Hills Garage, Charging
Stations, Pittsburgh, PA

PNC Tower Charging Stations, Pittsburgh, PA

2 PNC Tower Charging Stations,
Pittsburgh, PA

3 PNC Tower Charging Stations,
Pittsburgh, PA

PNC Tower, Switchgear Upgrades,
Pittsburgh, PA

1 PNC Tower, UPS Distribution Upgrades,
Pittsburgh, PA

2 PNC Tower, Pittsburgh, PA

- Switchgear Upgrades
- UPS and Generator Upgrades
- Chiller/Boiler Plant Upgrades

3 PNC Tower, UPS Distribution Upgrades,
Pittsburgh, PA

Facebook / Meta District 15 Research Data
Center, Pittsburgh, PA

University of Pittsburgh, Bradford, PA
• Campus 15 kV Distribution Upgrades
• MV Distribution

PNC Ashburn Data Center, Ashburn, VA
Databank Data Center, Design, Arc Flash
Study & Power Distribution Upgrades,
Pittsburgh, PA

PNC Data Center, Electrical Upgrades & Arc
Flash Study, Pittsburgh, PA

PNC Data Center, Electrical Upgrades & Arc
Flash Study, Cleveland, OH

UPMC Forbes Tower Data Center, Design,
Upgrades, Arc Flash, Coordination Study,
Pittsburgh, PA

Facebook Reality Labs, Pittsburgh, PA

Facebook Portal Lab, Pittsburgh, PA

Facebook Offices, Pittsburgh, PA

Google Bakery Square 1.0 Offices -
Renovations, Pittsburgh, PA

Google Bakery Square 2.0 Offices, LEED®
Gold, Pittsburgh, PA

SAP Ariba, Tenant Fit-Out, Pittsburgh, PA

Philips Respironics Offices, Pittsburgh, PA

Philips Center of Excellence, Bakery
Square 3.0, Pittsburgh, PA

Smith + Nephew Lab & Offices, 3.0
Crossings, Pittsburgh, PA

Parkdale Battery Storage Facility, Dallas, TX
IPL Battery Storage Facility, Indianapolis, IN

EDUCATION

2006 - Bachelor of Science
Electrical Engineering
Grove City College
(Four-year ABET accredited curriculum)

SPECIALIZATIONS

Data Centers
Arc Flash Studies
Power Distribution Systems
LEED® Design
Energy Audits
Tech Facilities

REGISTERED PROFESSIONAL ENGINEER

Pennsylvania, California, Kentucky,
Missouri, Michigan, Delaware,
South Carolina, Wisconsin,
North Carolina, Rhode Island

CERTIFICATIONS

Certified Data Center Professional (CDCP)
LEED® Building Design + Construction

MEMBERSHIPS/ACTIVITIES

7X24 Exchange Member (Mission Critical
Organization)
Board Member - Electric League of
Western Pennsylvania
Illuminating Engineering Society (IES)

Kristoffer J. Rickabaugh
Partner | Electrical Engineering

Contact Information

412.262.1220

krickabaugh@cjlengineering.com

PROFESSIONAL SUMMARY

Kris Rickabaugh is a Partner at CJL Engineering with more than 20 years of electrical design experience. He started with the firm in 1998. Kris is responsible for designing power, lighting and low voltage systems for various types of facilities. Kris has been designing and project managing health care projects for more than ten years.

Kris specializes in the design and specification of low and medium voltage power distribution systems, lighting systems, emergency power generation, nurse call telecommunications, paging/ intercom, fire alarm systems and site utilities. He collaborates well with owners, users and consultants to ensure a that quality project is achieved.

EDUCATION

1998 - Associate of Applied Science in
Architectural Drafting and Design and
Computer Aided Drafting and Design
Pittsburgh Technical Institute

SPECIALIZATIONS

Electrical Power Distribution
Low Voltage Systems
Energy Efficient Lighting Design
Project Management

REPRESENTATIVE PROJECTS

Duquesne Light Company, EV Charging
Stations, Pittsburgh, PA

- West Mifflin Borough Municipal Building
- West Mifflin Sanitary Sewer Authority
- The Borough of Swissvale
- Highland Electric Fleets McKees Rock
- Sisters of St. Joseph
- Bakery Square Garage
- Borough Wilkinsburg
- Borough of Bellevue
- Bryn Mawr Apartments
- Chatham University- Eden Hall
- Phipps Conservatory/Botanical Garden
- The Buncher Company
- Mascari Exxon Gas Station
- Allegheny County Police
- Pittsburgh Parking Authority Kirkwood
- Holy Family Institute Nazareth Prep
- Fox Apartments AR Building
- Hamilton Place Apartments AR Building
- UPMC McKeesport Hospital
- The Township of O'Hara

Potomac Green Condominium Units, EV
Charging Station Infrastructure, Ashburn, VA

U.S. Air Force Base, Fire Station Bagram,
Afghanistan

Clearway Energy Center - Uptown,
Chilled Water, Steam, Emergency Power,
Pittsburgh, PA, Pittsburgh, PA

UPMC Mercy Hospital, Emergency
Upgrades, Pittsburgh, PA

Jefferson Hospital, Jefferson Hills, PA

- Nurse Call Upgrades
- Phone System Upgrades

UPMC Magee-Womens Hospital,
Pittsburgh, PA

- Emergency Department
- Generator Plant
- Automatic Transfer Switch Upgrades
- Technology Distribution Room Upgrades
- Women's Care Birth Center
- PET CT Scanner
- Cooling Power Upgrades
- Green Zone, Purple Zone & Miller Wing
Chiller Plant Replacements
- O.R. Upgrades
- Fire Pump Upgrade/Replacement
- Internal Medicine Suite
- Pharmacy Relocation

UPMC Mercy Hospital, Pittsburgh, PA

- Vision & Rehabilitation Hospital
- Emergency Department, CT Scanner
- Helipad Relocation
- 4th Floor Lab and 8th Floor Renovation
- Clinical Diagnostic Unit
- CV ICU
- ICU/NICU Upgrades
- Technology Distribution Room Upgrades
- IR Room Renovations
- New MRI & Renovations

UPMC Presbyterian Hospital, Pittsburgh, PA

- South Tower Demolition
- EP Lab Renovation
- Hybrid OR
- Gamma Knife Replacement

West Virginia University, Morgantown, WV

- Oglebay Hall Renovation
- Evansdale Campus Master Plan

Allegheny General Hospital, Pittsburgh, PA

- Operating Room Upgrades,
- Infrastructure Coordination
- Linac Replacement

Allegheny Valley Hospital, Natrona Heights, PA

- Nurse Call Upgrades
- Anti-Ligature Upgrades

Forbes Hospital Nurse Call Upgrades,
Monroeville, PA

UPMC Presbyterian Hospital, Emergency
Generator Study, Pittsburgh, PA

UPMC Lemieux Sports Complex,
Pittsburgh, PA

Carnegie Mellon University, GSIA/Posner
Academic Backfill

University of Pittsburgh, Pittsburgh, PA

- Barco Law Library
- Falk School Renovation
- GSCC Innovation Renovations

Dennis Kopko, CPD
LEED® Accredited Professional
Principal | Plumbing & Fire Protection Design

Contact Information

☎ 412.262.1220

✉ dkopko@cjlengineering.com

PROFESSIONAL SUMMARY

Dennis is a Principal and Plumbing / Fire Protection Designer at CJL Engineering. He started with the firm in 2005 and has more than 30 years of experience as a plumbing and fire protection designer. Dennis is a Certified Plumbing Designer and serves as the Plumbing Department Supervisor. He has been involved in numerous projects for hospitals, primary and secondary education, colleges and universities, performing arts facilities, manufacturing facilities and office buildings. Dennis also has considerable experience in computer systems and operations.

REPRESENTATIVE PROJECTS

David L. Lawrence Convention Center,
Pittsburgh, PA

- Energy Analysis and Case Study, LEED Platinum EBOM
- Hot Water Recirculating Sys. Upgrade
- Kitchen Biodigester Study
- Expanded Hot Water System Upgrade
- MDF/IDF Room Upgrades

Upper St. Clair School District, Upper St. Clair, PA

- High School Natatorium Addition
- Boyce Middle School, LEED® Silver
- Ft. Couch Middle School, LEED® Silver

West Allegheny School District,
Imperial, PA

- High School Natatorium Addition
- High School Science Wing Renovation
- Wilson Elementary Renovation

Facebook CIC Building, Fit-out, Schenley,
Pittsburgh, PA

Facebook FAIR, Robotic Infrastructure
Upgrade, Pittsburgh, PA

Facebook Oculus, Schenley Place,
Pittsburgh, PA

Facebook Portal, Fit-out, Pittsburgh, PA

Facebook Reality Labs, Pittsburgh, PA,
multiple projects

Google Bakery Square 2.0 Offices, LEED®
Gold, Pittsburgh, PA

First National Bank 26- Story High Rise,
Pittsburgh, PA

Wittenberg University, Health, Wellness &
Athletics Complex, Springfield, OH

Carnegie Mellon University, Pittsburgh, PA

- Mellon Institute: 7th/8th Floor FP
- Mellon Institute: Noonan Lab
- Mellon Institute: Guo Lab
- Mellon Institute: Glass Washing Facility
- Robotics Center
- Scobell Hall
- Hamburg Hall Fire Protection Study

Duquesne University, Pittsburgh, PA

- Des Places Hall, LEED® Gold
- Library Plaza and Locker Rooms
- Mellon Hall of Science, Fire Protection

Washington & Jefferson College Dormitory,
Washington, PA

Slippery Rock University, Various Projects,
Slippery Rock, PA

Lock Haven University Durrwachter Alumni
Center, Lock Haven, PA

Fairmont Hotel, 3 PNC Plaza, Feasibility
Study, Pittsburgh, PA

PNC Banks, Various Nationwide Projects

Phipps Conservatory, Oakland, PA

One on Centre, Residential High Rise,
Pittsburgh, PA

Core Space, oLiv Highlands, Residential
High Rise, State College, PA

Ollie at Baumhaus, Mixed Use, High-Rise,
Pittsburgh, PA

EDUCATION

1989 - Associates Degree
Dean Institute of Technology

SPECIALIZATIONS

Plumbing Design
Fire Protection Design
Energy Analysis
Plumbing Code Review
Fire Protection Code Review

REGISTERED PROFESSIONAL ENGINEER

Certified Plumbing Designer, ASPE

MEMBERSHIPS/ACTIVITIES

American Society of Plumbing Engineers
National Fire Protection Association

Alyssa R. Rouser, P.E.
Associate Principal | Civil Engineer

Contact Information

814.536.1651

 arouser@cjlengineering.com

PROFESSIONAL SUMMARY

Alyssa Rouser is the manager of the Civil Department for CJL Engineering, starting with the firm in 2023. Her 11 years of experience includes a wide variety of Civil Engineering and Surveying disciplines. Alyssa's responsibilities include scheduling and coordination of personnel, client liaison work, project development, design and quality control. Her technical background includes water systems, sanitary sewer systems, stormwater management, site development, roadways, paving, drainage, municipal permitting, PennDOT permitting and DEP permitting. She performs feasibility studies, cost analysis, total project cost estimates and evaluation of funding alternatives.

REPRESENTATIVE PROJECTS

Duquesne Light Company, EV Charging Stations, Pittsburgh Parking Authority Kirkwood, Pittsburgh, PA

City of Johnstown, Streetscape Engineering and Design, Johnstown, PA (In-Design)

PennDOT I-80 Welcome Center/Rest Stop, Mercy County, PA

1st Summit Bank, Park Lot Expansion, Ebensburg, PA (In-Design)

Wyth County, Appalachian Expo (APEX) Center, Arena Floor Design, Wytheville, VA (In-Construction)

Punxsutawney Hospital, Site Design, Punxsutawney PA (In-Design)

Altoona Area School District, New High School and Renovations, Altoona, PA*

Altoona Area School District, Logan Elementary Softball Fields, Altoona, PA*

Altoona Area School District, Mansion Park Tennis Courts, Altoona, PA*

DuBois Area School District, Oklahoma Elementary School Additions and Renovations, DuBois, PA*

DuBois Area School District, Wasson Elementary School Additions and Renovations, DuBois, PA*

City of Twinsburg, Baseball Field, Twinsburg, OH*

University of Pittsburgh, Reachland Connectivity Project Phase 1, Johnstown, PA*

Mount Aloysius College, Soccer Field, Cresson, PA*

Mount Aloysius College, Ihmsen Hall Renovations, Cresson, PA*

Roxbury Park Baseball Field Upgrades, Johnstown, PA*

Beckman Drive Townhouses, Altoona, PA*

All-Nations Bible Translation Multi Use Building Addition, State College, PA*

Roxbury Place, Johnstown, PA*

Duncansville Municipal Authority, Beard Lane Waterline Improvements, Duncansville, PA*

Penns Valley Area School District, Sanitary Sewer Force Main, Spring Mills, PA*

New Florence Borough, New Florence, PA
• Vine Street Stormwater Improvements*
• New Florence Borough, 9th Street Stormwater Improvements*

City of Altoona, Altoona, PA
• Whittier Avenue Storm Sewer Upgrades*
• 7th Ave. and 9th Street Storm Sewer Upgrades*

Curwensville Borough, Irvin Park Road Paving, Curwensville, PA*

**Experience from previous employer*

EDUCATION

2012 - Bachelor of Science
Civil Engineering
University of Pittsburgh

SPECIALIZATIONS

Civil Engineering
Project Management
Permitting
Feasibility Studies
Stormwater Management

REGISTERED PROFESSIONAL ENGINEER

Pennsylvania

Timothy D. Nicholson, P.E.
Associate Principal | Structural Engineer

Contact Information

814.536.1651

tnicholson@cjlengineering.com

PROFESSIONAL SUMMARY

Tim Nicholson is an Associate Principal and Structural Engineer of CJL Engineering. He started with the firm in 2013 and has over 20 years of experience in the field of architectural engineering. Tim's experience includes a wide variety of building types and uses. He is responsible for the entire structural design process from schematic design, and construction documents, to construction administration. Tim also is experienced with creating three-dimensional building information models (BIM) using the Autodesk Revit® software. His technical background includes the structural engineering and the design of masonry, concrete, steel, wood, and a variety of lateral force resisting systems.

REPRESENTATIVE PROJECTS

Capitol Complex Steam Tunnel Repairs
(DGS 948-90 Ph. 2), Harrisburg, PA

SCI Waymart Renovate Steam System
(DGS 1578-0011 Ph. 1), Waymart, PA

SCI Smithfield, EDBC Replacement
of High Voltage and Generators, (DGS
C-1573-0011 Ph 1), Huntingdon, PA

State Correctional Institution - Forest
Replace HTHW Piping, (DGS 377-3, Ph. II)
Jenks Township, PA

Hiller Readiness Center Rehabilitation,
(DGS 963-64 Ph. 1), Fayette County, PA

Mercer County I-79, (DGS A251-685)
Roadside Rest Site #17 & #18, Mercer
County, PA

University of Pittsburgh, Pittsburgh, PA
• Campus Steam Tunnel & Vault Upgrade
• Schenley Steam Lines and Bridge
Replacement
• McGowan Center HVAC Upgrades

Pennsylvania Western University, Clarion, PA
• Campus Steam Vault Beam Shoring
• Harvey Steam Tunnel Rebuild
• Ralston Hall Steam Line Replacement
• Given Hall New Steam Vault
• Steam Line Replacement from
Manholes 9 & 11A

Grove City College, Grove City, PA
• PLC Recreation Pool Upgrade
• Competition Pool HVAC Upgrade
• Central Boiler Plant Upgrade

Elliott Group, Jeannette, PA

- Building 48, Office Renovation
- Gauge and Instrument Lab
- Research and Development Facility
- Roof Structure Evaluation

Dale Oxygen, Addition and Renovation,
Johnstown, PA

Westminster Canterbury at Shenandoah
Valley, Senior Living Community
Expansion, Winchester, VA

WRC Assisted Living Center, Clarion, PA
National Cancer Institute - Fort Detrick,
Chiller Plant Master Plan and Expansion,
Frederick, MD

Meadville Medical Center, Vernon Place
Medical Office Building, Meadville, PA

University of Pittsburgh, Bradford, PA
• Fisher Hall Chiller Replacement
• Student Union RTU-4 Replacement

St. Vincent College, Dunlap Family Athletic
and Recreation Center, Latrobe, PA

Westmoreland County Community
College, Youngwood PA

- Science Building Stage Rigging
Structural Assessment
- Student Achievement Center Weight
Room Floor Load Rating

Canon McMillan School District, High
School HVAC Upgrades, Canonsburg, PA

Erie Public Schools, High School
Renovations, Erie, PA

EDUCATION

2001 - Master of Engineering
Civil Engineering
The Pennsylvania State University

2000 - Bachelor of Science
Civil Engineering
The Pennsylvania State University

SPECIALIZATION

Structural Engineering

Building Evaluation

Structural Design REVIT®

- Masonry, Concrete
- Wood, Steel

REGISTERED PROFESSIONAL ENGINEER

Pennsylvania, Ohio, Maryland, Indiana,
Virginia, West Virginia

Ryan Maxwell, P.E.
LEED® Accredited Professional
Associate Principal | Mechanical Engineer

Contact Information

412.262.1220

rmaxwell@cjlengineering.com

PROFESSIONAL SUMMARY

Ryan Maxwell is an Associate Principal and Mechanical Engineer for CJL Engineering. He stated with the firm in 2015 and has over 15 years of experience. Ryan is experienced in designing and engineering HVAC, Plumbing, and Fire Protection systems for a wide variety of buildings. He has been involved in numerous building projects including museums, university classroom and faculty buildings, libraries, K-12 schools, hotels, country clubs, high-end residences, multi-unit residences, athletic facilities, performing arts centers, hospitals, medical office buildings, server rooms, science labs, churches, military facilities, prisons, mixed-use, and commercial office buildings.

REPRESENTATIVE PROJECTS

Facebook CIC Building, Fit-out, Schenley, Pittsburgh, PA

Facebook FAIR, Robotic Infrastructure Upgrade, Pittsburgh, PA

Facebook Oculus, Schenley Place, Pittsburgh, PA

Facebook Portal, Fit-out, Pittsburgh, PA

Facebook Reality Labs, Pittsburgh, PA, multiple projects

Facebook Offices, Pittsburgh, PA,

Google Expansion: 1.0, Bakery Square, Pittsburgh, PA

- Bakery Tenant Fitout 5th & 6th Fl. Toilet Rms
- Bakery Tenant Fitout 5th & 6th Fl. Bridge
- Bakery Tenant Fitout 5th & 6th Fl.
- Fire Alarm Upgrades
- PNC Fall Hill Branch, Chiller Replacement, Fredericksburg, VA

Google Bakery Square 2.0 Offices, LEED® Gold, Pittsburgh, PA

CBRE Global Investors, Liberty Center, 11th Floor Tenant Fit-Out, Pittsburgh, PA

Google Pittsburgh Bakery Square 2.0, Pittsburgh, PA

- Tenant Fitout 5th Fl. Porch & 6th Fl. SE, SW Bridge Roof
- Plumbing Revisions

Liberty Center, Pittsburgh, PA

- 14th Floor Core Modifications
- 6th Floor White Space Box

Liberty Tunnels - Ventilation and Fire Protection System Upgrades

Numerous PNC Branch Upgrades and New Construction

EQT Building 26th Floor MEP Renovations, Pittsburgh, PA

West Penn Cardiology, Pittsburgh, PA

Wexford Medical Mall, Wexford, PA

West Penn Neonatal, Pittsburgh, PA

Allegheny General Hospital Master Planning, Pittsburgh, PA

Carnegie Mellon University, Pittsburgh, PA

- Hamerschlag Hall B Level Reno
- Mellon Institute - MI Lab 243
- Warner Hall MEP AHU-1 Airflow Investigation
- Warner Hall MEP Infrastructure Upgrades
- Warner Hall MEP Infrastructure Upgrades

Grove City College, Grove City, PA

California University of Pennsylvania, Master Plan, California, PA

Community College of Allegheny County, Pittsburgh, PA

Bethel Park School District, High School Chiller Plant Study, Bethel Park, PA

West Jefferson Hills School District, Energy Project, Jefferson Hills, PA

North Catholic High School, 2nd Fl. Fit-Out, Cranberry Township, PA

Saint Killian's Parish School, Cranberry, PA

EDUCATION

Bachelor of Science
Architectural Engineering
Pennsylvania State University

SPECIALIZATIONS

Mechanical Engineering
HVAC Design
Facility Analysis
Master Planning
On-site Troubleshooting
LEED® and Sustainable Design

REGISTERED PROFESSIONAL ENGINEER

Pennsylvania, New York, Maryland
Delaware

MEMBERSHIPS/ACTIVITIES

ASHRAE

Paul A. Walker, AIA



Principal-in-Charge | Design Architect

Paul has 42 years of experience as an architect and received his registration in 1986. He became a business owner in October 2000 when he created Paradigm Architecture. Paul's design responsibilities include programming, development of construction documents, project management, and construction administration. Among the variety of projects he has designed and supervised are: hospitality, medical, commercial, corporate, educational, governmental, industrial, institutional, recreational, religious, and residential. The scope of projects ranges from a few thousand dollars to over 78 million dollars.

Experience

The General Services Administration for the
U. S. Department of Agriculture Office Building
Morgantown, West Virginia

Marina Tower Office Building
Morgantown, West Virginia

Jackson Kelly Office Building
Morgantown, West Virginia

U. S. Department of Energy
Office of Legacy Management Records
Morgantown, West Virginia

Canaan Valley Resort State Park Renovations & Additions
Davis, West Virginia

Cacapon Resort State Park Lodge Expansion
Berkeley Springs, West Virginia

One Waterfront Place Space Planning
Morgantown, West Virginia

Monongalia General Hospital - Multiple Renovations
Hazel Ruby McQuain Family Birth Center
Major Lab Renovation
Morgantown, West Virginia

Morgantown Marriott at Waterfront Place Renovations
Morgantown, West Virginia

National Oceanic and Atmospheric Administration Cyber Security
Operations Center Expansion
Fairmont, West Virginia

Charleston Federal Center Renovations*
Charleston, West Virginia

*Key involvement in project with firm(s) other than Paradigm Architecture, Inc.

Education

Bachelor of Architecture
University of Tennessee
Knoxville, 1982

Affiliations

American Institute of Architects
NCARB #93246

Registrations

West Virginia #2626
Alabama #5398
Arizona #54615
Arkansas 10351
Florida #AR95045
Georgia #RA015225
Maryland #17612
Massachusetts #31979
Mississippi #4652
Missouri #2014015049
North Carolina #4910
Ohio #ARC.2118431
Oregon #ARI-12853
Pennsylvania #RA405117
South Carolina #8238
Tennessee #104766
Texas #24245
Virginia #401015994



EXPERIENCE

EV CHARGING STATIONS EXPERIENCE



Adelphoi Village, Dual Charging Station, Latrobe, PA

Akron Children's Hospital, Dual Charging Station, Boardman, OH

Bill McCandless Truck and Auto Repair Shop, Three Level 3, Six Level 2, and Fourteen Level 1 Charging Stations, Mercer, PA

Duquesne Light Company, City of Pittsburgh EV Charging Stations, Pittsburgh, PA

- The Borough of Swissvale
- Sisters of St. Joseph
- Bakery Square Garage
- Borough Wilkesburg
- Borough of Bellevue
- Bryn Mawr Apartments
- The Buncher Company
- Mascari Exxon Gas Station
- Allegheny County Police
- The Township of O'Hara
- Pittsburgh Parking Authority Kirkwood
- Phipps Conservatory/Botanical Garden
- Holy Family Institute Nazareth Prep
- Fox Apartments AR Building
- Hamilton Place Apartments AR Building
- Highland Electric Fleets McKees Rock
- UPMC McKeesport Hospital
- Chatham University- Eden Hall
- West Mifflin Borough Municipal Building
- West Mifflin Sanitary Sewer Authority

FNB Tower (Part of the overall project), Pittsburgh, PA

Frederick County, Public Safety Training Facility, Frederick, MD

James Creek Marina, Washington, DC

Lovettsville Square South, Frederick, MD

Marshall University School of Business (Part of the overall project), Huntington, WV

North Knoxville Medical Center, Dual Charging Station, Knoxville, TN

Pennsylvania Departments of General Services, Human Services and Office of Administration, (Part of the overall project), Harrisburg, PA

Potomac Green Condominium Units, EVC Station Infrastructure, Ashburn, VA

PNC Moon Township Branch Bank, Pittsburgh, PA

PNC St. Clair Branch Bank, Pittsburgh, PA

Pittsburgh Lower Hills Garage, Pittsburgh, PA

PNC Tower Charging Stations, Pittsburgh, PA

2 PNC Tower Charging Stations, Pittsburgh, PA

3 PNC Tower Charging Stations, Pittsburgh, PA

Renn Kirby Mitsubishi Dealership, Level 2 Charging Stations, Frederick, MD

UPMC Mercy Pavilion (Part of the overall project), Pittsburgh, PA

UPMC East, Monroeville, PA

UPMC Presbyterian Bed Tower (Part of the overall project - Level 2 Charging Stations), Pittsburgh, PA

Duquesne Light Co., EV Charging Stations

City of Pittsburgh, 208+ Stations, Pittsburgh, PA



THE PROJECT

CJL Engineering is provided electrical and civil design services for the Duquesne Light Co., EV Charging stations. The following locations are either in design, in construction or have been completed: West Mifflin Borough Municipal Building, West Mifflin Sanitary Sewer Authority, The Borough of Swissvale, Highland Electric Fleets McKees Rock, Sisters of St. Joseph, Bakery Square Garage, Borough Wilksburg, Borough of Bellevue, Bryn Mawr Apartments, Phipps Conservatory/Botanical Garden, The Buncher Company, Mascari Exxon Gas Station, Allegheny County Police, Pittsburgh Parking Authority Kirkwood, Pittsburgh Parking Authority 2nd Ave., Holy Family Institute Nazareth Prep, Fox Apartments AR Building, and Hamilton Place Apartments AR Building.

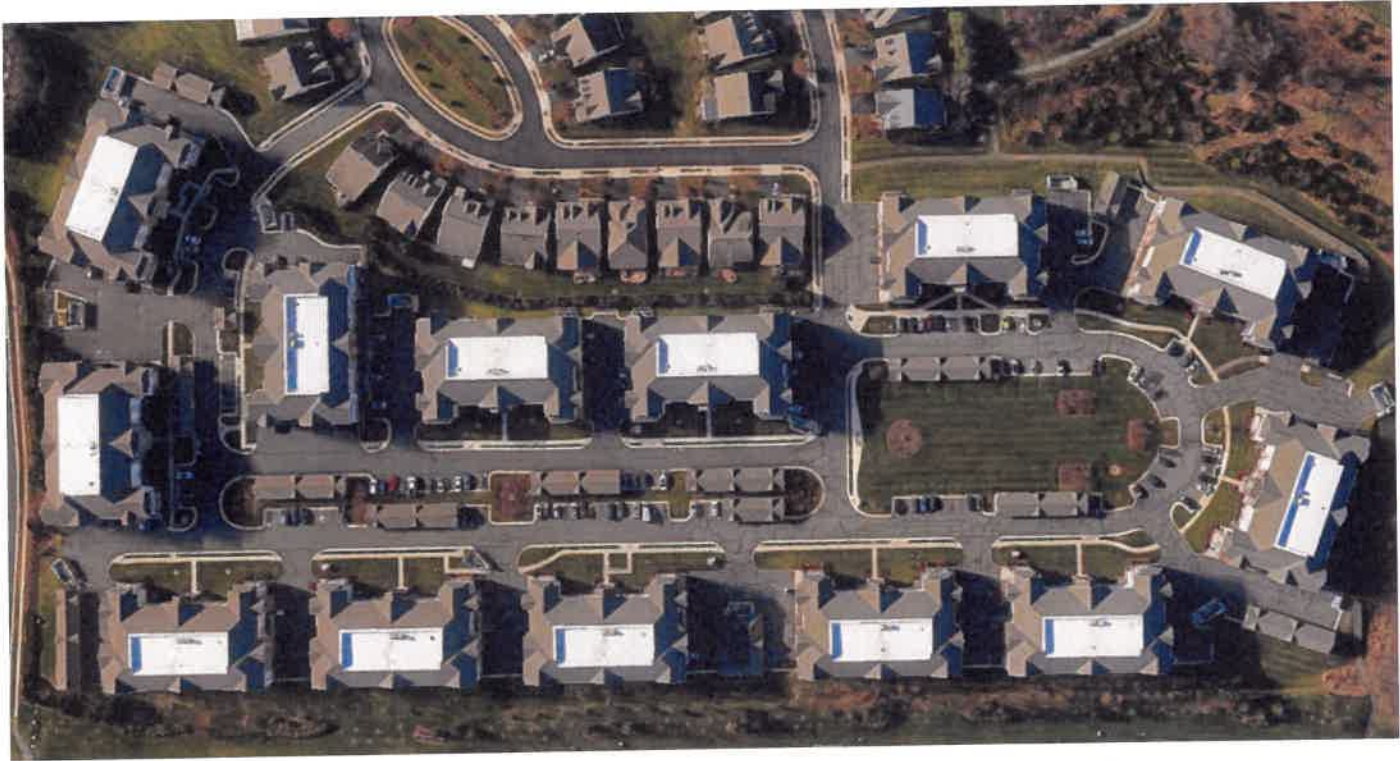
CJL DESIGN SOLUTIONS

- Perform an initial site visit to review project requirements with owner and to determine location of service connection, electrical equipment and charging stations.
- Develop preliminary electrical one line diagram and site plan depicting all distribution equipment and charging stations.
- Develop a prelim SOW narrative describing the electrical installation requirements.
- Review documents with owner and DLCO
- Perform site visit to review project and acquire DLCO's existing site drawings for the above referenced site.
- Coordinate and determine final location for EV equipment and charging stations.
- Determine City of Pittsburgh or Local AHJ zoning permit and site approval requirements for project site.
- Determine if installation of EV station will require additional planning reports such as Erosion & Sedimentation Control and Stormwater management plan.
- Submit site plan to the City of Pittsburgh or local AHJ for review and approval.
- Review documents with the owner and DLCO.



Potomac Green Condominium Units

325 EV Charging Station Infrastructure, Ashburn, VA



THE PROJECT

CJL Engineering is provided electrical design services for the Potomac Green Condominium Units EV Charging Station Infrastructure. The Potomac Green Condominium community is comprised of 13 nearly identical four-story buildings. Each building has 25 units, 16 garages and 9 covered parking spaces and an additional parking space outside each garage.

The PGCUOA wants to provide the infrastructure for each resident to install an electric vehicle charging station (20A, 240V circuit) for a total of 325 charging stations.

CJL DESIGN SOLUTIONS

- Full coordination is being conducted with Dominion Energy to facilitate the service upgrades required to accommodate the additional electrical capacity for the EVC infrastructure.
- Perform a site visit during design to document existing electrical equipment infrastructure and determine field conditions as necessary to develop the electrical design.
- Determine final locations for all electrical equipment for the EVC electrical system.
- Perform short circuit analysis to determine AIC ratings of all new electrical equipment.
- Perform voltage drop calculations on all new electrical feeders.
- Develop full electrical engineering documents detailing all the new electrical equipment required for the project. Documents suitable for obtaining an electrical permit and for obtaining electrical contractor bids for construction.
- Utilized a professional estimating firm, to provide a cost estimate for the EVC electrical system.
- Assist the owner in determining if existing rebate opportunities for the proposed scope of work are available.
- Design all conduits, transformer pads, excavation required by the utility co.
- Design of the power distribution system from the power company transformers, including CIT cabinets, meters, panelboards, feeders, excavation.
- One 20A 240V branch circuit from a designated panelboard to each garage and carport space, for a total of 325 locations.

UPMC East, LEED® Silver Hospital Complex, Monroeville, PA



PROJECT INFORMATION:

- 300,000 SF hospital with 156 beds
- 149,000 SF, 400-vehicle parking garage
- \$190 million project

THE PROJECT

UPMC East was Pittsburgh's first new hospital to achieve LEED® Silver Certification. The hospital includes an emergency department, surgery, cardiac catheterization laboratories, imaging rooms, cancer center, endoscopy units, and pharmacy.

CJL DESIGN SOLUTIONS

- Three high-pressure 9,900 MBH steam boilers for sterilizers, humidifiers, converters and instantaneous hot water heaters
- Three 750-ton centrifugal chillers and three 750-ton cooling towers for N+1 redundancy
- Complete variable air volume HVAC system with hot water reheat and perimeter radiant panels plus a DDC control system
- Two 2-megawatt emergency generators
- Snow melting system for helipad and the connecting sidewalk
- Primary electrical distribution system - 4,160 volts
- Fire protection and alarm systems
- Communication, paging, monitoring and nurse call systems
- Interior and exterior lighting design
- Plumbing and medical gas distribution and evacuation systems
- Testing, adjusting and balancing of operational systems
- **Numerous EV Charging Stations located in the Parking Garage**
- ER room revisions
- Full-time on-site field engineer



FNB Financial Center, New Headquarters

Lower Hill District, Pittsburgh, PA



THE PROJECT

CJL designed the mechanical and electrical systems for the new 24-story, \$200 million FNB Financial Center. The sustainable mixed-use project will contain over 387,000 SF of Class A office space, over 20,000 SF of multi-level retail space and a two-story parking structure. The green space adjacent to FNB Financial Center also will be named The Plaza at FNB Financial Center, where the Company plans to host various community events. Upon opening, FNB will occupy more than 160,000 SF of office space with additional options to expand to accommodate future growth, and nearly 2,000 SF of street level retail space which will be occupied by a state-of-the-art FNB technology branch.

CJL DESIGN SOLUTIONS

- CJL designed all electrical power distribution and fire alarm systems for the building.
- Design included a redundant Main Tie Main Switchgear configuration to maximize up time during utility and building maintenance.
- Distribution throughout the building was achieved in an efficient manner utilizing bus duct to allow for a compact electrical footprint while offering flexibility and expansion for future tenants.
- An 800kW generator provides code required emergency power to various life safety systems within the building.
- Wireless lighting control system provided throughout to expedite installation and provide future flexibility.
- Voice Notification fire alarm was provided throughout the building and interfaced with a building wide Emergency Responder Radio Communication System for enhanced safety for occupants and first responders.
- Electrical design for numerous EV Charging Stations



UPMC Presbyterian Tower

Pittsburgh, PA



PROJECT INFORMATION:

Size: 900,000 SF - 636 private rooms

Size: 158,000 SF - Parking Structure

Completion Date: Tentative 2026

THE PROJECT

The UPMC Presbyterian Tower Expansion brings a technologically advanced, soothing and expansive oasis to an urban setting where every space, amenity, caregiver and treatment is patient-centered. The 17-story inpatient tower will house 636 private rooms, 12 operating rooms and a total of 450 adjacent parking spaces.

The project broke ground in June 2022. CJL Engineering is providing mechanical, electrical, plumbing and fire protection engineering and design services for this new specialty hospital.

CJL DESIGN SOLUTIONS

As part of the overall project team, CJL Engineering is developing mechanical and electrical designs for:

- Surgical suites and operating rooms
- Patient rooms
- Radiology and imaging labs
- Normal, emergency, and UPS power
- HVAC requirements for a number of occupancies
- Chilled water and steam systems
- Interior and exterior lighting systems
- Ventilation, exhaust and filtration systems
- Fire suppression and alarm systems
- Visitor and patient transports
- **Level 2 Electric vehicle charging stations**
- The design of the hospital will include LEED BD+C certification.



REFERENCES



Duquesne Light EVC Projects Reference:

Tim Schultheis II
Electrical Engineer
Schultheis Electric
724.537.5157 ext. 102
timjs@tsbinc.net



PNC EVC Projects Reference:

Mark Sweeney
Vice President, MEP Engineering
The PNC Financial Services Group
412.803.7711
mark.Sweeney@pnc.com



FNB Tower and Lower Hills Garage EVC Project Reference:

Matt Corace
Development Manager
BPGS Construction
302.383.9005
Mcorace@bpgsconstruction.com





GOALS AND OBJECTIVES

ANTICIPATED CONCEPTS & METHODS OF APPROACH

Goal/Objective 1: Provide a complete design including all engineering, including mechanical, electrical, plumbing and architectural disciplines to prepare construction bid documents for West Virginia State Purchasing. Key design elements include utilizing energy efficient, economically and maintenance friendly equipment.

This project is very similar to our Duquesne Light, City of Pittsburgh EV Charging Stations. Our company has become familiar with many different Charging Models. We perform the following process for each of the projects:

- Perform an initial site visit to review project requirements with owner and to determine location of service connection, electrical equipment and charging stations.
- Develop preliminary electrical one line diagram and site plan depicting all distribution equipment and charging stations.
- Develop a prelim SOW narrative describing the electrical installation requirements.
- Review documents with owner and DLCO
- Perform site visit to review project and acquire DLCO's existing site drawings for the above referenced site.
- Coordinate and determine final location for EV equipment and charging stations.
- Determine City of Pittsburgh or Local AHJ zoning permit and site approval requirements for project site.
- Determine if installation of EV station will require additional planning reports such as Erosion & Sedimentation Control and Stormwater management plan.
- Submit site plan to the City of Pittsburgh or local AHJ for review and approval.
- Review documents with the owner and DLCO.

When it comes to determining which Charging models to select we always keep in mind energy efficiency, economically and maintenance friendly equipment. Throughout our project with the City of Pittsburgh we designed the electrical systems for the following Charger Models:

- ChargePoint CT4021 (Dual)
- ChargePoint CP6021 (Dual)
- ChargePoint CPE250 (Single)
- ChargePoint CPF50 Wall-Mount (Single)
- ChargePoint Express CPE250 (Single)
- Delta DC Wallbox EVDE25 (Single)
- InCharge ICE-30 DCFC (Single - 30kW)
- ABB Terra 124 CC (Dual)
- Tellus Power Green 30kW TP-EVPD-30kW
- OpConnect HCS-50 (Single Wall-mount on Pedestal)
- OpConnect ClipperCreek HCS-60 (Dual)
- OpConnect Enphase HCS-40 Wall-Mount (Single)
- OpConnect LiteOn IC3 (Single)
- FLO CoRe+ Charger (Dual)
- FLO CoRe+ Charger (Single)
- FLO CoRe+ Max Charger (Dual)

Goal/Objective 2: Designer shall be responsible for researching and investigating the location of existing utilities, and to provide drawings and specifications of any and all aspects of project as needed and directed by the owner and/or state agency, utility company or other approval authority for the various project locations across, West Virginia.

CJL Engineering is very familiar with the local/regional markets of West Virginia. CJL has been providing professional design services in the state of West Virginia for over 20 years and have had a local presence in Morgantown since 2019. CJL had a number of clients and projects in the Morgantown and surrounding areas and opening a new office enabled us to serve them better with staff proximity to the job sites and generally better accessibility.

Goal/Objective 3: Drawings and specifications are to be submitted at 35%, 65%, 95% and 100%, cost estimates are to be revised and submitted with each submittal at 35%, 65%, 95% and 100%.

We understand and will provide you with drawings and specifications submitted at 35%, 65%, 95% and 100%. CJL will utilized a professional estimating firm, to provide a cost estimates as well.

Goal/Objective 3: Provide construction bid services and administrative services to the Owner.

Matthew Corathers, West Virginia native, will be our dedicated on-site construction administration personnel for this projects. He is very familiar with this process because he has handled the CA Services for numerous West Virginia projects. During the Construction Administration Phase of the project, CJL will provide the following services:

1. Review and respond to bidders' questions, RFIs; issue required clarifications, and comment on MEP/FP bids.
2. Review of shop drawing submissions.
3. Observation of critical alarm and smoke tests, emergency generator tests.
4. Assist in the review and evaluation of mechanical and electrical change orders.
5. Attend project construction meetings during active MEP/FP construction, and perform periodic site observations including the preparation of an ongoing punch list of mechanical and electrical deficiencies as construction progresses through completion.
6. Preparation of final punch list upon substantial completion of services, prior to occupancy, including project sign-off after the Construction Manager has certified that all corrective services has been successfully completed. We will conduct as many visits as required for site observation and punch lists.
7. Review of MEP/FP installation testing reports.



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