February 19, 2019 - February 18, 2024
GSA Contract Catalog

Authorized Federal Supply Schedule Pricelist
Multiple Award Schedule

MAS SINS: 541690, 541690E, OLM
(LEGACY SINS: 871 202 // 871 206 // 871 207 // 871 211)

Matern Professional Engineering, Inc.
Updated 10-01-2020

POINTS OF CONTACT:
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W www.matern.net | T 407-740-5020 | E Federal@matern.net

Products and ordering information in this Authorized Federal Supply Schedule Pricelist are also available on the GSA Advantage! System (http://www.gsaadvantage.gov)
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THE MATERN DIFFERENCE

CULTURE — Help the community, encourage growth, embrace diversity, respect others, be receptive to the opinions of others, communicate needs, share ideas, make time for family, commit to excellence — these are the guiding principles and values embraced by our employees.

“CAN DO” FIRM — As with anything in life, things can go awry during construction. Our firm’s culture supports strong relationships and teamwork to deliver a successful project, whether during design or construction.

LEAD WITH INTEGRITY & ACCOUNTABILITY — Deciding to do the right thing seems like a simple rule, but it often gets lost in the daily grind. Honesty and responsibility are a daily requirement at this firm and two of our core values.

STAFF CERTIFICATIONS

- Certified Energy Managers (CEM)
- Energy Management Professionals (EMP)
- LEED Accredited Professionals
- Commissioning Authorities (CXA)
- Commissioning Process Management Professionals (CPMP)
- Certified Building Commissioning Professionals (CBCP)
- Registered Communications Distribution Designers (RCDD)

LICENSES & LOCATIONS

NAICS CODES

- 541330: Engineering Services
- 541690: Other Scientific and Technical Consulting Services
- 541990: All Other Professional, Scientific, and Technical Services
**UNITED STATES DEPARTMENT OF THE NAVY**

- US Naval Weapons Station at Goose Creek, Charleston, SC
  - 24,477SF Consolidated Navy Brig 80-bed Addition and Multi-purpose Room
  - 7,502SF Industrial Shop Training Facility

**UNITED STATES DEPARTMENT OF THE ARMY**

- Fort Bragg Army Base, Fayetteville, NC
  - Randall David Shugart K-8 School - EAp1 LEED V2.2 Fundamental Commissioning
  - Communications-Electronics Research, Development and Engineering Center (CERDEC)
    - Innovative Cooling Equipment (ICE) R&D project for DOD ECUs

**UNITED STATES DEPARTMENT OF THE NATIONAL GUARD**

- Mark Lance Armory Renovation Commissioning
- Mark Lance Armory Renovation Fire Protection Design
- Camp Blanding Joint Training Center BOD Armory Enhanced Commissioning
- Camp Blanding Bullard Armory Storage Addition and Reno to Existing Armory
- Robert F. Ensslin Armory Renovations Fire Protection
- Camp Blanding Joint Training Center DBK-DMA Armory Commissioning

**UNITED STATES POSTAL SERVICE**

- IDIQ for Central Florida Post Offices - Dixie Village Post Office Facility Assessment
- Longwood Post Office New Construction
- Merritt Island Post Office New Construction
- Silver Star Post Office New Construction
- Lake Mary Post Office New Construction

**ADDITIONAL EXPERIENCE**

**FEDERAL BUREAU OF PRISONS**

- Coleman Correctional Facility, Phase II, Coleman, FL
  - Food Service Warehouse Addition
  - Landscaping/Maintenance Building Addition
  - Improvements to Master Sewage Pumping Station

**VETERANS ADMINISTRATION**

- West Palm Beach Veterans Administration Medical Center
  - Central Energy Plant Upgrades

**FEDERAL AVIATION ADMINISTRATION, TRANSPORTATION SECURITY ADMINISTRATION, CUSTOMS BORDER PATROL**

- Orlando International Airport Security Improvements
- Building 830 Remote Baggage Facility Screening
- Design Criteria Package In-Line Baggage
- Airside 1 Rehabilitation
- Airside 3 Rehabilitation
- Airside 4 International Passenger Terminal Renovation
- South Terminal Complex
INTEGRATED LOGISTICS SUPPORT

Services include providing advice and assistance to businesses and other organizations on scientific and technical issues (except environmental). Typical associated tasks include, but are not limited to ergonomic/human performance analysis, feasibility analysis, logistics planning, requirements determination, policy standards/procedures development, conducting research studies, long-term reliability and maintainability, training, consulting, conduct acceptance, functional and post acceptance testing, testing, integration of the payload for flight Customer Agency, support provided during launch, orbital maneuvering and satellite separation from the spacecraft.

Example: The full range of life cycle logistics support for the navigation satellite will be identified and designed in this stage including training, operation and maintenance requirements, and replacement procedures. NOTE: Services under this NAICS can not include architect-engineer services as defined in the Brooks Act and FAR Part 2 or construction services as defined in the Federal Acquisition Regulation Part 36 and Part 2.

ENERGY CONSULTING SERVICES

Includes services related to energy management to include renewable energy studies and projects, energy services related training, resource efficiency management (REM) services, water conservation, building commissioning, re-commissioning and retro-commissioning, energy audits, energy consumption metering services, testing and evaluation of networked energy management systems, energy security, LEED, Green Globes, Energy Star, Energy Savings Performance Contracts (ESPC), Power Purchase Agreements, consulting on carbon emissions trading programs, renewable energy credits/certificates, greenhouse gas measurement and management, high performance sustainable buildings and sustainable design principles, resilience of Federal infrastructure and operations, energy services consulting etc.
CONTRACTED SPECIAL ITEM NUMBERS

OLM ORDER-LEVEL MATERIALS

OLMs are supplies and/or services acquired in direct support of an individual task or delivery order placed against a Schedule contract or BPA. OLM pricing is not established at the Schedule contract or BPA level, but at the order level. Since OLMs are identified and acquired at the order level, the ordering contracting officer (OCO) is responsible for making a fair and reasonable price determination for all OLMs. OLMs are procured under a special ordering procedure that simplifies the process for acquiring supplies and services necessary to support individual task or delivery orders placed against a Schedule contract or BPA. Using this new procedure, ancillary supplies and services not known at the time of the Schedule award may be included and priced at the order level.

OLM SIN-Level Requirements/Ordering Instructions:

OLMs are:

- Purchased under the authority of the FSS Program
- Unknown until an order is placed
- Defined and priced at the ordering activity level in accordance with GSAR clause 552.238-115 Special Ordering Procedures for the Acquisition of Order-Level Materials. (Price analysis for OLMs is not conducted when awarding the FSS contract or FSS BPA; therefore, GSAR 538.270 and 538.271 do not apply to OLMs)
- Only authorized for use in direct support of another awarded SIN.
- Only authorized for inclusion at the order level under a Time-and-Materials (T&M) or Labor-Hour (LH) Contract Line Item Number (CLIN)
- Subject to a Not To Exceed (NTE) ceiling price

OLMs are not:

- “Open Market Items.”
- Items awarded under ancillary supplies/services or other direct cost (ODC) SINs (these items are defined, priced, and awarded at the FSS contract level)

OLM Pricing:

- Prices for items provided under the Order-Level Materials SIN must be inclusive of the Industrial Funding Fee (IFF).
- The value of OLMs in a task or delivery order, or the cumulative value of OLMs in orders against an FSS BPA awarded under an FSS contract, cannot exceed 33.33%.

NOTE: When used in conjunction with a Cooperative Purchasing eligible SIN, this SIN is Cooperative Purchasing Eligible.
LEGACY SPECIAL ITEM NUMBERS

871 202  ENERGY MANAGEMENT PLANNING AND STRATEGIES

A four-phase comprehensive energy management solution consisting of all four phases of an energy project and could pertain to a variety of energy projects that include, but are not limited to, renewable energy, sustainable energy, and energy efficient buildings certification programs such as LEED. 1. Consulting/auditing/energy management solutions - this includes the strategic planning, energy assessments e.g. Feasibility, vulnerability and other detailed assessments, developing and executing of energy audits, audit plans, renewable energy surveys and energy management solutions. 2. Concept development and requirements analysis? This includes the analysis of the audit results and outlined requirements to design a detailed energy management project concept. 3. Implementation and change management - this includes the implementation and integration of more energy efficient practices and systems and training in using them effectively. 4. Measurement and verification - this includes the performance assessment and measurement of the effectiveness and energy efficiency of the project and can include long term monitoring, verification of savings and benchmarking.

871 206  BUILDING COMMISSIONING SERVICES

Including, but not limited to, comprehensive building commissioning services on new construction, major modernization projects, and existing energy consuming buildings and facilities designed to ensure the building systems are designed and built to operate as efficiently as possible. This includes re-commissioning and retro-commissioning services. Energy efficient buildings certification programs such as LEED may be included.

871 207  ENERGY AUDIT SERVICES

Including, but not limited to, developing, executing, and reporting on audit plans and/or performing energy and water audit services. Energy audits may range from cursory to comprehensive. Including, but not limited to data collection, data analysis, benchmarking with tools such as Energy Star, and written recommendations of suggested upgrades of electrical and mechanical infrastructure, including their impact on energy consumption and pollution can include recommendations for using alternative Energy Sources. Audit services can include computerized control systems using analytical software and a network of electronic devices to assist Federal agencies with achieving energy conservation goals. Energy efficient buildings certification programs such as LEED may be included

871 211  ENERGY CONSULTING SERVICES

Contractors shall provide expert advice, assistance, guidance or counseling on energy related projects or initiatives to assist agencies in adhering to energy legislation and policy such as EPACT 2005, Executive Orders 13423 and 13514. Consulting services covered by this SIN include: Energy management or strategy Energy program planning and evaluations Energy related studies, analyses, benchmarking and reporting such as feasibility studies, vulnerability assessments, and energy security Assistance in meeting energy efficient building standards such as Leadership in Energy and Environmental Design (LEED), Green Globes and Energy Star. Advisory services in obtaining alternative financing for energy projects such as Energy Savings Performance Contracts, Power Purchase Agreements or Enhanced Use Leases Consulting on carbon emissions trading programs consulting on where to obtain renewable energy credits/certificates consulting on greenhouse gas measurement and management. Strategic sustainability performance planning Consulting on obtaining high performance sustainable building
MULTIPLE AWARD SCHEDULE DETAILS: MATERN PROFESSIONAL ENGINEERING

1a. Awarded Special Item Numbers:

Legacy SINS: 871-202, 871-206, 871-207, 871-211

1b. Identification of the lowest priced model number and lowest unit price for that model for each special item number awarded in the contract.

Not Applicable

1c. Labor categories, experience, functional responsibility and education:

See Labor Category Descriptions below.

2. Maximum order:

$1,000,000

3. Minimum order:

$100

4. Geographic Coverage:

Domestic

5. Point(s) of production:

130 Candace Drive, Maitland, FL 32751

6. Discount from list prices or statement of net price:

See Labor Category Pricing below. All prices listed are net.

7. Quantity discounts:

5% on orders of 5 or more prototype projects with the same scope.

8. Prompt payment terms:

1%, 15 days; Net 30

Information for Ordering Offices: Prompt payment terms cannot be negotiated out of the contractual agreement in exchange for other concessions.
## MULTIPLE AWARD SCHEDULE DETAILS: MATERN PROFESSIONAL ENGINEERING

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<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>9a.</strong> Notification that Government purchase cards are accepted at or below the micro-purchase threshold.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>9b.</strong> Notification whether Government purchase cards are accepted or not accepted above the micro-purchase threshold:</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>10.</strong> Foreign items:</td>
<td>Not Applicable</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>11a.</strong> Time of delivery:</td>
<td>To be negotiated with the ordering agency on each task order</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>11b.</strong> Expedited Delivery:</td>
<td>To be negotiated with the ordering agency on each task order</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>11c.</strong> Overnight and 2-day Delivery:</td>
<td>To be negotiated with the ordering agency on each task order</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>12.</strong> F.O.B. point:</td>
<td>Destination, Location to be negotiated with the ordering agency on each task order</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
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</table>
| **13a.** Ordering Address: | Matern Professional Engineering, Inc.  
130 Candace Dr  
Maitland, FL 32751-3331 |
|   |   |
| **13b.** Ordering procedures: | For supplies and services, the ordering procedures, information on Blanket Purchase Agreements (BPA's) and a sample BPA can be found at the GSA/FSS Schedule homepage (fsa.gsa.gov/schedules).
## MULTIPLE AWARD SCHEDULE DETAILS: MATERN PROFESSIONAL ENGINEERING

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<thead>
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<th></th>
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<tr>
<td>14.</td>
<td><strong>Payment address:</strong></td>
</tr>
<tr>
<td></td>
<td>Matern Professional Engineering, Inc.</td>
</tr>
<tr>
<td></td>
<td>130 Candace Dr</td>
</tr>
<tr>
<td></td>
<td>Maitland, FL 32751-3331</td>
</tr>
<tr>
<td>15.</td>
<td><strong>Warranty provision:</strong> Not Applicable</td>
</tr>
<tr>
<td>16.</td>
<td><strong>Export packing charges:</strong> Not Applicable</td>
</tr>
<tr>
<td>17.</td>
<td><strong>Terms and Conditions of Government purchase card acceptance (any thresholds above micro-purchase level):</strong> Not Applicable</td>
</tr>
<tr>
<td>18.</td>
<td><strong>Terms and conditions of rental, maintenance, and repair:</strong> Not Applicable</td>
</tr>
<tr>
<td>19.</td>
<td><strong>Terms and conditions of installation:</strong> Not Applicable</td>
</tr>
<tr>
<td>20.</td>
<td><strong>Terms and conditions of repair parts indicating date of parts price lists and any discounts from list prices:</strong> Not Applicable</td>
</tr>
<tr>
<td>20a.</td>
<td><strong>Terms and conditions for any other services:</strong> Not Applicable</td>
</tr>
<tr>
<td>21.</td>
<td><strong>List of service and distribution points:</strong> Not Applicable</td>
</tr>
<tr>
<td>22.</td>
<td><strong>List of participating dealers:</strong> Not Applicable</td>
</tr>
<tr>
<td>23.</td>
<td><strong>Preventive maintenance:</strong> Not Applicable</td>
</tr>
<tr>
<td>24a.</td>
<td><strong>Special attributes such as environmental attributes:</strong> Not Applicable</td>
</tr>
<tr>
<td>24b.</td>
<td>If applicable, indicate that Section 508 compliance information is available on Electronic and Information Technology (EIT) supplies and services and show where full details can be found (e.g. contractor’s website or other location.) The EIT standards can be found at: <a href="http://www.Section508.gov">www.Section508.gov</a>: Not Applicable</td>
</tr>
<tr>
<td>25.</td>
<td><strong>Data Universal Number System (DUNS) number:</strong> 152904637</td>
</tr>
<tr>
<td>26.</td>
<td>Matern Professional Engineering Inc. is registered in System for Award Management (SAM) Database.</td>
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<tr>
<td>27.</td>
<td><strong>CAGE Code:</strong> 0SCD3</td>
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MULTIPLE AWARD SCHEDULE PRICING:
MATERN PROFESSIONAL ENGINEERING

Labor Category Pricing
rates include the IFF of .75%

<table>
<thead>
<tr>
<th>LABOR CATEGORY</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
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<tr>
<td>Principal Engineer/ QC</td>
<td>$197.48</td>
<td>$202.42</td>
<td>$207.48</td>
<td>$212.67</td>
<td>$217.98</td>
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<tr>
<td>Sr. Project Manager</td>
<td>$148.11</td>
<td>$151.81</td>
<td>$155.61</td>
<td>$159.50</td>
<td>$163.49</td>
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<tr>
<td>Project Manager</td>
<td>$110.83</td>
<td>$113.60</td>
<td>$116.44</td>
<td>$119.35</td>
<td>$122.34</td>
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<tr>
<td>Sr. Engineer</td>
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<td>$123.93</td>
<td>$127.03</td>
<td>$130.20</td>
<td>$133.46</td>
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<tr>
<td>Engineer</td>
<td>$95.72</td>
<td>$98.11</td>
<td>$100.56</td>
<td>$103.08</td>
<td>$105.65</td>
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<tr>
<td>Engineer V</td>
<td>$148.11</td>
<td>$151.81</td>
<td>$155.61</td>
<td>$159.50</td>
<td>$163.49</td>
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<tr>
<td>Designer IV</td>
<td>$95.72</td>
<td>$98.11</td>
<td>$100.56</td>
<td>$103.08</td>
<td>$105.65</td>
</tr>
<tr>
<td>Designer III</td>
<td>$82.62</td>
<td>$84.69</td>
<td>$86.80</td>
<td>$88.97</td>
<td>$91.20</td>
</tr>
<tr>
<td>Designer II</td>
<td>$73.55</td>
<td>$75.39</td>
<td>$77.28</td>
<td>$79.21</td>
<td>$81.19</td>
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<tr>
<td>Designer I</td>
<td>$62.47</td>
<td>$64.03</td>
<td>$65.63</td>
<td>$67.27</td>
<td>$68.95</td>
</tr>
<tr>
<td>Field Technician III **</td>
<td>$82.62</td>
<td>$84.69</td>
<td>$86.80</td>
<td>$88.97</td>
<td>$91.20</td>
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<tr>
<td>Field Technician II **</td>
<td>$73.55</td>
<td>$75.39</td>
<td>$77.28</td>
<td>$79.21</td>
<td>$81.19</td>
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<tr>
<td>Field Technician I **</td>
<td>$60.45</td>
<td>$61.96</td>
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<td>$65.10</td>
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<td>BIM Tech II **</td>
<td>$82.62</td>
<td>$84.69</td>
<td>$86.80</td>
<td>$88.97</td>
<td>$91.20</td>
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<tr>
<td>BIM Tech I **</td>
<td>$73.55</td>
<td>$75.39</td>
<td>$77.28</td>
<td>$79.21</td>
<td>$81.19</td>
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<td>CADD Technician **</td>
<td>$62.47</td>
<td>$64.03</td>
<td>$65.63</td>
<td>$67.27</td>
<td>$68.95</td>
</tr>
<tr>
<td>Clerical **</td>
<td>$62.47</td>
<td>$64.03</td>
<td>$65.63</td>
<td>$67.27</td>
<td>$68.95</td>
</tr>
</tbody>
</table>

PRINCIPAL ENGINEER/QC

Minimum Experience: 15 years’ experience with overall responsibility for engineering design evaluation. Demonstrated superior project management experience and experience directly supervising senior-level staff.

Functional Responsibility: Responsibilities include a broad spectrum from technical to administrative duties. Functions as the senior engineer on selected technical projects; assures client satisfaction by providing quality work product, on time and within budget; assigns resources to project teams. Is responsible for the overall culture of the work departments and teams, not limited to team cohesion, employee motivation and staff development. Will typically directly supervise senior-level technical staff.

Minimum Education: Bachelor’s degree in area of expertise and P.E license or MBA from accredited engineering program.
MULTIPLE AWARD SCHEDULE PRICING: MATERN PROFESSIONAL ENGINEERING

SENIOR PROJECT MANAGER

Minimum Experience: At least 10 years’ experience in design and management of projects for commercial, aviation, educational, institutional, governmental, or healthcare sectors. Demonstrates superior project management skills for highly complex, multi-faceted design projects.

Functional Responsibility: Provides the highest-level technical leadership, mentoring and guidance to assigned staff to assure total quality of work. May be responsible for coordinating multiple projects across different departments. May serve as the Project Engineer when dictated by the project size, complexity or client request. May directly supervise junior technical staff. May also include Commissioning Agent work and energy conservation audits.

Minimum Education: Bachelor’s degree in area of expertise or 12 years related experience in discipline.

PROJECT MANAGER

Minimum Experience: 6 years’ experience in design and management of projects for commercial, aviation, educational, institutional, governmental, or healthcare sectors. Demonstrated project management success in smaller projects.

Functional Responsibility: Provides the necessary technical leadership, mentoring and guidance to assigned staff to assure total quality of work. May serve as the Project Engineer when dictated by the project size, complexity or client request. May directly/indirectly supervise junior technical staff. May also include Commissioning Agent work and energy conservation audits.

Minimum Education: Bachelor’s degree in area of expertise or 10 years related experience in discipline.

SENIOR ENGINEER

Minimum Experience: 10 years’ experience in design and management of projects for commercial, aviation, educational, institutional, governmental, or healthcare sectors. Demonstrates leadership and project design successes. Commands an expert understanding of complex engineering design concepts.

Functional Responsibility: Provides the necessary technical leadership, design expertise, mentoring and guidance to assigned staff to assure total quality of work. Serves as the Project Engineer when dictated by the project size, complexity or client request. May directly supervise junior technical staff.

Minimum Education: Bachelor’s degree in area of expertise.
MULTIPLE AWARD SCHEDULE PRICING:
MATERN PROFESSIONAL ENGINEERING

ENGINEER

Minimum Experience: At least 4 years design experience for commercial, aviation, educational, institutional, governmental, or healthcare sectors. Demonstrates understanding of key engineering design concepts.

Functional Responsibility: Planning, design, evaluation of the technical components of engineering projects. Develops appropriate technical solutions that help maintain quality work. Coordinates with other team members and assists in production as needed to meet schedules. May function as Project Engineer on specific projects of smaller scope, and supervise the tasks and methods used by other junior personnel assigned to the project.

Minimum Education: Bachelor’s degree in area of expertise.

ENGINEER V

Minimum Experience: At least 8 years design experience for commercial, aviation, educational, institutional, governmental, or healthcare sectors. Demonstrates understanding of key engineering design concepts.

Functional Responsibility: Planning, design, evaluation of the technical components of engineering projects. Develops appropriate technical solutions that help maintain quality work. Coordinates with other team members and assists in production as needed to meet schedules. May function as Project Engineer on specific projects with a large scope, and supervise the tasks and methods used by other junior personnel assigned to the project.

Minimum Education: Bachelor’s degree in area of expertise and Professional Engineer (P.E.) License required.

DESIGNER IV

Minimum Experience: 10 years of technical/engineering design, not limited to commercial, aviation, educational, institutional, governmental, or healthcare sectors. Demonstrates understanding of key engineering and highly complex design concepts.

Functional Responsibility: Involves significant planning, design and evaluation of very complex technical components of engineering projects. Constant independent judgment used in developing appropriate technical/design solutions. Coordinates with other team members and assists in production as needed to meet schedules. May directly or indirectly supervise junior Designers.

Minimum Education: Associates degree or minimum of 12 years related experience in discipline.
DESIGNER III

Minimum Experience: 6 years’ technical/engineering design, not limited to commercial, aviation, educational, institutional, governmental, or healthcare sectors. Demonstrated understanding of key engineering and design concepts.

Functional Responsibility: Involves significant planning, design and evaluation of the technical components of engineering projects. Uses independent judgment in developing appropriate technical/design solutions. Coordinates with other team members and assists in production as needed to meet schedules.

Minimum Education: High school diploma, AS preferred. Engineering degree can substitute 4 years of experience.

DESIGNER II

Minimum Experience: 4 years of technical/engineering design, not limited to commercial, aviation, educational, institutional, governmental, or healthcare sectors. Demonstrated understanding of basic engineering and design concepts.

Functional Responsibility: Involves planning, design and evaluation of the technical components of engineering projects. Under moderate supervision, uses some judgment in developing appropriate technical/design solutions. Coordinates with other team members and assists in production as needed to meet schedules.

Minimum Education: High school diploma, AS preferred. Engineering degree can substitute 4 years of experience.

DESIGNER I

Minimum Experience: 2 years prior experience with technical/engineering design, not limited to commercial, aviation, educational, institutional, governmental, or healthcare sectors. Involved in application of engineering fundamentals to design; will prepare preliminary designs for engineer’s approval. Will coordinate drafting efforts for projects.

Functional Responsibility: Under heavy supervision, uses limited judgment in developing appropriate technical/design solutions. Coordinates with other team members and assists in production as needed to meet schedules.

Minimum Education: High school diploma, Associates degree preferred.
MULTIPLE AWARD SCHEDULE PRICING: MATERN PROFESSIONAL ENGINEERING

FIELD TECHNICIAN III

Minimum Experience: At least 15 years of professional construction observation experience. Includes at least 10 years’ experience as contractor in field of expertise.

Functional Responsibility: Reviewing subcontractor’s quality programs for compliance with the Contract Documents and applicable codes; writing detailed summaries of site observation results; interacting with design team members and construction team members and working to resolve construction-related issues; reviewing Shop Drawings; reviewing/updating CAD drawings; providing answers to RFI’s; working directly with clients. May directly or indirectly supervise junior field staff.

Minimum Education: High school diploma and commercial certifications and/or licenses.

FIELD TECHNICIAN II

Minimum Experience: At least 10 years of involvement in the construction trades in area of expertise along with 4 years of professional construction observation experience.

Functional Responsibility: Reviewing subcontractor’s quality programs for compliance with the Contract Documents and applicable codes; writing detailed summaries of site observation results; interacting with design team members and construction team members and working to resolve construction-related issues; reviewing Shop Drawings; reviewing/updating CAD drawings; providing answers to RFI’s; working directly with clients.

Minimum Education: High school diploma.

FIELD TECHNICIAN I

Minimum Experience: At least 5 years of involvement in the construction trades in area of expertise along.

Functional Responsibility: Reviewing contractor’s quality programs for compliance with the Contract Documents and applicable codes; writing detailed summaries of site observation results; interacting with design team members and construction team members and working to resolve construction-related issues; reviewing Shop Drawings; reviewing/updating CAD drawings; providing answers to RFI’s; working directly with clients.

Minimum Education: High school diploma.
# MULTIPLE AWARD SCHEDULE PRICING:
## MATERN PROFESSIONAL ENGINEERING

## BIM TECHNICIAN II

**Minimum Experience:** At least 10 years of experience in CAD drafting, not limited to commercial, aviation, educational, institutional, governmental, or healthcare sectors, plus experience with BIM coordination. Solid awareness of BIM concepts and more complex CAD concepts.

**Functional Responsibility:** Responsibilities of a CADD Technician, plus additional duties, relating to coordinating/updating drawings and models between different projects or departments.

**Minimum Education:** High school diploma.

## BIM TECHNICIAN I

**Minimum Experience:** At least 5 years of experience in CAD drafting, not limited to commercial, aviation, educational, institutional, governmental, or healthcare sectors, plus some prior experience with BIM coordination. Solid awareness of BIM concepts and more complex CAD concepts.

**Functional Responsibility:** Responsibilities of a CADD Technician, plus additional duties, relating to coordinating/updating drawings and models between different projects or departments.

**Minimum Education:** High school diploma.

## CADD TECHNICIAN

**Minimum Experience:** 2 years' experience in CAD drafting, not limited to commercial, aviation, educational, institutional, governmental, or healthcare sectors. Fundamental awareness of basic CAD concepts, such as layer translation and manipulation tools, block & dynamic block manipulation and creation, etc.

**Functional Responsibility:** Responsible for producing accurate CAD drawings in accordance with design/engineering specifications.

**Minimum Education:** High school diploma.

## CLERICAL

**Minimum Experience:** At least 10 years’ experience providing administrative support in a professional setting.

**Functional Responsibility:** Performing various administrative duties, regarding project performance, not limited to creating/maintaining databases of project-related information, creating various reports of project data, filing, organizing project information, processing RFIs and submittals. Producing project specifications per engineer’s direction.

**Minimum Education:** High school diploma.
Firm Overview & Services
ABOUT US

Matern Professional Engineering is an established mechanical, electrical, plumbing, fire protection, technology, commissioning and energy engineering firm in Florida. Douglas P. Matern, an electrical engineer and University of Central Florida graduate, founded the firm in 1984. We have offices in Maitland, Fort Myers, and Tampa, and are also licensed in Alabama, Georgia, North Carolina, Pennsylvania, South Carolina, Tennessee, Texas and Virginia.

QUALIFIED
Our staff's credentials include Professional Engineers, LEED Accredited Professionals, Certified Energy Managers, Commissioning Authorities, Registered Communications Distribution Designers and other specialty certifications known within the engineering industry. These qualifications coupled with real world experience enable us to provide consulting and design services for any type of facility.

EXPERIENCED
Our project experience ranges from small minor projects to large multi-million dollar facilities. Through this experience we understand the needs, schedules, budget requirements, safety, and other aspects required to successfully construct a project. Included in our core principles is helping our clients determine a complete project solution rather than a temporary fix to the current challenge.

DEDICATED
Our team of dedicated professionals strive to provide exceptional service each day to every client. They are led by strong and consistent executive and management teams, which provide effective in-house quality control. As a client centric firm, we pride ourselves on quick responses, complete flexibility and pragmatic decision making in its endeavor to “engineer building systems that work for you.”

“Without people, we have no clients and we have no product to offer. The most important thing we do to maintain our longevity is to take care of our staff and clients.” ~Douglas P. Matern

OUR MISSION

We are in the people business. Without people, we have no clients and we have no product to offer. The most important thing we do to maintain our longevity is to take care of our staff and clients. This mission led us to develop these core values...

CORE VALUES

- Possess a “CAN DO” Attitude
- Show Respect
- Behave Ethically
- Demonstrate Integrity & Accountability
- Maintain A Balance of Work & Home
- Embrace Diversity
- Commitment to Excellence
- Help People
- Encourage Growth
- Open to Innovation
OUR SERVICES

MECHANICAL DESIGN

ENERGY ANALYSIS SURVEY & STUDIES

ELECTRICAL DESIGN

COMMISSIONING

PLUMBING DESIGN

LIGHTING DESIGN

FIRE PROTECTION DESIGN

PROJECT MANAGEMENT
Contract Documentation, Contract Negotiations, Bidding Support, Construction Administration, Material and System Evaluations, Bid Validation and Acceptance, Scheduling and Progress Control, Cost Control Contractor Selection

TECHNOLOGY DESIGN

SUSTAINABLE DESIGN
Matern has been designing and commissioning Federal projects for over 30 years. These projects include armories, barracks, brigades, federal prisons, post offices, research and development efforts, customs border patrol and schools.

Through this experience we have developed a strong understanding of the stringent standards put forth by federal agencies such as US Department of Agriculture, Homeland Security, US Immigration and Customs Enforcement, Federal Aviation Authority, Department of Defense and Federal Department of Transportation to name a few.

In addition, we have intimate knowledge of Energy Star, Green Building Initiative and US Green Building Council Initiatives and have committed to the Architecture 2030 Challenge.
UNITED STATES POSTAL SERVICE
- IDIQ for Central Florida Post Offices - Dixie Village Post Office Facility Assessment
- Longwood Post Office - New Construction
- Merritt Island Post Office - New Construction
- Silver Star Post Office - New Construction
- Lake Mary Post Office - New Construction

FEDERAL BUREAU OF PRISONS
- Coleman Correctional Facility, Phase II, Coleman, FL
  » Food Service Warehouse Addition
  » Landscaping/Maintenance Building Addition
  » Master Sewage Pumping Station Improvements

UNITED STATES MARINE CORPS
- Camp Lejeune Stone Bay Rifle Range- Bachelor Enlisted Quarters Commissioning, Jacksonville, NC

UNITED STATES DEPARTMENT OF THE NAVY
- US Naval Weapons Station at Goose Creek, Charleston, SC
  » 24,477 SF Consolidated Navy Brigg 80-Bed Addition and Multi-Purpose Room
  » 7,502 SF Industrial Shop Training Facility
- Pensacola Naval Air Station, Pensacola, FL
  » Renovation Numerous Buildings after Hurricane Damage

UNITED STATES DEPARTMENT OF THE ARMY
- Fort Bragg Army Base - Shugart Elementary & Middle School, Cameron, NC
  » LEED V2.2 Fundamental Commissioning

UNITED STATES DEPARTMENT OF THE NATIONAL GUARD
- Mark Lance Armory Renovation Commissioning, St Augustine, FL
- Mark Lance Armory Renovation Fire Protection Design, St Augustine, FL
- Camp Blanding Joint Training Center BOD Armory Commissioning Enhanced, Starke, FL
- Camp Blanding Bullard Armory Storage Addition and Renovation to Existing Armory, Starke, FL
- Robert F. Ensslin Armory Renovations Fire Protection, St Augustine, FL
- Camp Blanding Joint Training Center DBK-DMA Armory Commissioning, Starke, FL

VETERANS ADMINISTRATION
- Veterans Administration Medical Center, West Palm Beach, FL
  » Central Energy Plant Upgrades
Being “GREEN” is more than just the materials used to build a facility. It’s also knowing how a building uses energy through both natural resources and the systems designed to make the building operate.

Matern is well versed in energy saving concepts for building systems. We have performed lighting retrofits, central energy plant life cycle cost analysis for various HVAC concepts, geothermal designs and solar domestic water heating and photovoltaic systems designs for numerous clients throughout the State of Florida. We provide comparative system studies for the majority of our projects; looking for long term and first cost savings for Owners.

We have a core team of professionals who specialize in energy modeling, utility analysis, thermal energy and solar power. This group has been thoroughly trained in building simulation software and individuals of the group are Certified to Calculate Florida Energy Code and Certified in Energy Management.
We are one of the preferred engineers of one of the nation’s largest ESCO firms and has completed numerous energy analysis / performance projects with them. Some of those projects include:

- Clay County Government:
  350,000 square feet / 10 Buildings

- Brevard County Government:
  500,000 square feet / 1 Building

- St. Johns County Government:
  200,000 square feet / 12 Buildings

- Winter Park Government:
  200,000 square feet / 4 Buildings

Our team is one of the largest thermal energy storage designers in the Florida. We most recently expanded the Indian River State College Central Energy Plant with thermal energy storage. This energy saving technology qualified the college for $375,000 in energy rebates from the power company, as well as saving $50,000 annually in utility expenses.

As solar and photovoltaic energy becomes more accessible and prominent, we are in the forefront of this innovation. We have more recently designed projects such as domestic solar water heating retrofits for six Charlotte County Fire Stations and a Solar Vehicle Charging Station for the University of Central Florida.
We believe that buildings should function the way they were designed. This ensures longer lasting facilities and systems, as well as energy and cost savings for our clients.

We have extensive commissioning experience with a variety of client and project types. Commissioning responsibilities have included everything from leading kick-off meetings with the Owner, design, and construction teams; performing design reviews; writing and executing functional tests; writing and managing commissioning plans; performing post-construction warranty performance reviews; and generating system manuals.

We combine 30 years of HVAC design and energy engineering experience to offer a comprehensive expert skill set to any project. Our commissioning experience includes both Fundamental and Enhanced Commissioning for new construction, as well as investigative Retro-Commissioning. We also have extensive experience with the LEED requirements for the commissioning process. Our Commissioning Process is based on the guiding principles of The Building Commissioning Association (BCA), ASHRAE Guidelines and Standards, AABC Commissioning Group (ACG). Our final Commissioning scope can be custom tailored to the Client and project needs.

Our extensive and diverse client background includes, but is not limited to: Orange County Public Schools, Florida Gulf Coast University, Volusia County Government, Charlotte County Government, Naval Facilities Engineering Command (NAVAC), Florida Air National Guard (FANG), Lee County Public Schools, Collier County Public Schools, Seminole State College, Lee County Public Library System, LeeSar - Lee County Hospital Co-op Services.
Our commissioning services include:

- Basis of Design
- Construction Checklists
- Design Intent/OPR
- Energy Management / Audits
- Enhanced Commissioning
- Facility Assessments
- Factory Witness Tests
- Functional Tests
- Fundamental Commissioning
- Indoor Air Quality
- LEED® Facilitation
- Mechanical and Electrical Commissioning
- Operations Manual
- Performance Tests
- Post-occupancy Optimization
- Retro-Commissioning
- Re-Commissioning
- Peer Review
- Total Facility Commissioning
OUR PROJECTS

COMMISSIONING OVERVIEW
One of our core services includes commissioning. These services include total facility commissioning, LEED Facilitation, Mechanical & Electrical Commissioning, Retro-Commissioning and Re-Commissioning. Commissioning responsibilities have included everything from leading kick-off meetings with the Owner, design and construction teams; performing design reviews; writing and executing functional tests; writing and managing commissioning plans; performing post-construction warranty performance reviews; and generating system manuals. In this capacity, we work directly for the owner as a third-party review.

We combine thirty years of HVAC design and energy engineering experience to offer a comprehensive expert skill set to any project. Our commissioning experience includes both Fundamental and Enhanced Commissioning for new construction as well as investigative Retro-Commissioning. We also have extensive experience with the LEED requirements for the commissioning process. Our Commissioning Process is based on the guiding principles of The Building Commissioning Association (BCA), ASHRAE Guidelines 0 and 1.1 and Standard 202, AABC Commissioning Group (ACG). Our final Commissioning scope can be custom tailored to the Client and Project needs.

Our extensive and diverse client background includes, but is not limited to: Orange County Public Schools, Florida Gulf Coast University, Volusia County Government, Charlotte County Government, Naval Facilities Engineering Command (NAVAC), Florida Air National Guard (FANG), Lee County Public Schools, Collier County Public Schools, Seminole State College, Lee County Public Library System, LeeSar - Lee County Hospital Co-op Services.

ENERGY AUDIT OVERVIEW
Energy Audits are used for a variety of purposes such as energy rebates, tax incentives and cutting down on the electric bills. In most cases, the primary goal is to save money so most of our clients want a complete ASHRAE Level facility energy audit — identifying the energy consumption from highest to lowest and indicating energy conservation measures (ECMs) that can be incorporated to save on capital outlay. We identify the ECMs and give them a priority order. Then we work with the client to design a solution to the energy inefficiencies.

We are one of the only firms under contract to provide energy modeling and auditing engineering for one of the Nation’s largest ESCO providers. We provide these services all over the Southeast and predominately for government projects. We also hold the engineering contract with Florida Housing Finance Corporation to provide: Energy Consumption Model – which at a minimum, takes into account specific factors including, but not limited to, unit size, building orientation, design and materials, mechanical systems, appliances, characteristics of the building location.

Some of our clients include St. Johns County Government, Clay County Government, City of Winter Park, Brevard County Public Schools, Greater Orlando Aviation Authority, and U.S. Army Communications-Electronics Research, Development and Engineering Center (CERDEC).

We have staff with specialized qualifications who lend their expertise these unique projects and help lay out a well design plan of action for energy conservation needs.
OUR PROJECTS

CITY OF WINTER PARK
GOVERNMENT BUILDINGS
ENERGY AUDITS

Winter Park, Florida

This project involved an energy audit for over 200,000SF across four buildings — the City Hall, Public Library, Public Safety Building and Civic Center for the City of Winter Park, FL. Certain buildings within this energy audit were over 40 years old. Accurate as-built drawings did not exist, so extra measures were taken during the site survey process to gather sufficient data for an accurate simulation.

Simulation development methodology:

- Many simulation tasks are not dependent on each other; therefore, the project was phased so that some of these tasks ran in a parallel nature to one another. At the start of the simulation process, a site survey was performed to compare as-built drawings to what currently exists. As the site survey was performed, the observations made and data obtained was catalogued and entered in the site survey notes.
- Concurrently, the utility data of the buildings in question were obtained from the utility providers and entered into a spreadsheet for the utility analysis report. These utility bill spreadsheets were then sent to a Measurements and Verification company to be normalized.
- Once these tasks were accomplished, a full list of energy conservation measures were made on each building and a then incorporated into an energy conservation measure matrix. Upon approval, the Energy Conservation Measure Narrative was made. As this energy conservation measure narrative was being written, the baselines of the buildings were constructed in the simulation software. These baselines were then calibrated to match the normalized utility data of the building.
- The energy conservation measure narrative and calibrated baseline models were sent for review simultaneously. Once approved, the energy conservation measures were implemented in the baselines in cascading order. Savings were reported and then incorporated into a final report containing all facets of the analysis process.

The baseline calibrations for this audit ranged from 0.5% to 10.5%. The baseline annual consumption for this simulation was 4.2 MWh. The baseline annual demand was 10.1 MW.

Energy conservation measures for this audit included the following. An energy conservation measure matrix was generated to show which energy conservation measures applied to which buildings.

The lighting retrofit energy conservation model projected the highest energy savings for almost all buildings (8%-14%).
**CITY OF DELAND ENERGY CONSERVATION MEASURES**

Deland, Florida

Matern provided engineering services to assist with the energy audits and efficiency upgrades. Services include signed and sealed permit drawings, assistance during the bid process and construction administration for the following buildings:

**CITY HALL**
Main DDC Building Automation Systems - Integration of current Building Management System (BMS). Provided EMS monitoring and control via Graphical User Interface (GUI) used by City of Deland City Hall each subsequent upgrade was tied into this system.

**POLICE STATION**
Replace existing rooftop air-cooled chiller with new high-efficiency air-cooled chiller of equal capacity. Includes new valves and piping on roof as required to facilitate chiller replacement. Services include coordination with structural engineer (under separate contract) to confirm existing rooftop is adequate for new chiller weight.

**CHISHOLM PARK GYM**
Replace four (4) 5-ton wall DX packaged units and two (2) 7-1/2-ton split DX units with new high-efficiency units of equal capacity. Scope includes verifying ventilation requirement per ASHRAE 62.1-2007 is met with new systems. Capacities shall be up-sized if required to meet current ventilation rates.

**FISH BUILDING**
Replace one (1) 10-ton and one (1) 15-ton packaged DX rooftop units with new high-efficiency units of equal capacity. Scope includes verifying ventilation requirement per ASHRAE 62.1-2007 is met with new systems. Capacities shall be up-sized if required to meet current ventilation rates.

**LEMON BUILDING**
Replace one (1) 5-ton packaged DX wall unit with new high-efficiency unit of equal capacity.

**FIRE STATION 81**
Replace existing DX split system on east side with new high-efficiency VRF (variable refrigerant flow) system equal to Daikin. Scope includes verifying ventilation requirement per ASHRAE 62.1-2007 is met with new systems. Capacities shall be up-sized if required to meet current ventilation rates.

**DREGGORS MUSEUM**
Provide ducted returns for the existing fan coil units inside the mechanical rooms. Relocate thermostats as necessary for new installation.
Matern provided fundamental LEED® Commissioning services for a new U.S. Army Corps of Engineers, Savannah District K-8 school.

The Shughart Elementary and Middle School sets on a site of approximately 50 acres. This single story facility was constructed to accommodate approximately 700 elementary school students and 550 middle school students. The elementary school and middle school wings are connected with a centralized core consisting of a cafeteria, kitchen, administrative areas and a media center. A gymnasium is located at the end of the middle school wing as well.

The entire complex is air-conditioned utilizing two 350 ton air cooled screw chillers which produce chilled water as the cooling medium for the fourteen air handling units located throughout the facility. Two chilled water pumps (one being a backup) deliver 42°F water to the air handling units in varying quantities dependent upon the cooling load of the space being served. The Johnson Control automation system assures minimum flow through both chillers even during part load conditions.

The air handling units utilize flat plate air to air energy recovery units to preheat/precool Code required ventilation air. All air is filtered and dehumidified and delivered to the variable terminal boxes with electric heating coils controlled by a space thermostat via a medium velocity sheet metal ductwork system. The system providing conditioned air to the kitchen is supplemented by a kitchen hood makeup air and exhaust system. With the exception of the kitchen hood fans and the relief fans associated with the air handling units, all of the fans are scheduled ON/OFF based on building occupancy periods.

The Johnson Control METASYS® building automation and control system constantly monitors all HVAC equipment and space temperature/humidity. The control system is now a part of the base wide automation system. All domestic hot water is generated at the point of use by means of instantaneous electric heaters.

All class room and office spaces are equipped with occupancy sensors which are set to turn off lights whenever the spaces are unoccupied. All interior corridors and hallways along with exterior canopy lighting a controlled through the building automation system based on the building occupancy schedule.
CAMP LEJEUNE STONE BAY
BACHELOR ENLISTED QUARTERS,
RIFLE RANGE (LEED® GOLD)

Jacksonville, North Carolina

Matern was contracted to perform Fundamental Commissioning of all HVAC, Plumbing, and Lighting Control systems. The project obtained LEED® Gold certification.

The Stone Bay Bachelor Enlisted Quarters at Rifle Range complex consists of two 75,000SF, 3-level, hardened buildings (154,000SF total). Though both building had similar layouts - “U” shaped, common core with resident units at the wings - both had unique core areas.

HVAC: Both buildings utilized the latest Variable Refrigerant Flow (VRF) technology to handle the primary cooling load of the spaces and split, DX, 100% OA units, with ERV sections (Wheels) to pre-condition the outside air. All exhaust, with the exception of Mechanical spaces and the Laundry Facilities were ducted through the ERV sections of the 100% units to reduce energy usage.

Plumbing: Besides and energy efficient gas boiler design (cascading - 4-stage), the facility takes advantage of rooftop mounted solar panels and a separate rain water capture/storage system. Rain water is captured and stored for use in toilets and exterior wash stations.

Lighting Controls: Occupancy sensors were implemented throughout the facility.

UNIQUE PROJECT CHALLENGES:

1. Due to budget issues, the building systems design was changed after construction started. The major design change was switching from air cooled chilled water system with VAV boxes to Variable Refrigerant flow systems and Split DX 100% OA units with Energy Recovery. The entire Cx team needed to adjust on-the-fly as construction deadlines were still rigid.

2. Domestic water heating. Separate contractors were used for the gas boilers, solar water heating, and rain water capture systems. Extensive coordination among these sub-contractors was required by the Cx Team to ensure all (3) systems were installed and performed together as originally intended.
Matern was contracted with Adams Communication & Engineering Technology (ACET) to provide market research for the Innovative Cooling Equipment (ICE) project. The project consisted of two Phases. The ICE program’s task was to find an operational efficiency improvement of 10 to 30% for the DoD’s existing fleet of HVAC systems, also known as ECUs (Environmental Control Units).

Phase 1 concentrated on researching existing packaged HVAC systems (sizes 3/4, 1 ½, 3, 5 and 10 tons) produced by commercial manufacturers and by manufacturers already providing ECUs to the military. This effort yielded information of the units having the highest energy efficiencies. One of each size units was purchased and delivered to CERDEC at the Aberdeen Proving Grounds for testing in their ASHRAE test chamber. Although the market research did not uncover substantial technology improvements in existing commercial units employing the vapor compression cycle, the components within the systems have made significant efficiency advances when compared to the government’s existing family of ECUs. To assist CERDEC in this project, Matern was provided a 1 ½ ton, 3 ton and 5 ton ECU for evaluation in their Ft. Myers, Florida facility.

In Phase 2, Matern and ACET worked with and assisted two military contractors, three major universities and five private firms to develop and produce high efficiency prototype ECUs and to evaluate new technology available in near and long term time frames. The prototypes selected were a 9,000 BTU (3/4 ton), and a 36,000 BTU ECU to be manufactured by Mainstream Engineering and an 18,000 BTU (1 ½ ton) and 60,000 BTU (5 ton) ECU manufactured by HDT Global. The Mainstream ECU’s were tested by the Intertek company in Columbus, Ohio. The HDT Global ECU’s were tested in HDT’s ASHRAE Test Chamber in Geneva, Ohio.

Part of Matern’s facet of this project was evaluating specific components of the ECUs, in particular: insulating materials, insulating/reflective paints and heat recovery units for possible use in the ECUs.

In addition (not specifically part of the ICE program) was the research, development and the improvement of the existing flexible ductwork currently used with the military ECUs. Matern, in conjunction with ACET, designed and developed a military grade high efficiency insulated flexible duct system. Prototypes were manufactured by a flexible duct company based in Houston, Texas. These flexible ducts were tested in HDT Global’s ASHRAE Test Chamber with HDT’s 5 ton ECU. The tests resulted in a 12% energy improvement as compared with the military’s conventional flexible ducts. It should be noted that, while not a part of the ICE program, the 12% improvement of the flexible ducts alone exceeded the minimum requirements of 10% mandated by CERDEC and the ICE program.
FLORIDA ARMY NATIONAL GUARD - MARK LANCE ARMORY (LEED® SILVER)
St. Augustine, Florida

Matern was contracted to perform Fundamental Commissioning of all HVAC, Plumbing, and Lighting Control systems. The Owner sought LEED® certification; however, the project was awarded a LEED® Silver Certification.

The Mark Lance Armory at St. Augustine is a historic, multi-purpose, 19,405SF, single level, Florida National Guard facility. The building is divided into two main areas: a large multi-purpose Drill Hall and Offices.

HVAC: The facility is conditioned using a decoupled air system - consisting of (3) rack mounted, packaged, direct expansion, air handlers providing preconditioned outside air to the spaces and (4) direct expansion split systems, located in mechanical rooms providing space cooling.

The air handler that provides cooling to the Drill Hall also contains an integral energy recovery wheel and associated exhaust fan that is used during Drill Weekends and Special Events.

Plumbing: The facility was served by two gas fired instantaneous water heaters mounted on the exterior of the building.

Lighting Controls: Occupancy sensors were implemented throughout the facility.

UNIQUE PROJECT CHALLENGES:
1. Initial functional testing went smoothly. Though 3-4 months after occupancy, complaints were made that the building was under negative pressure. It was discovered that insufficient training was provided and the end user made significant changes to the controls system. Additional training was given to the actual end users vs. the building Owners.
CONSOLIDATED BRIG ADDITION
NAVAL WEAPONS STATION
CHARLESTON
Charleston, South Carolina

Matern was contracted to perform Fundamental Commissioning of all HVAC, Plumbing, and Lighting Control systems. The Owner did not seek LEED® certification.

The Brig addition project consist of a new two level facility having two cell blocks for inmate housing and associated support spaces, a new single level multi-purpose building and an Industries (VOTEC) building.

HVAC: The housing units are served by a single air cooled chiller having 2 chilled water pumps (one as a standby). Conditioned air is delivered to the spaces from a variable volume air handling unit via a ductwork system utilizing terminal VAV boxes with hot water heating coils. Exhaust air from the cells is routed through an air to air heat recovery unit to preheat/pre-cool outside air. Smoke exhaust fans and intake vents makeup the smoke containment system utilizing the space pressurization method per NFPA 92A. The Industries building is conditioned mostly by a single split system direct expansion air handling unit. Several other split systems of lesser capacity complete the space conditioning. The maintenance bay is heated by two overhead gas fired infra-red heaters.

Lighting Controls: Occupancy sensors were implemented throughout the facility.

UNIQUE PROJECT CHALLENGES:
1. The air cooled chiller was operational and the water flow was measured using an ultrasonic flow meter at the chiller. This reading was within 1 GPM of the BAS reading of 105 GPM. Water temperatures were as specified and only a 3.5 degree temperature difference was observed. This is due to the building not having a cooling load present. Only one of the two chilled water pumps was operational. The repair of the second pump was scheduled.

2. Testing of the small split system DX units and the exhaust fans in the Industries building was completed 3 weeks later by Hunt Construction and observed by a Navy representative. Gas fired unit heater UH-1 operated as required but UH-2 was not operational when initial testing was done but retested successfully at the same time the small split systems were tested. AHU-1-1 was running and was operating as required. The space thermostat reading for AHU-1-1 was 3.5° lower than the hand-held instrument. The BAS reading was adjusted to match the field measurement.
OUR PROJECTS

8

ST. JOHNS COUNTY GOVERNMENT ENERGY CONSERVATION MEASURES PHASE I
St. Augustine, Florida

Matern completed an 11-building energy audit and made recommendations to St. Johns County Government on how they can save energy.

The buildings that full energy usage audits were completed on include:

- Sheriffs/Old Jail - 87,687SF
- Main Library - 15,562SF
- Ketterlinus Gym - 16,000SF
- Cypress Links Golf Club - 22,546SF
- Administration Building - 105,000SF

We performed a block energy model on:

- Ponte Vedra Library - 24,000SF
- Bartram Library - 15,000SF
- Anastasia Library - 8,252SF
- Animal Control Center - 6,198SF

We performed a line item energy analysis for:

- Health and Human Services Building - 110,000SF
- Council on Aging - 21,118SF

Once the evaluations and recommendations of the energy audits were complete, the County moved forward with the implementation of the energy conservation measure implementation. The energy conservation measure recommended were primarily HVAC and controls replacements and/or upgrades.