



**The City of Hollywood:
RFQ No. 4422-14-RD
Continuing Contract for Mechanical, Electrical,
& Plumbing Engineering Services
(PW 14-010)**



May 30, 2014

COPY

SGM
ENGINEERING
MEP CONSULTING ENGINEERS



ARCHITECT - ENGINEER QUALIFICATIONS

PART I - CONTRACT-SPECIFIC QUALIFICATIONS

A. CONTRACT INFORMATION

1. TITLE AND LOCATION (City and State)

**City of Hollywood: Continuing Contract for Mechanical, Electrical, & Plumbing Engineering Services
(PW 14-010)**

2. PUBLIC NOTICE DATE

May 8th, 2014

3. SOLICITATION OR PROJECT NUMBER

RFQ No. 4422-14-RD:

B. ARCHITECT-ENGINEER POINT OF CONTACT

4. NAME AND TITLE

Tony Shahnami, President, P.E., F.E., CxA, CES, CHS-III

5. NAME OF FIRM

SGM Engineering, Inc. - 100% Small Business NAICS Codes: 236220, 238210, 238220, 541310, 541330, 541340, 541350, 561210, 561499 DUNS #94-459-9141

6. TELEPHONE NUMBER

(954) 421-1944

7. FAX NUMBER

(954) 421-1924

8. E-MAIL ADDRESS

Tony@SGMEngineering.com

C. PROPOSED TEAM

(Complete this section for the prime contractor and all key subcontractors.)

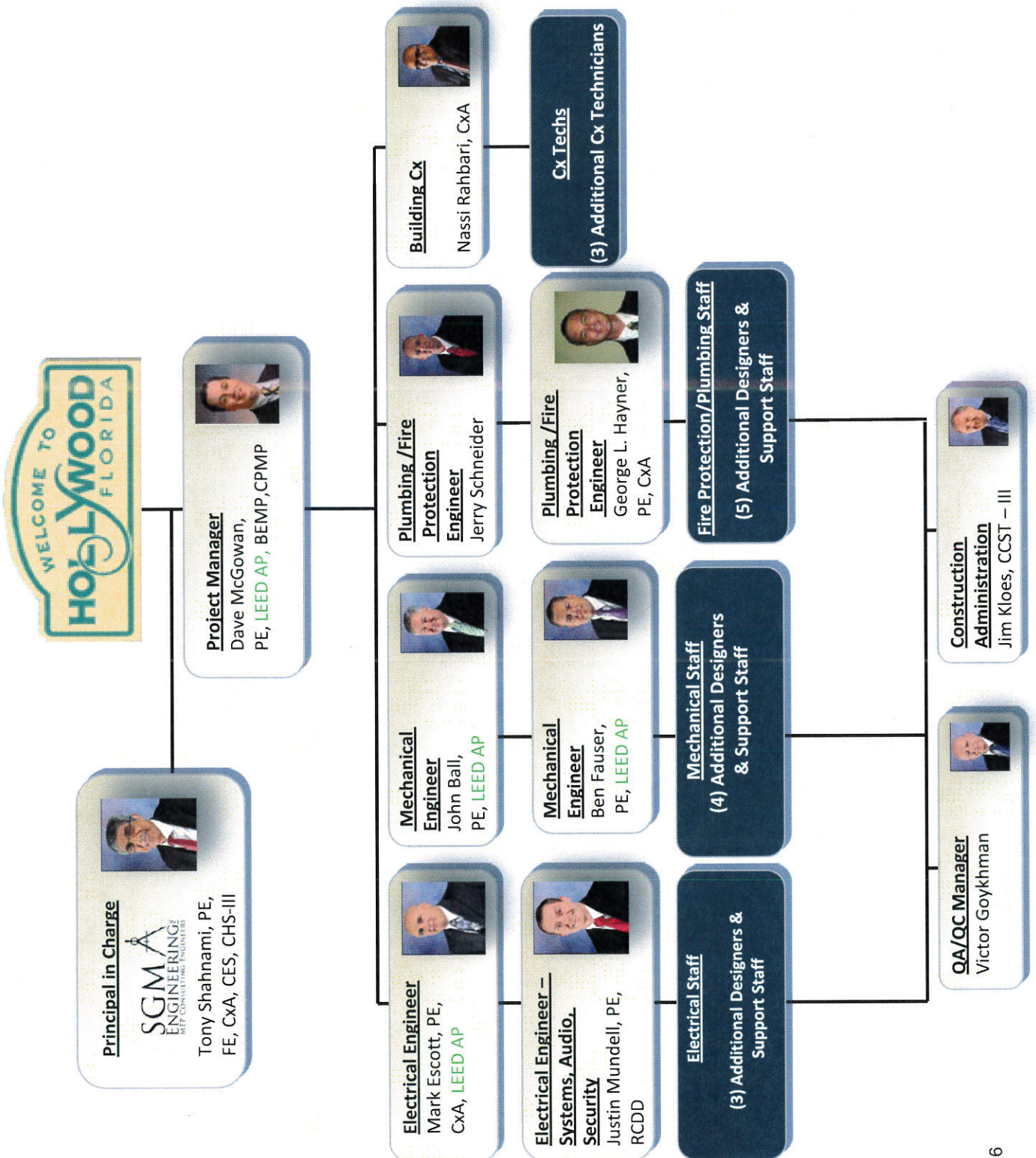
| | (Check) | | | 9. FIRM NAME | 10. ADDRESS | 11. ROLE IN THIS CONTRACT |
|----|---------|-------------|----------------|--|---|---|
| | PRIME | J-V PARTNER | SUBCON-TRACTOR | | | |
| a. | X | | | SGM Engineering, Inc. <i>SDB, SBE, MBE</i> <input checked="" type="checkbox"/> CHECK IF BRANCH OFFICE | 700 W. Hillsboro Blvd., Bldg. 3, Suite 212, Deerfield Beach, FL 33441 | Mechanical, Electrical, Plumbing, Fire Protection Engineering, Commissioning Authority, LEED / Sustainable Design |

D. ORGANIZATIONAL CHART OF PROPOSED TEAM

☒ (Attached)



City of Hollywood Beach
Continuing Contract for Mechanical, Electrical, and Plumbing Engineering Services
RFQ: 4422-14-RD
Profile of Consultant



E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

| 12. NAME | 13. ROLE IN THIS CONTRACT | 14. YEARS EXPERIENCE | |
|--|----------------------------|----------------------|----------------------|
| | | a. TOTAL | b. WITH CURRENT FIRM |
| Tony Shahnam, P.E., F.E., CES, CHS-III, CxA | Principal in Charge | 33 | 23 |

15. FIRM NAME AND LOCATION (City and State)

SGM Engineering, Inc., Deerfield Beach, FL

16. EDUCATION (DEGREE AND SPECIALIZATION)

Bachelor of Science, Mechanical Engineering, University of Miami

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Florida - #41204 Also Registered in 37 other states. Certified Commissioning Agent, Certified Homeland Security Level III and Forensic Engineer

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Affiliations: Member of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Florida Engineering Society, and National Fire Protection Association. **Awards:** Energy Award by Florida State Governor's Energy Office, Florida Tax Watch Organization, experience with Orange County Government and UCF.

19. RELEVANT PROJECTS

| (1) TITLE AND LOCATION (City and State) | (2) YEAR COMPLETED | |
|--|-----------------------|------------------------------|
| | PROFESSIONAL SERVICES | CONSTRUCTION (If applicable) |
| Town of Palm Beach, Street/Site Lighting, Palm Beach, FL | 2010 | 2011 |
| <p>(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm</p> <p>a Tony Shahnam acted as Principal in Charge for the Street/Site Lighting in the Town of Palm Beach. SGM also replaced the existing light poles with new fixtures/poles and connected them to an existing circuit. Additionally, SGM removed existing conductors that did not have enough slack to provide connection to the new pull-box; new conductors were installed in its place. Project Cost: \$1.6M</p> | | |
| Orange County Government, Fire Station #36, #66, and #76, Orlando, FL | 2009 | 2010 |
| <p>(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm</p> <p>b SGM provided full MEP/FP engineering design services for the generator replacement at Orange County Government's Fire Stations #36, #66, and #76. SGM's scope included the removal of the existing generator and transfer switch system at the Fire Stations. Mr. Shahnam acted as Principal in Charge for this project. Project Cost: 1.5M</p> | | |
| Indian River County Government, Indian River County Sheriff's Office, Vero Beach, FL | 2012 | 2013 |
| <p>(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm</p> <p>c Tony Shahnam acted as Principal in Charge by providing overview of design services for SGM Engineering's modifications to the CCTV video surveillance system, as well as access control system design for the new crime scene lab and evidence holding facility for Indian County Sheriff's office. Project Cost: \$400,000</p> | | |
| City of Riviera Beach, HVAC Replacement at City Hall, Riviera Beach, FL | 2011 | 2012 |
| <p>(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm</p> <p>d Tony acted as Principal in Charge for the replacement of the HVAC system at the City Hall in Riviera Beach. All duct work was redesigned to include thermostat placement, air flow returns, diffusers, energy management system and other compensating devising to provide maximum system adjustments and flexibility. Project Cost: \$325,000</p> | | |
| MacDill Air Force Base, 6th Contracting Squadron, Demo/Consol, CE Storage Facilities, Tampa, FL | 2013 | 2014 |
| <p>(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm</p> <p>e SGM Engineering provided Civil, Structural, Architectural, MEP/FP design Services for this multi-phased Design-Build project as part of a Multiple Award Construction Contract at MacDill Air Force Base. The facility is used for the storage/maintenance of landscaping machines and lawn equipment serving the entire base. Project Cost: \$1.2M</p> | | |

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

| | | | | | |
|---|--|---|--|-----------------------|----------------------------------|
| 12. NAME David McGowan, P.E., LEED AP, BEMP, CPMP | 13. ROLE IN THIS CONTRACT Project Manager | 14. YEARS EXPERIENCE <table border="1"> <tr> <td>a. TOTAL 11</td> <td>b. WITH CURRENT FIRM 2</td> </tr> </table> | | a. TOTAL 11 | b. WITH CURRENT FIRM 2 |
| a. TOTAL 11 | b. WITH CURRENT FIRM 2 | | | | |
| 15. FIRM NAME AND LOCATION (City and State) SGM Engineering, Inc., Deerfield Beach, FL | | | | | |
| 16. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science, Mechanical Engineering, University of Utah | | 17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Florida #69768, LEED Accredited Professional, Building Energy Modeling Professional, ASHRAE, CPMP | | | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Affiliations: Member of the American Society of Heating, Refrigerating, and Air Conditioning Engineers, Florida Engineering Society, and USGBC | | | | | |

19. RELEVANT PROJECTS

| (1) TITLE AND LOCATION (City and State) | (2) YEAR COMPLETED | |
|---|---|--|
| Broward College, Art Display Building HVAC Upgrade, Davie, FL | PROFESSIONAL SERVICES 2014 | CONSTRUCTION (If applicable) 2014 |
| a (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Dave McGowan acted as Project Manager for the MEP/FP design services for the HVAC Upgrade of the Art Display Building at Broward College. This provided humidity control and provided a design consisting of a 3 ton split system to meet the art department's standards for preserving the artwork. Project Cost: \$12,000 | | |
| Indian River County Sheriff's Office, Indian River County Government, Vero Beach, FL | PROFESSIONAL SERVICES 2012 | CONSTRUCTION (If applicable) 2013 |
| b (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Mr. McGowan, acting as Project Manager, provided modifications to the CCTV video surveillance system and access control system design for the new crime scene lab and evidence holding facility for Indian County Sheriff's office. This project was performed under a Continuing Contract. Project Cost: \$400,000 | | |
| Florida International University, Generator Study, Miami, FL | PROFESSIONAL SERVICES 2012 | CONSTRUCTION (If applicable) n/a |
| c (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Dave acted as Project Manager for the field survey and investigation in order to identify existing generators and its respective fuel tanks at 29 various buildings on the FIU Modesto A. Maidique campus. All data was prepared for Florida International University in order to provide the Department of Environmental Resources Management with all requested information. Project Cost: \$13,600 | | |
| Florida International University: Strobe Fans for Marine Science Building, Miami, FL | PROFESSIONAL SERVICES 2012 | CONSTRUCTION (If applicable) 2013 |
| d (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm SGM provided the evaluation of the existing Marine Science Building's laboratory chemical exhaust system and also provided design documents to replace three existing Strobic fans with new laboratory chemical exhaust fans. Dave acted as Project Manager. Project Cost: \$545,271 | | |
| Florida International University, Engineering Center Generator, Miami, FL | PROFESSIONAL SERVICES 2012 | CONSTRUCTION (If applicable) 2013 |
| e (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm SGM provided MEP/P design for the replacement of two interior 260KW generators and hot sync controller at FIU Engineering Center Central Energy Plant. The design included the reuse of 2,000 gallon remote fuel tank. Dave acted as Project Manager. Project Cost: \$350,000 | | |

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

| | | | | | | | |
|---|--|---|--|----------|----------------------|-----------|----------|
| 12. NAME Mark Escott, P.E., CxA, LEED AP | 13. ROLE IN THIS CONTRACT Electrical Engineer | 14. YEARS EXPERIENCE <table border="1"> <tr> <td>a. TOTAL</td> <td>b. WITH CURRENT FIRM</td> </tr> <tr> <td>25</td> <td>9</td> </tr> </table> | | a. TOTAL | b. WITH CURRENT FIRM | 25 | 9 |
| a. TOTAL | b. WITH CURRENT FIRM | | | | | | |
| 25 | 9 | | | | | | |
| 15. FIRM NAME AND LOCATION (City and State) SGM Engineering, Inc., Deerfield Beach, FL | | | | | | | |
| 16. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science, Electrical Engineering, University of South Florida | | 17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Registered Professional Engineer – FL #50737; ACG Certified Commissioning Agent; LEED Accredited Professional | | | | | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Affiliations: Florida Chapter of Electrical Inspectors Grounding; American Builders; Project Management. Training includes: OSHA Construction Industry Standards, Florida Building Code Administrative Core Training; Automatic Fire Alarm Association NFPA 72 Training; SGM Engineering's Electrical Department Manager | | | | | | | |

19. RELEVANT PROJECTS

| (1) TITLE AND LOCATION (City and State) | (2) YEAR COMPLETED | |
|--|---|--|
| Indian River County Government, Indian River County Sheriff's Office, Vero Beach, FL | PROFESSIONAL SERVICES 2012 | CONSTRUCTION (If applicable) 2013 |
| a (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Mark Escott, acting as an Electrical Engineer, oversaw the Electrical design components for SGM Engineering's modifications to the CCTV video surveillance system and access control system design for the new crime scene lab and evidence holding facility. This project was performed under a Continuing Contract. Project Cost: \$400,000 | | |
| Orange County Government, Courthouse Evidence Room Relocation, Orlando, FL | PROFESSIONAL SERVICES 2010 | CONSTRUCTION (If applicable) 2011 |
| b (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm SGM provided full MEP engineering services for the evidence room relocation within the Orange County Government Courthouse. Mark's scope of work included full system design including access control with proximity scanners, high resolution CCTV (video surveillance at strategic points of entry), voice/audio, intercom/communication system, and intrusion detection systems. Project Cost: \$1M | | |
| Orange County Government, Fire Station #36, #66, and #76, Orlando, FL | PROFESSIONAL SERVICES 2009 | CONSTRUCTION (If applicable) 2010 |
| c (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm SGM provided full MEP/FP engineering design services for the generator replacement at Orange County Government's Fire Stations #36, #66, and #76. SGM's scope included the removal of the existing generator and transfer switch system at the Fire Stations. Mr. Escott acted as Electrical Engineer for this project. Project Cost: 1.5M | | |
| Town of Palm Beach, Street/Site Lighting, Palm Beach, FL | PROFESSIONAL SERVICES 2010 | CONSTRUCTION (If applicable) 2011 |
| d (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm SGM replaced the existing light poles with new fixtures/poles and connected them to an existing circuit. Additionally, SGM removed existing conductors that did not have enough slack to provide connection to the new pull-box; new conductors were installed in its place. Mark acted as Lead Electrical Engineer for this project. Project Cost: \$1.6M | | |
| City of Riviera Beach HVAC Replacement at City Hall, Riviera Beach, FL | PROFESSIONAL SERVICES 2011 | CONSTRUCTION (If applicable) 2012 |
| e Mark acted as Electrical Engineer for the replacement of the HVAC system at City Hall. The goal of this project was to reduce the number of HVAC systems from eight to two units with strategic redundancy for common areas within the building. Project Cost: \$325,000 | | |

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

| | | | | | |
|--|---|--|--|-----------------------|----------------------------------|
| 12. NAME Justin Mundell, P.E., RCDD | 13. ROLE IN THIS CONTRACT Electrical Engineer – Systems, Audio, and Security | 14. YEARS EXPERIENCE <table border="1"> <tr> <td>a. TOTAL 11</td> <td>b. WITH CURRENT FIRM 7</td> </tr> </table> | | a. TOTAL 11 | b. WITH CURRENT FIRM 7 |
| a. TOTAL 11 | b. WITH CURRENT FIRM 7 | | | | |
| 15. FIRM NAME AND LOCATION (City and State) SGM Engineering, Inc., Deerfield Beach, FL | | | | | |
| 16. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science, Electrical Engineering, University of Central Florida | | 17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Registered Professional Engineer – FL #70700 FL; Registered Communications Distribution Designer | | | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Affiliations: Florida Engineering Society | | | | | |

19. RELEVANT PROJECTS

| (1) TITLE AND LOCATION (City and State) | (2) YEAR COMPLETED | |
|--|---|--|
| Indian River County Government, Indian River County Sheriff's Office, Vero Beach, FL | PROFESSIONAL SERVICES 2012 | CONSTRUCTION (If applicable) 2013 |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm a Mr. Mundell, Electrical Engineer – Systems, Audio, and Security Engineer, provided modifications to the CCTV video surveillance system and access control system design for the new crime scene lab and evidence holding facility for Indian County Sheriff's office. This project was performed under a Continuing Contract. Justin's scope of services included the design for the installation of three additional CCTV video surveillance systems 360 degree cameras. Project Cost: \$400,000 | | |
| City of Riviera Beach HVAC Replacement at City Hall, Riviera Beach, FL | PROFESSIONAL SERVICES 2011 | CONSTRUCTION (If applicable) 2012 |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm b Justin acted as Electrical Engineer – Systems, Audio, and Security Engineer for the replacement of the HVAC system at City Hall. The goal of this project was to reduce the number of HVAC systems from eight to two units with strategic redundancy for common areas within the building. Project Cost: \$325,000 | | |
| Orange County Government, Fire Station #36, #66, and #76, Orlando, FL | PROFESSIONAL SERVICES 2009 | CONSTRUCTION (If applicable) 2010 |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm c SGM provided full MEP/FP engineering design services for the generator replacement at Orange County Government's Fire Stations #36, #66, and #76. SGM's scope included the removal of the existing generator and transfer switch system at the Fire Stations. Mr. Mundell acted as Electrical Engineer – Systems, Audio, and Security Engineer for this project. Project Cost: 1.5M | | |
| Town of Palm Beach, Street/Site Lighting, Palm Beach, FL | PROFESSIONAL SERVICES 2010 | CONSTRUCTION (If applicable) 2011 |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm d SGM replaced the existing light poles with new fixtures/poles and connected them to an existing circuit. Additionally, SGM removed existing conductors that did not have enough slack to provide connection to the new pull-box; new conductors were installed in its place. Justin acted as Electrical Engineer – Systems, Audio, and Security Engineer for this project. Project Cost: \$1.6M | | |
| Florida International University: Strobe Fans for Marine Science Building, Miami, FL | PROFESSIONAL SERVICES 2012 | CONSTRUCTION (If applicable) 2013 |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm e SGM provided the evaluation of the existing Marine Science Building's laboratory chemical exhaust system and also provided design documents to replace three existing Strobic fans with new laboratory chemical exhaust fans. Justin acted as Electrical Engineer – Systems, Audio, and Security Engineer. Project Cost: \$545,271 | | |

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

| | | | | | |
|--|--|--|--|-----------------------|----------------------------------|
| 12. NAME John Ball, P.E., LEED AP | 13. ROLE IN THIS CONTRACT Mechanical Engineer | 14. YEARS EXPERIENCE <table border="1"> <tr> <td>a. TOTAL 16</td> <td>b. WITH CURRENT FIRM 1</td> </tr> </table> | | a. TOTAL 16 | b. WITH CURRENT FIRM 1 |
| a. TOTAL 16 | b. WITH CURRENT FIRM 1 | | | | |
| 15. FIRM NAME AND LOCATION (City and State) SGM Engineering, Inc., Deerfield Beach, FL | | | | | |
| 16. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science, Mechanical Engineering, Mississippi State University, 1997 | | 17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Registered Professional Engineer – FL #66893; LEED Accredited Professional | | | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Affiliations: Member of the American Society of Heating, Refrigerating, and Air-Conditioning Engineers; Florida Engineering Society; National Protection Association, Department Manager of Mechanical Engineering at SGM Engineering, Inc. | | | | | |

19. RELEVANT PROJECTS

| (1) TITLE AND LOCATION (City and State) | (2) YEAR COMPLETED | |
|---|-----------------------|------------------------------|
| | PROFESSIONAL SERVICES | CONSTRUCTION (If applicable) |
| Valencia College, Park Place Office Building Renovation: MEP Services, Orlando, FL | 2013 | 2014 |
| a (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm John Ball acted as Mechanical Engineer for this renovation of the existing 57,000-SF, five story, L-shaped building to serve as Valencia College's administrative headquarters. John Ball conducted a full survey and identified the existing condition of building MEP system, and then provided a report including a probable cost estimate for each component of the system. Project Cost: \$5.8M | | |
| Broward College, Art Display Building HVAC Upgrade, Davie, FL | 2014 | 2014 |
| b (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm John Ball acted as Mechanical Engineer for the MEP/FP design services for the HVAC Upgrade of the Art Display Building at Broward College. This provided humidity control and provided a design consisting of a 3 ton split system to meet the art department's standards for preserving the artwork. Project Cost: \$12,000 | | |
| MacDill Air Force Base, 6th Contracting Squadron, Demo/Consol, CE Storage Facilities, Tampa, FL | 2013 | 2014 |
| c (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm SGM provided Civil, Structural, Architectural, MEP/FP design Services for this multi-phased Design-Build project as part of a Multiple Award Construction Contract at MacDill Air Force Base. The facility is used for the storage/maintenance of landscaping machines and lawn equipment serving the entire base. John acted as Mechanical Engineer for this project and oversaw all of the design and reviews all documents. Project Cost: \$1.2M | | |
| Citrus Elementary School HVAC Upgrade, School District of Indian River County, Vero Beach, FL | 2013 | 2014 |
| d (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm John Ball, as Lead Mechanical Engineer, is responsible for the HVAC Upgrade at Citrus Elementary School. SGM was responsible for the MEP design for the relocation of the existing HVAC/ Mechanical, including the pump room and its equipment. This project included the demolition of existing mechanical room, new mechanical room, and re-route underground chilled water piping. Project Cost: \$54,264 | | |
| Florida International University, Satellite Chiller Plant, Miami, FL | 2013 | 2013 |
| e (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm John acted as Mechanical Engineer for the design a new satellite utility plant on the Florida International University main campus. The chiller plant was designed to accommodate future chilled water and condenser water piping system which are capable of accommodating another 3-1500 ton chillers, cooling towers, and pumps. Project Cost: \$6M | | |

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

| | | | |
|--|---|---|----------------------------------|
| 12. NAME Ben Fauser, P.E., LEED AP | 13. ROLE IN THIS CONTRACT Mechanical Engineer | 14. YEARS EXPERIENCE | |
| | | a. TOTAL 11 | b. WITH CURRENT FIRM 2 |
| 15. FIRM NAME AND LOCATION (City and State) SGM Engineering, Inc., Deerfield Beach, FL | | | |
| 16. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science, Mechanical Engineering, Mississippi State Missouri | | 17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Registered Professional Engineer – FL #67008; LEED Accredited Professional | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Affiliations: Member of the American Society of Heating, Refrigerating, and Air-Conditioning Engineers; Florida Engineering Society; USGBC | | | |

19. RELEVANT PROJECTS

| (1) TITLE AND LOCATION (City and State) | (2) YEAR COMPLETED | |
|--|-----------------------|------------------------------|
| | PROFESSIONAL SERVICES | CONSTRUCTION (If applicable) |
| U.S. Department of Veteran Affairs, Design-Build Cooling Tower Addition, Orlando, FL | 2013 | 2014 |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm a SGM was the Engineer of Record for the design and construction of an additional cooling tower at the Orlando Lake Baldwin Campus along with upgrades inside the Central Energy Plant (CEP). The items that were included in the CEP consisted of repainted interior walls, repainted epoxy flooring and safety lines, designed additional overhead lighting and reinsulated selected supply lines. Ben acted as Mechanical Engineer. Project Cost: \$780,000 | | |
| Florida International University, Satellite Chiller Plant, Miami, FL | 2013 | 2013 |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm b Ben acted as Mechanical Engineer for the design a new satellite utility plant on the Florida International University main campus. The purpose of the project is to provide cooling requirement for existing campus facilities and future growth of the campus. The chiller plant is designed to accommodate future chilled water and condenser water piping system which are capable to accommodate another 3-1500 ton chillers, cooling towers, and pumps. Project Cost: \$6M | | |
| Valencia College, Park Place Office Building Renovation: MEP Services, Orlando, FL | 2013 | 2014 |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm c Ben Fauser acted as Mechanical Engineer for this renovation of the existing 57,000-SF, five story, L-shaped building to serve as Valencia College's administrative headquarters. Ben Fauser conducted a full survey and identified the existing condition of building MEP system, and then provided a report including a probable cost estimate for each components of the system. Project Cost: \$5.8M | | |
| Broward College, Art Display Building HVAC Upgrade, Davie, FL | 2014 | 2014 |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm d Ben Fauser acted as Mechanical Engineer for the MEP/FP design services for the HVAC Upgrade of the Art Display Building at Broward College. This provided humidity control and provided a design consisting of a 3 ton split system to meet the art department's standards for preserving the artwork. Project Cost: \$12,000 | | |
| Florida International University: Strobe Fans for Marine Science Building, Miami, FL | 2012 | 2013 |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm e SGM provided the evaluation of the existing Marine Science Building's laboratory chemical exhaust system and also provided design documents to replace three existing Strobic fans with new laboratory chemical exhaust fans. Ben acted as Mechanical Engineer. Project Cost: \$545,271 | | |

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

| | | | |
|--|---|--|----------------------------------|
| 12. NAME Jerry Schneider | 13. ROLE IN THIS CONTRACT Plumbing and Fire Protection Engineer | 14. YEARS EXPERIENCE | |
| | | a. TOTAL 21 | b. WITH CURRENT FIRM 7 |
| 15. FIRM NAME AND LOCATION (City and State) SGM Engineering, Inc., Deerfield Beach, FL | | | |
| 16. EDUCATION (DEGREE AND SPECIALIZATION) Autodesk Training for Building Systems | | 17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Affiliations: Member of the American Society of Heating, Refrigerating, and Air-Conditioning Engineers; Member of Autodesk User Group International, Plumbing and Fire Protection Engineering Department Manager | | | |

19. RELEVANT PROJECTS

| | (1) TITLE AND LOCATION (City and State) | (2) YEAR COMPLETED | |
|---|--|-----------------------|------------------------------|
| | | PROFESSIONAL SERVICES | CONSTRUCTION (If applicable) |
| a | MacDill Air Force Base, 6th Contracting Squadron, Demo/Consol, CE Storage Facilities, Tampa, FL | 2013 | 2014 |
| | (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm SGM provided MEP/FP design for this Design-Build project as part of a Multiple Award Construction Contract. The facility is used for the storage/maintenance of landscaping machines and lawn equipment. Jerry acted as Plumbing and Fire Protection Engineer for this project. Project Cost: \$1.2M | | |
| b | Orange County Government, Fire Station #36, #66, and #76, Orlando, FL | 2009 | 2010 |
| | (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm SGM provided full MEP/FP engineering design services for the generator replacement at Orange County Government's Fire Stations #36, #66, and #76. SGM's scope included the removal of the existing generator and transfer switch system at the Fire Stations. Mr. Schneider acted as Plumbing and Fire Protection Engineer for this project. Project Cost: 1.5M | | |
| c | Orange County Government: Horizon's Corrections Facility – MEP/FP Design Services, Orlando, FL | 2010 | 2011 |
| | (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm SGM provided MEP/FP design services for the Horizon's Correction Facility. SGM's primary design scope included the design and replacement of the existing domestic water systems through the entire building. Jerry acted as a Plumbing and Fire Protection Engineer for this project. Project Cost: \$787,000 | | |
| d | City of Hialeah, Public Works Facility, Hialeah, FL | 2011 | 2012 |
| | (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Jerry acted as the Plumbing and Fire Protection Engineer for the full MEP/FP renovation services for the Public Works Facility in Hialeah, FL. SGM provided a detailed report that outlined the existing conditions, identified the current deficiencies/code violations, as well as how to cost effectively correct the problems. The main office building had major MEP improvements and an additional 1,600-SF of space was added on to the northeast corner. Project Cost: \$1.6M | | |
| e | Orange County Government, Fire Station #36, #66, and #76, Orlando, FL | 2009 | 2010 |
| | (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm SGM provided full MEP/FP engineering design services for the generator replacement at Orange County Government's Fire Stations #36, #66, and #76. SGM's scope included the removal of the existing generator and transfer switch system at the Fire Stations. Mr. Schneider acted as Plumbing and Fire Protection Engineer for this project. Project Cost: 1.5M | | |

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

| | | | | | |
|---|--|---|--|-----------------------|----------------------------------|
| 12. NAME George Hayner, P.E., CxA | 13. ROLE IN THIS CONTRACT Plumbing/Fire Protection Engineer | 14. YEARS EXPERIENCE <table border="1"> <tr> <td>a. TOTAL 11</td> <td>b. WITH CURRENT FIRM 4</td> </tr> </table> | | a. TOTAL 11 | b. WITH CURRENT FIRM 4 |
| a. TOTAL 11 | b. WITH CURRENT FIRM 4 | | | | |
| 15. FIRM NAME AND LOCATION (City and State) SGM Engineering, Inc., Deerfield Beach, FL | | | | | |
| 16. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science, Mechanical Engineering, University of Central Florida | | 17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Registered Professional Engineer – FL #70682, ACG Certified Commissioning Agent | | | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Affiliations: Member of the American Society of Heating, Refrigerating, and Air-Conditioning Engineers; Florida Engineering Society, National Fire Protection Association, USGBC | | | | | |

19. RELEVANT PROJECTS

| (1) TITLE AND LOCATION (City and State) | (2) YEAR COMPLETED | |
|---|--|--|
| MacDill Air Force Base, 6th Contracting Squadron, Demo/Consol, CE Storage Facilities, Tampa, FL | PROFESSIONAL SERVICES 2013 | CONSTRUCTION (If applicable) 2014 |
| a (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm SGM provided MEP/FP design for this Design-Build project as part of a Multiple Award Construction Contract. The facility is used for the storage/maintenance of landscaping machines and lawn equipment. George acted as Plumbing/Fire Protection Engineer for this project. Project Cost: \$1.2M | | |
| (1) TITLE AND LOCATION (City and State) Orange County Government: Horizon's Corrections Facility – MEP/FP Design Services, Orlando, FL | (2) YEAR COMPLETED PROFESSIONAL SERVICES 2010 | CONSTRUCTION (If applicable) 2011 |
| b (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm SGM provided MEP/FP design services for the Horizon's Correction Facility. SGM's primary design scope included the design and replacement of the existing domestic water systems through the entire building. George acted as a Plumbing/Fire Protection Engineer for this project. Project Cost: \$787,000 | | |
| (1) TITLE AND LOCATION (City and State) Florida International University: Strobe Fans for Marine Science Building, Miami, FL | (2) YEAR COMPLETED PROFESSIONAL SERVICES 2012 | CONSTRUCTION (If applicable) 2013 |
| c (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm SGM provided the evaluation of the existing Marine Science Building's laboratory chemical exhaust system and also provided design documents to replace three existing Strobic fans with new laboratory chemical exhaust fans. George acted as the Plumbing/Fire Protection Engineer for this project. Project Cost: \$545,271 | | |
| (1) TITLE AND LOCATION (City and State) Valencia College, Park Place Office Building Renovation: MEP Services, Orlando, FL | (2) YEAR COMPLETED PROFESSIONAL SERVICES 2013 | CONSTRUCTION (If applicable) 2014 |
| d (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Ben Fauser acted as Plumbing/Fire Protection Engineer for this renovation of the existing 57,000-SF, five story, L-shaped building to serve as Valencia College's administrative headquarters. George Hayner conducted a full survey and identified the existing condition of building plumbing and fire protection systems, and then provided a report including a probable cost estimate for each components of the system. Project Cost: \$5.8M | | |
| (1) TITLE AND LOCATION (City and State) City of Hialeah, Public Works Facility, Hialeah, FL | (2) YEAR COMPLETED PROFESSIONAL SERVICES 2011 | CONSTRUCTION (If applicable) 2012 |
| e (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm George acted as Plumbing/Fire Protection Engineer for the full MEP/FP renovation services for the Public Works Facility in Hialeah, FL. SGM provided a detailed report that outlined the existing conditions, identified the current deficiencies/code violations, as well as how to cost effectively correct the problems. The main office building had major MEP improvements and an additional 1,600-SF of space was added on to the northeast corner. Project Cost: \$1.6M | | |

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

| | | | |
|--|--|--|----------------------------------|
| 12. NAME Nassi Rahbari, CxA | 13. ROLE IN THIS CONTRACT Building Commissioning | 14. YEARS EXPERIENCE | |
| | | a. TOTAL 29 | b. WITH CURRENT FIRM 3 |
| 15. FIRM NAME AND LOCATION (City and State) SGM Engineering, Inc., Deerfield Beach, FL | | | |
| 16. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science, Engineering and Computer Sciences, University of Central Florida | | 17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Certified Commissioning Agent | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Affiliations: Commissioning Department Manager | | | |

19. RELEVANT PROJECTS

| | (1) TITLE AND LOCATION (City and State) | (2) YEAR COMPLETED | |
|---|--|-----------------------|------------------------------|
| | | PROFESSIONAL SERVICES | CONSTRUCTION (If applicable) |
| a | P1267 French Creek Mess Hall 128, Marine Corps Base Camp Lejeune, NC | 2012 | 2014 |
| | (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm SGM provided Commissioning services for the LEED Enhanced Commissioning for a Design Build, state-of-the-art Mess Hall at French Creek. This 21,840SF facility includes high efficiency kitchens, bakery, and a drive-thru. Nassi acted as Lead CxA responsible for shop drawing review, on-site functional analysis, and construction inspections. LEED Gold Pending. Project Cost: \$14M | | |
| b | Main Downtown Library Retro-Commissioning / Design Improvements (SF330 Sec F, #9), City of Jacksonville, FL | 2014 | 2014 |
| | (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Nassi Rahbari, Lead Commissioning Authority, address major energy deficiencies with existing building systems and building envelope pressurization in their downtown, 300,000SF Main Library. Services provided include Retro-Commissioning and recommended design improvements as the prime consultant. Project Cost: \$2.5M | | |
| c | Combat Engineer Maintenance OPS Center, Marine Corps Base Camp Lejeune, NC | 2013 | 2014 |
| | (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm SGM is providing LEED Enhanced Commissioning for a design-build, multi-phased military tactical project for the 2 ND Combat Engineer Battalion at Camp Lejeune Marine Corps Base in North Carolina. Nassi provided the Commissioning for eight new facilities including administrative, maintenance, armory, indoor marksmanship, and showers with locker areas. Nassi acted as Lead Commissioning Authority. LEED Silver Pending. Project Cost: \$64M | | |
| d | P1319 Camp Johnson Bachelor Enlisted Quarters Marine Corps Base Camp Lejeune, NC | 2012 | 2013 |
| | (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm SGM provided LEED Enhanced Commissioning for design and construction of two 85-room Bachelor Enlisted Quarters, as well as a parking garage with a large photovoltaic array. Nassi acted as Lead Commissioning Agent and Provided a Commissioning report, on-site functional analysis/testing, meetings with NAVFAC and the Design Build team, OMSI, and construction inspection services. LEED Gold Pending. Project Cost: \$27M | | |
| e | Orange County Government, Internal Operations Centre II, Orlando, FL | 2014 | 2014 |
| | (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Mr. Rahbari acted as the Lead Commissioning Agent for the Fundamental Commissioning for the Internal Operations Centre II of all MEP systems and controls for both the Construction Phase and Occupancy/Operation Phase. Nassi's scope of work consisted of review of submittals, providing comments to the Engineer of Record, developing a Commissioning plan, execute Commissioning meetings, reviewing the system verification checklist, witness the functional performance tests, and review the Test and Balance report. Project cost: \$150,000 | | |

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

| | | | |
|------------------------------------|---|-----------------------|-----------------------------------|
| 12. NAME Victor Goykhman | 13. ROLE IN THIS CONTRACT QA/QC Manager | 14. YEARS EXPERIENCE | |
| | | a. TOTAL 39 | b. WITH CURRENT FIRM 18 |

15. FIRM NAME AND LOCATION (City and State)

SGM Engineering, Inc., Deerfield Beach, FL

16. EDUCATION (DEGREE AND SPECIALIZATION)

**Bachelor of Science, Electrical Engineering,
Polytechnic University**

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Affiliations: Vice President of SGM Engineering.

19. RELEVANT PROJECTS

| | (1) TITLE AND LOCATION (City and State) | (2) YEAR COMPLETED | |
|---|---|-----------------------|------------------------------|
| | | PROFESSIONAL SERVICES | CONSTRUCTION (If applicable) |
| a | Florida International University: Strobe Fans for Marine Science Building, Miami, FL | 2012 | 2013 |
| | (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm SGM provided the evaluation of the existing Marine Science Building's laboratory chemical exhaust system and also provided design documents to replace three existing Strobic fans with new laboratory chemical exhaust fans. Victor acted as QA/QC Manager. Project Cost: \$545,271 | | |
| b | Florida International University, Generator Study, Florida International University, Miami, FL | 2012 | n/a |
| | (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Victor Goykhman acted as QA/QC Manager for the survey and identification of the existing generators and fuel tanks at 29 buildings on the Florida International University Modesto A. Maidique campus. The report included a spreadsheet with the generator size, catalog number, and serial number of the generators from field survey. Data cut sheets for each generator from the manufacturer was provided for each generator. Project Cost: \$13,600 | | |
| c | City of Riviera Beach, HVAC Replacement at City Hall, Riviera Beach, FL | 2011 | 2012 |
| | (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Victor acted as a QA/QC Manager for the replacement of the HVAC system at the City Hall in Riviera Beach. The goal of this project was to reduce the number of HVAC systems from eight to two (or three) units with strategic redundancy for common areas within the building (Main Lobby & City Council Chambers) and design of a new air-duct system to eliminate existing over/under cooling issues inherent in the existing system. Project Cost: \$325,000 | | |
| d | Town of Palm Beach, Street/Site Lighting, Palm Beach, FL | 2010 | 2011 |
| | (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Victor Goykhman acted as QA/QC Manager for the Street/Site Lighting in the Town of Palm Beach. SGM also replaced the existing light poles with new fixtures/poles and connected them to an existing circuit. Additionally, SGM removed existing conductors that did not have enough slack to provide connection to the new pull-box; new conductors were installed in its place. Project Cost: \$1.6M | | |
| e | Florida International University, Satellite Chiller Plant, Miami, FL | 2012 | 2013 |
| | (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Victor acted as QA/QC for the design a new satellite utility plant on the Florida International University main campus. The purpose of the project is to provide cooling requirement for existing campus facilities and future growth of the campus. The chiller plant is designed to accommodate future chilled water and condenser water piping system which are capable to accommodate another 3-1500 ton chillers, cooling towers, and pumps. Project Cost: \$6M | | |

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

| | | | | | | | |
|---|--|--|--|----------|----------------------|-----------|-----------|
| 12. NAME Jim Kloes, CCST-III | 13. ROLE IN THIS CONTRACT Construction Administration Manager | 14. YEARS EXPERIENCE <table border="1"> <tr> <td>a. TOTAL</td> <td>b. WITH CURRENT FIRM</td> </tr> <tr> <td align="center">48</td> <td align="center">10</td> </tr> </table> | | a. TOTAL | b. WITH CURRENT FIRM | 48 | 10 |
| a. TOTAL | b. WITH CURRENT FIRM | | | | | | |
| 48 | 10 | | | | | | |
| 15. FIRM NAME AND LOCATION (City and State) SGM Engineering, Inc., Deerfield Beach, FL | | | | | | | |
| 16. EDUCATION (DEGREE AND SPECIALIZATION) Certified Plumbing/Pipe Fitting Instructor, Purdue University | | 17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) ISA, Level III, Control Technician | | | | | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Affiliations: Member of the American Society of Heating, Refrigerating, and Air-Conditioning Engineers; Florida Engineering Society, National Fire Protection Association; USGBC | | | | | | | |

19. RELEVANT PROJECTS

| (1) TITLE AND LOCATION (City and State) | (2) YEAR COMPLETED | |
|---|---|--|
| Orange County Government, Fire Station #36, #66, and #76, Orlando, FL | PROFESSIONAL SERVICES 2009 | CONSTRUCTION (If applicable) 2010 |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm a SGM provided full MEP/FP engineering design services for the generator replacement at Orange County Government's Fire Stations #36, #66, and #76. SGM's scope included the removal of the existing generator and transfer switch system at the Fire Stations. Mr. Kloes acted as Construction Administration Manager for this project. Project Cost: 1.5M | | |
| Indian River County Government, Indian River County Sheriff's Office, Vero Beach, FL | PROFESSIONAL SERVICES 2012 | CONSTRUCTION (If applicable) 2013 |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm b Jim Kloes, acting as CA Manager, oversaw the Construction for SGM Engineering's modifications to the CCTV video surveillance system and access control system design for the new crime scene lab and evidence holding facility. This project was performed under a Continuing Contract. Project Cost: \$400,000 | | |
| Orange County Government, Courthouse Evidence Room Relocation, Orlando, FL | PROFESSIONAL SERVICES 2010 | CONSTRUCTION (If applicable) 2011 |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm c SGM provided Audio/Visual, Voice/Data, and Security Systems (in addition to MEP engineering services) for the evidence room relocation within the Orange County Government Courthouse. Jim provided CA services for the full system installation including access control with proximity scanners, high resolution CCTV, voice/audio, intercom/communication system, and intrusion detection systems. Project Cost: \$1M | | |
| City of Riviera Beach, HVAC Replacement at City Hall, Riviera Beach, FL | PROFESSIONAL SERVICES 2011 | CONSTRUCTION (If applicable) 2012 |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm d Jim acted as Construction Administration Manager for the replacement of the HVAC system at the City Hall in Riviera Beach. All duct work needed to be redesigned to include considerations for the thermostat placement, air flow returns, diffusers, energy management system and other compensating devising to provide maximum system adjustments and flexibility. Project Cost: \$325,000 | | |
| City of Hialeah, Public Works Facility, City of Hialeah, Hialeah, FL | PROFESSIONAL SERVICES 2011 | CONSTRUCTION (If applicable) 2012 |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm e Jim Kloes, Construction Administration Manager, provided engineering design services for this Public Work Facility. This main office building had major MEP improvements and an extra 1,600-SF of space added. SGM provided a detailed report outlining the existing conditions while identifying the current deficiencies and code violations and how to cost effectively correct the problems. Construction Cost: \$1.5M | | |

| | | | | |
|---|--|--|--------------------------------------|--|
| F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i> | | 20. EXAMPLE PROJECT KEY NUMBER 1 | | |
| 21. TITLE AND LOCATION <i>(City and State)</i> Demo/Consol, CE Storage Facilities (Bldgs 1075, 1083, 1084), Tampa, FL | | 22. YEAR COMPLETED <table border="1"> <tr> <td>PROFESSIONAL SERVICES 2013</td> <td>CONSTRUCTION <i>(If applicable)</i> 2014</td> </tr> </table> | PROFESSIONAL SERVICES 2013 | CONSTRUCTION <i>(If applicable)</i> 2014 |
| PROFESSIONAL SERVICES 2013 | CONSTRUCTION <i>(If applicable)</i> 2014 | | | |

23. PROJECT OWNER'S INFORMATION

| | | |
|--|---|---|
| a. PROJECT OWNER U.S. Air Force, MacDill Air Force Base, 6th Contracting Squadron | b. POINT OF CONTACT NAME Mack Reifers | c. POINT OF CONTACT TELEPHONE NUMBER (904) 886-2990 |
|--|---|---|

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

SGM Engineering provided Civil, Structural, Architectural, Mechanical, Electrical, Plumbing, and Fire Protection Design Services for this multi-phased Design-Build project as part of a Multiple Award Construction Contract at MacDill Air Force Base.

This large facility is primarily used for the storage and maintenance of large landscaping machines and relevant lawn equipment serving the entire base.

Architectural design included the design, installation, and construction of a new pre-engineered storage facility with open bays and enclosed storage. Additionally, open bay storage has roof ridge ventilation.

Civil engineering design primarily consisted of the clearing of previous groundskeeping facilities/hardscape work, grading, drainage, and permitting for new facility location.

Mechanical design components included a new ventilation system including new fans per ASHRAE minimum standards, motorized louvers, structural support frame members, controls, and protective housing. Additionally, SGM provided compressed air piping from the existing compressor to its new location. New piping (buried underground), valves, gauges, moisture separator, filter, and bib were also provided and installed.

Electrical design components included service lighting, lightning protection, and power. Fire Protection design included detection and notification.

SGM Engineering participated in site visits and hosted a kick-off meeting to develop a thorough understanding of the project scope. All drawings and designs were completed via AutoCAD and were compliant with 2011 MacDill Air Force Base's security and safety guidelines including ASHRAE, NFPA, UFC 3-410, and all applicable ETLs.

Construction Cost: \$1.2M

RELEVANCE TO THIS CONTRACT:

- ☒ Performed under a Continuing Contract
- ☒ Federal government project under \$2M
- ☒ Design of complete HVAC system
- ☒ Design of complete electrical-related systems and upgrades
- ☒ Electrical construction supervision/administration/management
- ☒ Preparation and delivery of as-built plans and specifications



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

| | | |
|--|---|---------------------------------|
| a. (1) FIRM NAME SGM Engineering, Inc. | (2) FIRM LOCATION <i>(City and State)</i> Deerfield Beach, FL | (3) ROLE MEP Engineer |
|--|---|---------------------------------|

| | | | | | | |
|---|-------------------------------------|---|-----------------------|-------------------------------------|-------------|-------------|
| F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i> | | 20. EXAMPLE PROJECT KEY NUMBER 2 | | | | |
| 21. TITLE AND LOCATION <i>(City and State)</i> Indian River County Sheriff's Office, Indian River County Government, Vero Beach, FL | | 22. YEAR COMPLETED <table border="1"> <tr> <td>PROFESSIONAL SERVICES</td> <td>CONSTRUCTION <i>(If applicable)</i></td> </tr> <tr> <td>2012</td> <td>2013</td> </tr> </table> | PROFESSIONAL SERVICES | CONSTRUCTION <i>(If applicable)</i> | 2012 | 2013 |
| PROFESSIONAL SERVICES | CONSTRUCTION <i>(If applicable)</i> | | | | | |
| 2012 | 2013 | | | | | |

23. PROJECT OWNER'S INFORMATION

| | | |
|---|--|--|
| a. PROJECT OWNER Indian River County Government | b. POINT OF CONTACT NAME Lynn Williams | c. POINT OF CONTACT TELEPHONE NUMBER (727) 226-1416 lwilliams@ircgov.com |
|---|--|--|

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

SGM Engineering provided modifications to the CCTV video surveillance system and access control system design for the new crime scene lab and evidence holding facility for Indian County Sheriff's office. This project was performed under a Continuing Contract.

The scope of services that SGM Engineering provided included, but was not limited to, the design for the installation of three additional CCTV video surveillance systems with 360 degree cameras. These additional cameras were tied into the new head-end in the crime scene building.

SGM installed 10 cameras and 16 doors/openings that need access control devices; one intercom/camera was also installed at the front entry.

All CCTV modifications complied with the 2010 Florida Building Code and 2010 Florida Fire Prevention Code, as well as the Owner's Standards.



Construction Cost: \$400,000

RELEVANCE TO THIS CONTRACT:

- ☒ Performed under a Continuing Contract
- ☒ A municipal project under \$2M
- ☒ Design of complete electrical-related systems and upgrade
- ☒ Preparation of plans and specifications
- ☒ Electrical construction supervision/administration/management
- ☒ Project close-out, testing, and reporting

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

| | | |
|--|---|---------------------------------|
| a. (1) FIRM NAME SGM Engineering, Inc. | (2) FIRM LOCATION <i>(City and State)</i> Deerfield Beach, FL | (3) ROLE MEP Engineer |
|--|---|---------------------------------|

| | | | | | | |
|---|-------------------------------------|---|-----------------------|-------------------------------------|-------------|-------------|
| F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i> | | 20. EXAMPLE PROJECT KEY NUMBER 3 | | | | |
| 21. TITLE AND LOCATION <i>(City and State)</i> Florida International University: Strobe Fans for Marine Science Building, Miami, FL | | 22. YEAR COMPLETED <table border="1"> <tr> <td>PROFESSIONAL SERVICES</td> <td>CONSTRUCTION <i>(If applicable)</i></td> </tr> <tr> <td>2012</td> <td>2013</td> </tr> </table> | PROFESSIONAL SERVICES | CONSTRUCTION <i>(If applicable)</i> | 2012 | 2013 |
| PROFESSIONAL SERVICES | CONSTRUCTION <i>(If applicable)</i> | | | | | |
| 2012 | 2013 | | | | | |

23. PROJECT OWNER'S INFORMATION

| | | |
|---|--|---|
| a. PROJECT OWNER Florida International University | b. POINT OF CONTACT NAME Slyvia Berenguer, Project Manager | c. POINT OF CONTACT TELEPHONE NUMBER (305) 348-4077 |
|---|--|---|

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

SGM Engineering was notified that the existing Marine Science Building was not exhausting sufficient air for the building use. SGM provided the evaluation of the existing building's laboratory chemical exhaust system and also provided design documents to replace three existing Strobic fans with new laboratory chemical exhaust fans. The fans were replaced with higher capacity fans that allow for future expansion of the labs to easily accommodate future chemical fume hoods in the building.

Construction Cost: \$545,271



RELEVANCE TO THIS CONTRACT:

- ☒ Project under \$2M
- ☒ Performed under a Continuing Contract
- ☒ Performed on an occupied facility
- ☒ Project close-out, testing, and reporting
- ☒ Development of bidding documents

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

| | | |
|--|---|---------------------------------|
| a. (1) FIRM NAME SGM Engineering, Inc. | (2) FIRM LOCATION <i>(City and State)</i> Deerfield Beach, FL | (3) ROLE MEP Engineer |
|--|---|---------------------------------|

| | | |
|---|---|---|
| F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i> | | 20. EXAMPLE PROJECT KEY NUMBER 4 |
| 21. TITLE AND LOCATION (City and State) Florida International University, Generator Study, Miami, Florida | 22. YEAR COMPLETED | |
| | PROFESSIONAL SERVICES 2012 | CONSTRUCTION (If applicable) n/a |

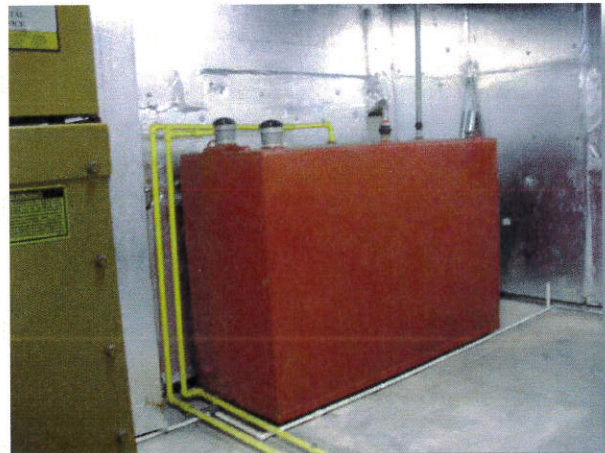
23. PROJECT OWNER'S INFORMATION

| | | |
|--|--|--|
| a. PROJECT OWNER Florida International University | b. POINT OF CONTACT NAME Danny Paan | c. POINT OF CONTACT TELEPHONE NUMBER (305) 348-4005 paand@fiu.edu |
|--|--|--|

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

SGM Engineering provided a field survey and investigation in order to identify existing generators and respective fuel tanks at 29 various buildings on the FIU Modesto A. Maidique campus. The report included a spreadsheet with the generator size, catalog number, and serial number of the generators from field survey. Additionally, information regarding the generator fuel tank size/style and whether unit mounted or stand alone tank was also included in the report/spreadsheet. Data cut sheets from the manufacturer, for each generator, was provided for each generator, as well. All info was prepared for Florida International University in order to provide the Department of Environmental Resources Management with all requested information.

This project was completed on time and within budget.



Project Cost: \$13,600

RELEVANCE TO THIS CONTRACT:

- ☒ Perform all field tests, laboratory tests, and collection of all necessary data
- ☒ A municipal project under \$2M
- ☒ Development of bidding documents
- ☒ Preparation of plans and specifications
- ☒ Preparation of cost estimates and budget recommendations
- ☒ Project close-out, testing, and reporting

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

| | | |
|---|---|---|
| a. (1) FIRM NAME SGM Engineering, Inc. | (2) FIRM LOCATION (City and State) Deerfield Beach, FL | (3) ROLE MEP/FP Engineer |
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| F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i> | | 20. EXAMPLE PROJECT KEY NUMBER 5 |
| 21. TITLE AND LOCATION (City and State) City of Riviera Beach HVAC Replacement at City Hall, Riviera Beach, FL | 22. YEAR COMPLETED | |
| | PROFESSIONAL SERVICES 2011 | CONSTRUCTION (If applicable) 2012 |

23. PROJECT OWNER'S INFORMATION

| | | |
|---|---|--|
| a. PROJECT OWNER City of Riviera Beach | b. POINT OF CONTACT NAME Brynt Johnson, CGC, LEED AP | c. POINT OF CONTACT TELEPHONE NUMBER (561) 845-4066 BJohnson@rivierabch.com |
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24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost)

SGM was hired to replace the HVAC system at the City Hall in Riviera Beach. The system to be replaced is composed of multiple HVAC packages with various tonnages which were incrementally put into service over time to address increasing service needs as the existing facility transitioned from less than 60% occupancy to full occupancy.

The goal of this project was to reduce the number of HVAC systems from eight to two units with strategic redundancy for common areas within the building (Main Lobby & City Council Chambers) and design of a new air-duct system to eliminate existing over/under cooling issues inherent in the existing system. The new high efficiency HVAC units provided ample cooling capacity to satisfy the cooling needs for the 22,000-SF City Hall which had large windows and approximately 75 full time employees along with 75 members of public at any given time.

All duct work needed to be redesigned to address each individual office space and to provide maximum comfort. This included considerations for the thermostat placement, air flow returns, diffusers, energy management system, and other compensating devising to provide maximum system adjustments and flexibility. Design services included, but were not limited to, the following: submitting a detailed preliminary report assessing the current average energy usage of the existing facility, the project needs – determining the proper equipment and/or upgrades needed, the estimated project time/costs for completion along with any/all drawings and specifications needed to accomplish the project goals. SGM also provided a projected cost savings scenario for the project based upon execution of our designs.

Construction Cost: \$325,000



RELEVANCE TO THIS CONTRACT:

- ☒ **Performed under a Continuing Contract**
- ☒ **A municipal project under \$2M**
- ☒ **Evaluation of existing electrical systems, including back-up generators and fire alarm system**
- ☒ **Provided signed and sealed construction drawings**

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

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|---|---|--|
| a. (1) FIRM NAME SGM Engineering, Inc. | (2) FIRM LOCATION (City and State) Deerfield Beach, FL | (3) ROLE MEP Engineer |
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| F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i> | | 20. EXAMPLE PROJECT KEY NUMBER 6 |
| 21. TITLE AND LOCATION <i>(City and State)</i> City of Hialeah, Public Works Facility, Hialeah, FL | 22. YEAR COMPLETED | |
| | PROFESSIONAL SERVICES 2011 | CONSTRUCTION <i>(If applicable)</i> 2012 |

23. PROJECT OWNER'S INFORMATION

| | | |
|--|---|--|
| a. PROJECT OWNER City of Hialeah | b. POINT OF CONTACT NAME Yvette London, Harvard Jolly | c. POINT OF CONTACT TELEPHONE NUMBER (954) 486-7910, Y.London@harvardjolly.com |
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24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

This Public Work Facility project for the City of Hialeah consisted of a site visit to obtain field conditions of the existing main office building, where customers enter to pay their utility bills. The main maintenance building was scheduled to be demolished. This main office building was to have major MEP improvements and have an extra 1,600-SF of space added on to the northeast corner to accommodate a large entry area and bill paying windows. SGM provided a detailed report outlining the existing conditions while identifying the current deficiencies and code violations and how to cost effectively correct the problems.

Upon conducting a conference call with the architect and the Director of the City of Hialeah Public Works, the client accepted our recommendations and requested a fee proposal to accommodate the additional services. SGM successfully completed and coordinated the design effort during multiple design and coordination meetings to meet the deadline of the project. Site visits were conducted during the design phase to verify existing above ceiling conditions to verify the design layout was constructible.

This project was completed on time and within budget.

Construction Cost: \$1.5M



RELEVANCE TO THIS CONTRACT:

- ☒ Perform all field tests, laboratory tests, and collection of all necessary data
- ☒ A municipal project under \$2M
- ☒ Development of bidding documents
- ☒ Preparation of plans and specifications
- ☒ Preparation of cost estimates and budget recommendations
- ☒ Project close-out, testing, and reporting

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

| | | | |
|----|---|---|---------------------------------|
| a. | (1) FIRM NAME SGM Engineering, Inc. | (2) FIRM LOCATION <i>(City and State)</i> Deerfield Beach, FL | (3) ROLE MEP Engineer |
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| F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i> | | 20. EXAMPLE PROJECT KEY NUMBER 7 |
| 21. TITLE AND LOCATION (City and State) Town of Palm Beach, Street/Site Lighting, Palm Beach, FL | 22. YEAR COMPLETED | |
| | PROFESSIONAL SERVICES 2010 | CONSTRUCTION (If applicable) 2011 |

23. PROJECT OWNER'S INFORMATION

| | | |
|--|--|--|
| a. PROJECT OWNER Town of Palm Beach | b. POINT OF CONTACT NAME Michael A. Roach, P.E. | c. POINT OF CONTACT TELEPHONE NUMBER (561) 838-5440 |
|--|--|--|

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

SGM Engineering provided engineering design services for the Street/Site Lighting in the Town of Palm Beach. SGM replaced the existing light poles with new fixtures/poles and connected them to an existing circuit. Additionally, SGM removed existing conductors that did not have enough slack to provide connection to the new pull-box; new conductors were installed in its place.

As a part of SGM's design light poles were moved to the back of the sidewalk to reduce potential damage from vehicles and allow enhanced accessibility in order to comply with the American Disabilities Act. Additionally, it was SGM Engineering's responsibility to improve and match the existing area where the lighting poles were to be installed, including similar style and height of the light fixtures and surrounding land modification.

Construction Cost: \$1.6M



RELEVANCE TO THIS CONTRACT:

- ☒ A municipality project under \$2M
- ☒ Development of bidding documents
- ☒ Preparation of plans and specifications
- ☒ Preparation of cost estimates and budget recommendations
- ☒ Project close-out, testing, and reporting

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

| | | | |
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| a. | (1) FIRM NAME SGM Engineering, Inc. | (2) FIRM LOCATION (City and State) Deerfield Beach, FL | (3) ROLE MEP Engineer |
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| F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i> | | 20. EXAMPLE PROJECT KEY NUMBER 8 |
| 21. TITLE AND LOCATION (City and State) Orange County Government: Courthouse Evidence Room Relocation, Orlando, FL | 22. YEAR COMPLETED | |
| | PROFESSIONAL SERVICES 2010 | CONSTRUCTION (If applicable) 2011 |

23. PROJECT OWNER'S INFORMATION

| | | |
|--|---|--|
| a. PROJECT OWNER Orange County Government | b. POINT OF CONTACT NAME Sara Flynn-Kramer | c. POINT OF CONTACT TELEPHONE NUMBER (407) 836-0048 |
|--|---|--|

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost)

SGM Engineering provided Audio/Visual, Voice/Data, and Security Systems (in addition to Mechanical, Electrical, and Plumbing/Fire Protection engineering services) for the evidence room relocation within the Orange County Government Courthouse. The facility consisted of a new office area, including desk spaces with new vaults located on each side of the area. SGM's scope of work included full system design including, but not limited to, the following: access control with proximity scanners, high resolution CCTV (video surveillance at strategic points of entry), voice/audio, intercom/communication system, and intrusion detection systems. The vaults were dual layered for maximum security of criminal, civil, weapons, and drug evidence. Additionally, SGM's scope included modifying a records room and building new concrete rooms. Full power, lighting, HVAC, and fire alarms were also designed.

SGM provided work on the 14th floor of the Courthouse; the space was renovated to provide storage for records. Large filing cabinets were replaced with additional office space, a breakroom, and an evidence review space. Securing the occupied area and making sure the facility could operate regularly was a design element that SGM accomplished. This project was high profile and highly visible, therefore timeliness of the project was a high priority.

This project was completed on time and within budget.

Construction Cost: \$1M



RELEVANCE TO THIS CONTRACT:

- ☒ Performed under a Continuing Contract
- ☒ A municipal project under \$2M
- ☒ Consultation services for electrical-related issues and troubleshooting related to audio/visual, acoustical, instrument and control, and CCTV
- ☒ Evaluation of existing HVAC systems
- ☒ Evaluation of existing electrical systems, including back-up generators and fire alarm systems

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

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|---|---|--|
| a. (1) FIRM NAME SGM Engineering, Inc. | (2) FIRM LOCATION (City and State) Deerfield Beach, FL | (3) ROLE MEP Engineer |
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| F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i> | 20. EXAMPLE PROJECT KEY NUMBER 9 |
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| 21. TITLE AND LOCATION (City and State) Orange County Government: Horizon's Corrections Facility – P/FP Design Services, Orlando, FL | 22. YEAR COMPLETED | |
| | PROFESSIONAL SERVICES 2010 | CONSTRUCTION (If applicable) 2011 |

23. PROJECT OWNER'S INFORMATION

| | | |
|--|---|--|
| a. PROJECT OWNER Orange County Government | b. POINT OF CONTACT NAME Sara Flynn-Kramer | c. POINT OF CONTACT TELEPHONE NUMBER (407) 836-0048 |
|--|---|--|

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost)

SGM Engineering provided Plumbing and Fire Protection design services for the Horizon's Correction Facility, located off of John Young Parkway in Orlando, Florida. The facility was an existing structure that was built in 1990. SGM's primary design scope included the design and replacement of the existing domestic water systems through the entire building.

SGM overcame a few challenges that needed to be taken into consideration during design; the facility was an occupied building that was actively running during the design and construction of this project, therefore phasing was pertinent to the project's success. This project was performed under a Continuing Contract.

This project was completed on time and within budget.

Construction Cost: \$787,000



RELEVANCE TO THIS CONTRACT:

- ☒ Performed under a Continuing Contract
- ☒ A municipal project under \$2M
- ☒ Development of bidding documents
- ☒ Preparation of plans and specifications
- ☒ Preparation of cost estimates and budget recommendations
- ☒ Project close-out, testing, and reporting

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

| | | | |
|-----------|--|---|--|
| a. | (1) FIRM NAME SGM Engineering, Inc. | (2) FIRM LOCATION (City and State) Deerfield Beach, FL | (3) ROLE MEP Engineer |
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| F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i> | | 20. EXAMPLE PROJECT KEY NUMBER 10 |
| 21. TITLE AND LOCATION <i>(City and State)</i> Orange County Government, Fire Station #36, #66, and #76, Orlando, FL | 22. YEAR COMPLETED | |
| | PROFESSIONAL SERVICES 2009 | CONSTRUCTION <i>(If applicable)</i> 2010 |

23. PROJECT OWNER'S INFORMATION

| | | |
|---|---|---|
| a. PROJECT OWNER Orange County Government | b. POINT OF CONTACT NAME Beth Yohe, MRI Architectural | c. POINT OF CONTACT TELEPHONE NUMBER (407) 245-3660 |
|---|---|---|

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

SGM Engineering provided full Mechanical, Electrical, Plumbing, and Fire Protection engineering design services for the generator replacement at Orange County Government's Fire Stations #36, #66, and #76.

As a part of the project scope, SGM provided engineering services for the removal of the existing generator and transfer switch system at the Fire Stations. Additionally, SGM provided electrical design services for an emergency generator/automatic transfer switch system to provide emergency power for the entire station. A proposed lift station, design services, construction administration, and three site visits for each Fire Station were included in the scope of work. The design of this project was completed with Auto CAD and backgrounds were furnished by SGM Engineering.

This was a replacement/renovation project and was performed under a Continuing Contact.

Construction Cost: \$1.5M



RELEVANCE TO THIS CONTRACT:

- ☒ Evaluation of facility energy usage and efficiency
- ☒ Local government project under \$2M
- ☒ Preparation of plans and specifications
- ☒ Design of complete electrical-related systems and upgrades

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

| | | |
|--|---|---------------------------------|
| a. (1) FIRM NAME SGM Engineering, Inc. | (2) FIRM LOCATION <i>(City and State)</i> Deerfield Beach, FL | (3) ROLE MEP Engineer |
|--|---|---------------------------------|

G. KEY PERSONNEL PARTICIPATION IN SAMPLE PROJECTS

| 26. NAMES OF KEY PERSONNEL (From Section E, Block 12) | 27. ROLE IN THIS CONTRACT (From Section E, Block 13) | 28. SAMPLE PROJECTS LISTED IN SECTION F (Fill in "Example Projects Key" section below before completing table. Place "X" under project key number for participation in same or similar role.) | | | | | | | | | |
|--|---|--|---|---|---|---|---|---|---|---|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Tony Shahnam, <i>P.E., F.E., CES, CHS-III, CxA</i> | Principal in Charge/President | X | X | X | X | X | X | X | X | X | X |
| David McGowan, <i>P.E., LEED AP, BEMP, CPMP</i> | Project Manager | X | X | X | X | | | | | | |
| John Ball, <i>P.E., LEED AP</i> | Mechanical Engineer | X | | | | | | | | | |
| Ben Fauser, <i>P.E., LEED AP</i> | Mechanical Engineer | X | X | X | X | | | | | | |
| Mark Escott, <i>P.E., CxA, LEED AP</i> | Electrical Engineer | X | X | X | X | X | X | X | X | X | X |
| Justin Mundell, <i>P.E., RCDD</i> | Electrical Engineer – Systems, Audio, Security | X | X | X | X | X | X | X | X | X | X |
| Jerry Schneider | Plumbing/Fire Protection Engineer | X | X | X | X | X | X | X | X | X | X |
| George Hayner | Plumbing/Fire Protection Engineer | X | X | X | X | X | X | X | X | X | |
| Nassi Rahbari, <i>CxA</i> | Lead Commissioning Authority | X | X | X | X | X | X | X | X | X | |
| Victor Goykhman | OA/QC Manager | X | X | X | X | X | X | X | X | X | X |
| Jim Kloes, <i>CCST-III</i> | Construction Administration Manager | X | X | X | X | X | X | X | X | X | X |

29. SAMPLE PROJECTS KEY

| NO. | TITLE OF SAMPLE PROJECT (FROM SECTION F) | NO. | TITLE OF SAMPLE PROJECT (FROM SECTION F) |
|-----|--|-----|--|
| 1 | Demo/Consol, CE Storage Facilities (Bldgs 1075, 1083, 1084), Tampa, FL | 6 | City of Hialeah, Public Works Facility, Hialeah, FL |
| 2 | Indian River County Sheriff's Office, Indian River County Government, Vero Beach, FL | 7 | Town of Palm Beach, Street/Site Lighting, Palm Beach, FL |
| 3 | Florida International University: Strobe Fans for Marine Science Building, Miami, FL | 8 | Orange County Government: Courthouse Evidence Room Relocation, Orlando, FL |
| 4 | Florida International University, Generator Study, Miami, Florida | 9 | Orange County Government: Horizon's Corrections Facility – P/FP Design Services, Orlando, FL |
| 5 | City of Riviera Beach HVAC Replacement at City Hall, Riviera Beach, FL | 10 | Orange County Government, Fire Station #36, #66, and #76, Orlando, FL |

H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION REQUESTED BY THE AGENCY. ATTACH ADDITIONAL SHEETS AS NEEDED.

Qualifications

SGM Engineering, Inc. (SGM) is a Certified Minority-Owned Business Enterprise, Professional Consulting Engineering Firm founded and incorporated in the State of Florida in 1991; DUNS Number 94-459-9141. For the past 23 years, SGM has been successfully delivering projects on time and under budget. SGM is registered to do business in multiple states and has an extensive Design-Build background associated with local and federal governmental, educational, and commercial industries which includes, but is not limited to, the following: analysis, design development/production of construction documents, energy efficiency, lighting/water usage analysis for **LEED facilities**, preparation of design documents for the installation of HVAC/lighting systems upgrades, conducting facility audits (which includes evaluation of facility equipment, lighting, and maintenance practices), system selection, heating/cooling load calculations, component selection, system integration leading to the preparation of drawings, specifications/ bidding documents for recommended modifications, understanding of thermodynamics/heat transfer (and its application to the design of HVAC systems), processing/measuring systems, value engineering, life cycle costing, post design drawing review, preparation of operational maintenance manuals, electronic communications systems, force protection, electronic communications, engineering studies/site investigations, designing security/fire protection systems, layouts, schematics, 3-D Solid Models, and Computer Aided Analysis Programs to complete our designs.

Location and Florida Licensed Staff

Our office is located in **Broward County** in South Florida at *700 W. Hillsboro Blvd., Building 3, Suite 212, Deerfield Beach, FL 33441*; **Phone:** (954) 421-1944; **Fax:** (954) 421-1924; **Website:** www.sgmengineering.com. SGM Engineering has **offices located throughout Florida** in Deerfield Beach, Orlando, and Tampa, and, as well as an office in Chevy Chase, Maryland. Our multiple office locations throughout the State of Florida allow SGM Engineering to respond efficiently and effectively. Our personnel from all office locations can support any projects administered by the City of Hollywood. Our point of contact for this contract is Tony Shahnami, President, *P.E., CxA, F.E., CES, CHS-II*. He may be reached at Tony@SGMEngineering.com. SGM Engineering, Inc. is an S-Corporation, incorporated in the State of Florida in 1991 (**23 years in business**). Our Corporation number is V02240.

Ability to Furnish the Required Services

Our team is well qualified and capable of designing all aspects of MEP/FP systems for renovations, additions, and new facilities with knowledgeable emphasis on codes and energy conservation requirements. Our staff is also familiar with the latest Force Protection/Anti-Terrorism criteria, IBC/UFC codes along with NFPA codes 70 and 101. SGM's role is to provide high quality design, engineering, analysis, inspection services, design construction documents, cost estimates, construction administration, and coordination efforts with Construction Managers and the City of Hollywood's representatives by ensuring that professional standards and timeliness of all projects are met.

Relevancy to This Contract:

Typical projects have included HVAC, indoor air quality (IAQ), chillers, air handler units (AHU), pumps, laboratory hoods, controls, electrical power, lighting, lightning arrestors, grounding, kitchen/cafeteria, emergency hurricane shelter program, fire alarm, energy management, construction management, peer review, and construction administration. Past experience has included, but is not limited to, the following:

- Conducting analysis, design development, and production of construction documents
- Providing water/wastewater pumping stations and treatment plant modifications
- Providing design of MEP systems, in whole or part, for small projects
- Conducting analysis of new and existing MEP systems conditions in government-owned buildings and facilities
- Conducting inspection and approval of MEP construction elements performed by outside contractors
- Providing pre-design MEP analysis to determine feasibility of new additions or modifications to existing buildings or facilities
- Conducting inspection of electrical systems and components, as required by County Ordinance, for 40-year old buildings and preparation of required reports.
- Providing energy, lighting, and water usage analysis (for **LEED facility design**)
- Providing Commissioning services (**including Fundamental and Retro-Commissioning**)

H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION REQUESTED BY THE AGENCY. ATTACH ADDITIONAL SHEETS AS NEEDED.

Ability of Professional Personnel

SGM's **Mechanical Engineers** have experience in the design of mechanical systems including, but not limited to, the following: fire protection systems, all types/sizes of HVAC systems, high temperature hot water boilers, piping, fluid systems, chilled water, compressed gas systems, elevators, hoists/cranes, specialized mechanical equipment, direct digital controls (DDC), programmable logic controllers (PLC), as well as facilities to house the mechanical equipment.

SGM's **Electrical Engineers** are skilled in the following design elements: medium/low voltage AC power systems, uninterruptible power systems, computer power conditioning, grounding, lightning protection, lighting, emergency power, hazardous area electrical installations, and control/monitoring systems. Previous project experience has consisted of utilizing electrical system designs, such as security installation in which CCTV, CATV, fire alarm, detection systems, voice evacuation, cable tray systems, communications systems, communications premise wiring, Electronic Security Systems (ESS), and intercom systems were designed/installed per national and local codes. SGM also has previous project experience associated with the "Anti-Terrorist Force Protection Act" which we have successfully applied to new and existing buildings.

Unique operations, often require secure communication channels, demand the skills of our BICSI RCDD credentialed professionals. SGM's designs are crafted to allow flexibility for growth and change, cutting edge technology, and the incorporation of future technologies. Specialized applications include integrated security, audio/visual presentation, voice/video/data distribution, public address/sound, intercom, CCTV, broadband distribution, and video tele-presence. SGM is highly experienced with communications in highly specialized facilities (such as SCIFs), and team members have attained the necessary clearances to work on classified facilities.

Our **Plumbing/Fire Protection Engineers** have the ability to design for domestic water systems, hot water return systems, equipment/fixtures identification, sanitary drainage system, storm drainage piping, liquid propane/natural gas systems, and boilers. Also, fire protection areas of expertise include, but are not limited to, the following: fire suppression requirements (light, ordinary, and extra hazard classifications), wet, dry, deluge/pre-action systems, backflow prevention/metering specifications, and fire flow tests (static, residual, and flow).

As part of our commitment to continued technical and professional development, we regularly send our staff of engineers and designers to seminars and training classes (such as USGBC, STFP, UFC, ASHRAE, NFPA, OSHA) which allows them to keep up-to-date with the latest design methodologies and state-of-the-art engineering technology. Our emphasis on continued training and education is a testimony to our belief in the principle that the time and resources spent for continued professional development and training is an investment in the firm's future.

SGM Continuing Service Contracts:

SGM maintains multiple **Continuing Services Contracts**, allowing us the opportunity to perform various A/E local government renovations. A sample of the Continuing Contracts SGM has recently held include:

- *U.S. Department of Labor - IDIQ for MEP Services*
- *Broward State College*
- *General State Administration State of Florida - A/E IDIQ*
- *U.S. Air Force, Tyndall AFB - IDIQ Open-ended Contract for Multi-discipline A/E Services*
- *City of Miami Gardens*
- *Town of Palm Beach - Mechanical and Electrical Engineering Consultants*
- *School District of Palm Beach County - MEP/FP and Cx Services*
- *Florida International University - Continuing MEP/FP and Cx Services*
- *Town of Fort Myers Beach - On-Going Mechanical, Electrical, and Controls Professional Services*
- *Lake County Government - Continued On-Call Commissioning/Retro-Commissioning Services*
- *St. John County - MEP Services*
- *City of Orlando - MEP/FP*
- *Hillsborough County Government - MEP/FP*
- *City of Tampa - MEP/FP*
- *Orange County Government - Commissioning*
- *United States Army Corps - Commissioning*

H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION REQUESTED BY THE AGENCY. ATTACH ADDITIONAL SHEETS AS NEEDED.

COST CONTROL

SGM's philosophy is to provide our clients with quality professional services, promptly after their request. We will maximize cost savings while designing and constructing all projects with on-time performance on a schedule that meets all of your expectations. This philosophy will be carried through by the following means:

- The project manager will communicate with your representatives and all team members throughout all phases of the project
- Establishing the project criteria during initial project kick-off meetings and assurance of applicable code compliance throughout the project implementation
- Attendance at meetings, provide cost estimating, and stay within the budget
- Careful maintenance of the project schedule and provide value engineering
- Close communication with the City of Hollywood's staff throughout the project to ensure needs and expectations are being met
- Close coordination with local authorities
- Close communication and cooperation with the Project Manager, Construction Manager, and other personnel involved on the project
- Consistent project site observation and inspections throughout the project
- Resolving construction issues on-the-spot
- Perform substantial completion inspection and follow-through with final punch list items

Budget analysis is offered to assist clients in defining their goals and objectives while taking construction costs into consideration. A course of action is then established along with open suggestions for design changes in order to reduce the budget within their budgeted guidelines. SGM can use an alternative cost control called Value Engineering.

Life Cycle Cost and Long Term Maintenance Features

SGM will lead the design effort in analyzing life cycle costing, energy conservation, first cost premiums, pay back periods with energy design, and modeling analyses. This approach will allow the City of Hollywood to make informed decisions and optimize the financial resources of the project. It is our priority to provide the City with the most accurate, dependable, and flexible designs. SGM utilizes the Carrier HAP software and Trane Tracer for cost analysis. Additionally, SGM will incorporate the same approach into lighting systems that are presently stand alone and not configured in a BAS, so that they become a component of the BAS control.

Systems that allow flexibility in zoning can be added to meet new room configurations. Systems that are dependable/require little maintenance and have a long life expectancy will be heavily considered. SGM designs the HVAC systems with maintenance in mind. We make sure boilers and chillers have sufficient adjacent tube pull space for maintenance and replacement. We specify that access panels reach reheat coils above hard ceilings, and that permanently sealed bearings are available in order to eliminate field lubrication maintenance. SGM strives to provide the best equipment and appurtenances on the market that require little or no maintenance.

SGM will meet and work with the Project Delivery Team in the evaluation of the various options and incorporate selected options into the estimates. SGM will specifically identify on the Cost Savings Suggestion list the type of documentation required of the designer (i.e.-addenda note, bulletin drawing, etc.) and we will monitor the drawings to ensure that the selected Cost Savings Suggestions are incorporated into the final construction documents. SGM uses our knowledge of economics and environment in HVAC/building systems to recommend quality, maximum payback solutions for the City.

Compliance with Performance Schedules

SGM utilizes a management plan for processing tasks in order to develop a project schedule that will track major milestones in the project. Schedules are developed based upon the project deadline from the client. SGM will provide adequate resources to meet each step of the design process. Schedules are updated on a weekly basis. Project Managers have weekly meetings to discuss the design completion schedule and other requirements needed to meet the deadline and its construction budget. The staff is experienced and has ample resources to meet deadlines and stay within construction budget. Specific challenges in scheduling may include project phasing or construction delays. Overcoming these challenges may include planning designs during a certain time of the year (i.e. remodeling a cafeteria during the summer, when less students are at the campus), or scheduling construction at night so an office building can remain occupied during the day.

H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION REQUESTED BY THE AGENCY. ATTACH ADDITIONAL SHEETS AS NEEDED.

SUSTAINABLE DESIGN

SGM and our sub-consultants are proud members of the US Green Building Council and are committed to environmental stewardship and social responsibility. Our firms employ **LEED accredited professionals** from all engineering and architecture disciplines familiar with Green Building design requirements and documenting projects for certification under the **USGBC's LEED rating system**. We achieve sustainable solutions through an integrated design approach, having professionals interact regularly from the sustainability charrette to final construction detailing to achieve sustainable solutions which benefit both the client and the environment.



Our team experience includes design solutions and **LEED administration** on projects which have achieved, or are in the process of achieving, a "Certified" or higher rating under the **LEED rating systems**. SGM's previous and current experience with the LEED rating system is diverse, involving "Certified", "Silver Certified" and "Gold Certified" projects. Our team strives for top performing designs, and LEED enhances this goal, through efficient use of energy, environmental, and human resources. These aspects directly translate into economic benefits for our clients. A one-time investment premium of less than 1% of costs can increase energy efficiency 20-30% in comparison to standard building code practices.

Some examples of SGM's LEED MEP engineering design include Orange County Public Schools - Colonial 9th Grade Center, the Skanska Orlando Office, and the Geico Garage attached to the Amway Center. SGM currently employs **LEED Accredited Professionals**.

SGM is familiar with standards regarding **LEED certification**, as well as the following values of LEED certified buildings: lower operating costs/increased asset value, reduced waste sent to landfills, conservation of energy and water, healthier/safer environment for occupants, reduced harmful greenhouse gas emissions, the ability to qualify for tax rebates, and zoning allowances.

SGM has developed a set of guidelines that represents energy efficient and environmentally responsible practices. They are recommended in supporting a sustainable design checklist. For example, issues may include:

- Controllable systems (lighting and thermal comfort)
- Energy efficiency
- Environmentally sensitive design
- Protection and preservation of natural resources
- Energy-conscious design
- Water efficiency / conservation
- Increased materials reuse and recycling
- Environmentally sound building materials and construction
- Eliminating hazardous substances
- Improving indoor and outdoor air quality
- Materials selection
 - Recycled materials and content
 - Low-emitting materials selection
- Materials reuse

Attention has been given in the past to energy conservation and efficiency, water conservation, recycling, reduced use of ozone depleting substances, and avoidance of the use of certain harmful substances such as asbestos, lead based paints, and PCB's. The critical key to accomplishing the listed initiatives is an integral design approach, where the evaluation of any building element, material or system is not viewed solely on the basis of its own isolated merit and cost, but is designed and then appraised as an integrated part of the entire building, facility or infrastructure system.

Energy Conservation

In HVAC construction projects, opportunities exist to reduce energy consumption between 30 and 50 percent over current energy codes. SGM plans to use the following high efficiency equipment and energy conservation measures:

- High efficiency package units
- Energy efficient chillers with staging
- Gas boilers Use of CO2 sensors for indoor air quality
- Pumps with VFD's to reduce chilled & heating hot water flow based on demand
- Use of 0% - 100% economizer cycles for all air handling units
- Air handlers that operate only when required to meet zone load

H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION REQUESTED BY THE AGENCY. ATTACH ADDITIONAL SHEETS AS NEEDED.

By addressing peak cooling/heating demand requirements, daylighting strategies, plug loads, thermal mass characteristics of holding tanks, and reservoirs significant reduction in energy use can be created.

SGM will take the lead with local utility providers in analyzing energy conservation, first cost premiums, and pay back periods. The local power supplier, in conjunction with SGM, will prepare energy design and modeling analyses. Thorough review/design feasibility will be completed and appropriate equipment, systems/ efficiencies will be incorporated, allowing for the most efficient design. This approach will allow the SGM to make informed decisions and optimize the financial resources of the project.

COMMISSIONING

Commissioning (Cx) consists of systematically documenting specified components/systems have been installed and started up properly, then functionally tested to verify/document proper operation through all modes and conditions. In addition, personnel training will be verified and final project O&M documents will be reviewed for completeness.

SGM's team will follow a basic approach to every commissioning project produced through this contract which includes pre-design commissioning for existing or new facilities, design phase, construction phase, acceptance phase, and warranty phase of commissioning. Should SGM be selected for this contract, our firm will guarantee substantial savings in the the City's operational costs. All commissioning efforts will be performed through SGM's in-house staff. At the beginning of each work authorization/task order or assignment, our approach will be as follow:

Systems to be Commissioned

The following systems, including all components and controls, will be commissioned:

- Central building automation systems (Energy Management & Control System), including linkages to remote monitoring and control sites
- All equipment of the heating, ventilating, and air conditioning systems
- Refrigeration systems
- Life safety systems (fire alarm, smoke control systems, fire protection)
- Domestic and process water pumping systems
- Emergency power and uninterruptible power supply (UPS) systems
- Lighting control systems
- Electrical systems
- Various special equipment systems, such as pneumatic tube systems
- Special Construction

Existing buildings

SGM proposes that the City considers retro-commissioning of all existing facilities. Our prior retro-commissioning projects have produced whole-building energy consumption reduction of 20 – 45%.

SGM takes a phased approach to existing building retro-commissioning. The first phase includes calibration of sensors and actuators, as well as unifying system environmental set-points. The second phase includes a close scrutiny of the facility building system schedules.

The third phase of the SGM retro-commissioning approach involves the optimization of the actual sequences that the building system uses to control the indoor environmental conditions. Many building owners mistakenly believe that the installation of a complete Building Automation System will cause a decrease in the utility bills for their facilities. A building automation system simply executes the instructional code as was programmed to do so. If the code was written poorly written then the building system continues to operate inefficiently indefinitely.

SGM's Commissioning team has great experience with existing building commissioning. A common scenario that we see is that the building may appear to operate well from an occupant comfort perspective, while energy consumption may be excessive. It is the goal of the SGM commissioning team to find the most efficient operation of the building system, while maintaining the comfort of the building occupants.

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Fundamental Commissioning Services

The typical scope for the SGM fundamental building commissioning services for new construction projects includes the following building systems:

- HVAC&R systems
- Innovative and renewable energy technologies
- Lighting and day lighting controls

Enhanced Commissioning Services

The enhanced commissioning service provides additional value to the owner and provides all documentation necessary to obtain the **LEED Energy & Atmosphere** credit 3. This service often results in smoother project coordination, reduction in Requests for Information between the construction team and the design team, and an overall higher level of performance for the building. The additional enhanced commissioning scope, provided by SGM includes:

- Facilitate and lead a kick-off meeting with the design and construction teams to discuss the additional commissioning scope
- Review all design and specification documents in the design development, 50% construction document, and just prior to the 100% construction document phase
- Review of all applicable contractor submittal documentation
- Develop a complete systems manual documenting the pertinent data needed by the operations & maintenance teams to assure a smooth transition at substantial completion and during occupancy
- Coordinate and participate in all training sessions with the operations and maintenance staff
- Return to the building, 10 months after substantial completion to check systems operation, interview the operations & maintenance staff, and document open issues related to the commissioned systems

Although most of the complexity of the building systems in this particular contract appear to be related to HVAC and building automation, the other support systems must receive an adequate level of attention to detail. The commissioning team must contain technical experts in these other support building systems such as access control, lighting control, biological safety cabinet controls, and effluent decontamination treatment systems. SGM has assembled a team of experts in these ancillary building systems and can successfully complete the commissioning process.

As the project nears the end of the design phase, a comprehensive customized commissioning plan will be created, specific to this project. The plan will be divided into two distinct phases. There will be a design phase portion of the plan and a construction phase portion. The plan will strictly define the roles and responsibilities of each of the project participants as related to commissioning. The intent of the plan is to create an outline of the processes and responsibilities of all parties involved in the planning, design, construction and operation of the facility. It is imperative that a relationship with good communication and teamwork be established at onset of the project. Commissioning is the process of achieving, verifying, and documenting the performance of building systems in accordance with the design intent and the client's functional and operational needs. Commissioning starts in the design phase and extends through the construction phase and into the warranty period.

Commissioning during the design phase is intended to achieve the following specific objectives:

- Provide commissioning focused design review
- Ensure that the design and operational intent are clearly documented
- Ensure that the commissioning for the construction phase is adequately documented in the bid documents.

Local Government Projects

SGM Engineering prides itself as a market leader in providing exceptional Mechanical, Electrical, and Plumbing design services for local government clients throughout the State of Florida. Our past performance outlines over 300 local government projects since 1991, directly providing Mechanical, Electrical, Plumbing, and Fire Protection. These projects include public safety, police stations, fire stations, street lighting, parks/recreational centers, jail/corrections facilities, museums, and more.