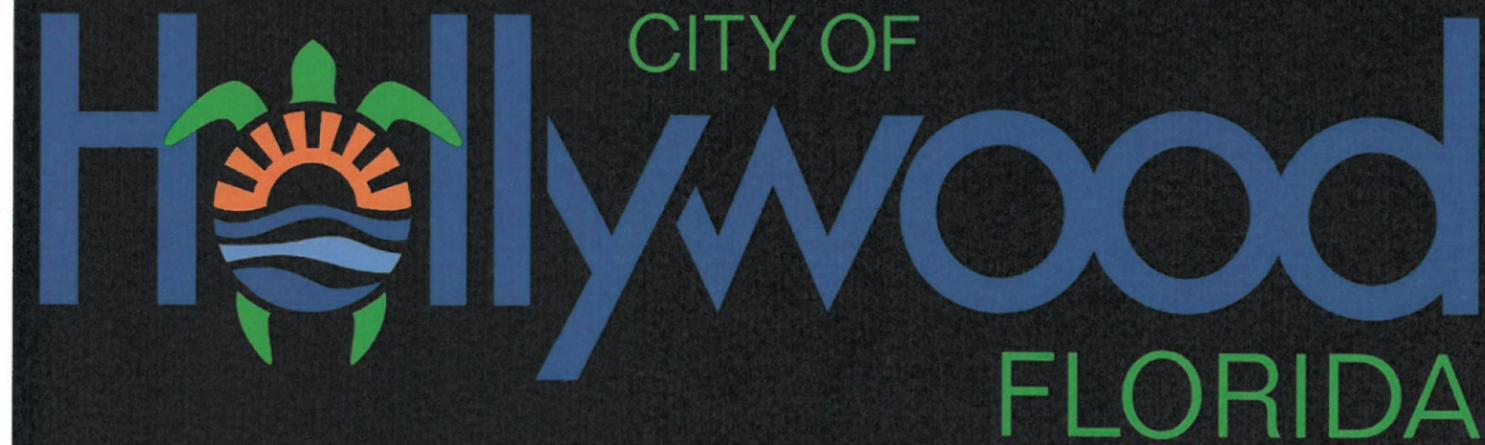




## Surveying and Mapping Consulting Services

Solicitation  
DCRA 19-029



August 2019

**Craig A. Smith & Associates**

21045 Commercial Trail, Boca Raton, FL 33486  
Phone: 561 314 4445 • [ssmith@craigasmith.com](mailto:ssmith@craigasmith.com)

[www.craigasmith.com](http://www.craigasmith.com)





**Craig A. Smith & Associates, Inc.**  
Engineers • Surveyors • Subsurface Utility Engineering  
3D Subsurface Imaging • Utility Coordination

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August 27, 2019

Jorge Camejo, CRA Executive Director  
Hollywood Community Redevelopment Agency  
1948 Harrison Street  
Hollywood, FL 33020

**RE: DCRA 19-026 – SURVEYING AND MAPPING CONSULTING SERVICES TO THE CRA FOR NEIGHBORHOOD LIGHTING & STREETScape ENHANCEMENT CAS PROPOSAL NO. 3876**

Dear Selection Committee:

For your consideration, Craig A. Smith & Associates, Inc. (CAS), is pleased to submit this proposal in response to your Request for Qualifications for Surveying and Mapping Consulting Services to the Community Redevelopment Agency (CRA) for Neighborhood Lighting & Streetscape.

#### **Company Overview**

CAS has been in business for 39 years, providing Civil Engineering, Surveying, Utility Locating, and Construction Management services to municipal clients. The firm is located at 21045 Commercial Trail, Boca Raton, Palm Beach County, Florida 33486. CAS has over 35 dedicated staff members consisting of registered professional engineers, registered professional surveyor, ADDA certified drafters, GIS specialists, survey crews, certified field inspectors, utility locators, as well as competent administrative, clerical and accounting personnel, to provide the CRA with the comprehensive expertise required to perform duties requested for the Surveying and Mapping Consulting Services. CAS specializes in providing professional surveying, mapping and utility locating services to South Florida municipal governments and understands the needs of such public entities. We are a client-oriented firm and our emphasis is on providing exemplary service. In addition to the above-mentioned services, CAS brings unique and exclusive 3D underground mapping and utility locates capability that can save the CRA time and money by accurately locating existing buried facilities and verifying utility field markings and record drawings. Our 3D technology further ensures CAS's commitment and ability to complete the project on time and within budget.

#### **Understanding Scope of Work**

We fully understand the project scope of work and commit to meeting the project time lines and budget requirements. The project scope entails surveying and mapping services for the Neighborhood Lighting and Streetscape Enhancement Project within the downtown CRA district from Johnson Street to Washington Street between 21<sup>st</sup> Avenue and Federal Highway which encompasses approximately 253 acres. Services to be rendered under this contract will include but not be limited to design survey, construction layout, boundary surveys, preparation of sketched and legal descriptions, mapping and AutoCAD. More specifically, the scope of work will include topographic surveys, limited hydrographic work, construction layout and as-built surveys. Elevation cross sections of 50-foot station intervals (10-foot spacing on pavement) shall be provided for topographic work. Right-of-way cross-sections shall include back of sidewalk, type and top of curb, gutter line, edge off pavement, centerline/median and intersection centerline. Elevations shall be accurate to 1/100 of a foot on natural ground. All existing improvements should be located and identified on the survey and shall include but not be limited to buildings, manholes rim elevations, pipe inverts, utility poles, utility boxes, fire hydrants, traffic signs, buried and overhead utilities, trees, fences, hedges, existing pavement markings and traffic signals.

#### **Similar Project Experience**

We believe our successful experience with similar municipalities to that of the City of Hollywood will benefit the City. Municipalities that CAS has provided similar surveying, mapping and utility locating services include **City of Lake Worth, Town of Golden Beach, City of Sunny Isles, Bal Harbour Village, Village of Biscayne Park, City of Sweetwater, Village of El Portal, City of Miami Beach, Palm Beach County, City of Margate, City of Pompano Beach and Town of Pembroke Park**, just to name a few. We provide long term, relationship-based quality professional services to our clients and we commit to work with the CRA's Staff to provide the best possible service to complete the project cost-effectively and within the CRA's budget and schedule. CAS takes a team approach while making the CRA's staff an integral part of that team. The CAS team has on staff the necessary professionals available for the scope of services as outlined in the Request for Qualifications.

#### **Continuity of Staff**

Our internal company culture has created an environment for staff to excel and experience satisfaction. CAS is proud to state that the current average employee tenure is over 13 years. The CRA will have the advantage of knowing that our staff will be there throughout the duration of this contract to serve the CRA'S's survey and mapping needs.

#### **Principal CAS Staff**

Mr. Robert D. Keener, P.S.M., Vice President of Survey will serve as Project Manager and will be the Primary Contact for the duration of the contract. Mr. Keener can be reached by telephone at (561) 644-2698 or via email at [bkeener@craigasmith.com](mailto:bkeener@craigasmith.com). Mr. Stephen C. Smith, P.E., Senior Vice President is the Principal of the firm. Mr. Smith will serve as the Quality Assurance/Quality Control Officer. Mr. Smith can be reached by telephone at (954) 815-4111 or via email at [ssmith@craigasmith.com](mailto:ssmith@craigasmith.com). Mr. Smith will ensure the necessary resources are provided for the duration of the contract. All assigned CAS staff are located and work shall be completed from the firm's corporate headquarters in Boca Raton. Key and principal staff shall be available for the assigned work and coordination meetings with the CRA as need.

CAS believes it is the best firm to perform the advertised services because of its current and past experience in the Tri-County area with similar municipal neighborhood improvement projects. We retain the personnel with experience and training along with a proven track record to perform on time and within budget. CAS would be honored to have the opportunity to work with the Hollywood CRA and looks forward to its favorable consideration. CAS has no conflicts of interest.

Sincerely,

**CRAIG A. SMITH & ASSOCIATES, INC.**



Stephen C. Smith, P.E.  
Senior Vice President

**ARCHITECT – ENGINEER QUALIFICATIONS**  
**PART 1 – CONTRACT-SPECIFIC QUALIFICATIONS**

**A. CONTRACT INFORMATION**

1. TITLE AND LOCATION *(City and State)*  
**REQUEST FOR QUALIFICATIONS FOR SURVEYING AND MAPPING CONSULTING SERVICES TO THE CRA FOR NEIGHBORHOOD LIGHTING & STREETScape**  
**RFQ DCRA 19-026**  
**CITY OF HOLLYWOOD**  
**BROWARD COUNTY, FLORIDA**

2. PUBLIC NOTICE DATE  
**JULY 30, 2019**

3. SOLICITATION OR PROJECT NUMBER  
**RFQ DCRA 19-026**

**B. ARCHITECT-ENGINEER POINT OF CONTACT**

4. NAME AND TITLE  
**STEPHEN C. SMITH, P.E., SENIOR VICE PRESIDENT**

5. NAME OF FIRM  
**CRAIG A. SMITH & ASSOCIATES**

6. TELEPHONE NUMBER  
**561-314-4445**

7. FAX NUMBER  
**561-314-4458**

8. E-MAIL ADDRESS  
**ssmith@craigasmith.com**

**C. PROPOSED TEAM**

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

**CHECK**

	PRIME	J-V PARTNER	SUBCON-TRACTOR	9. FIRM NAME	10. ADDRESS	11. ROLE IN THIS CONTRACT
A.	<input checked="" type="checkbox"/>			<b>CRAIG A. SMITH &amp; ASSOCIATES, INC.</b>  <input type="checkbox"/> CHECK IF BRANCH OFFICE	<b>21045 COMMERCIAL TRAIL BOCA RATON, FL 33486</b>	<b>PRIME – SURVEY &amp; SUE</b>
B.				  <input type="checkbox"/> CHECK IF BRANCH OFFICE		
c				  <input type="checkbox"/> CHECK IF BRANCH OFFICE		
d				  <input type="checkbox"/> CHECK IF BRANCH OFFICE		
e				  <input type="checkbox"/> CHECK IF BRANCH OFFICE		
f				  <input type="checkbox"/> CHECK IF BRANCH OFFICE		

**D. ORGANIZATIONAL CHART OF PROPOSED TEAM**

*(Attached)*

**E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT**  
 (Complete one Section E for each key person.)

<b>12. NAME</b> ROBERT D. KEENER, P.S.M.  	<b>13. ROLE IN THIS CONTRACT</b> VICE PRESIDENT, SURVEYING	<b>14. YEARS EXPERIENCE</b>	
		a. TOTAL 41	b. WITH CURRENT FIRM 24

**15. FIRM NAME AND LOCATION (City and State)**  
 CRAIG A. SMITH & ASSOCIATES  
 BOCA RATON, FLORIDA

**16. EDUCATION (DEGREE AND SPECIALIZATION)**  
 ASSOCIATES IN ARTS DEGREE  
 CONTINUING EDUCATION IN LAND SURVEYING

**17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)**  
 PROFESSIONAL SURVEYOR AND MAPPER  
 FLORIDA REGISTRATION NO. 4846



**18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organization, Training, Awards, etc.)**  
 FLORIDA SURVEYING AND MAPPING SOCIETY

**19. RELEVANT PROJECTS**

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING	CONSTRUCTION (IF APPLICABLE)
a.	<b>CITY OF MARGATE WWTP TRIPLEX LIFT STATION REHABILITATION</b> MARGATE, FLORIDA	PROFESSIONAL SERVICES SURVEYING AND MAPPING 2018	CONSTRUCTION (IF APPLICABLE) TBD
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE SURVEY AND UTILITY LOCATES OF EXISTING BURIED UTILITIES, INCLUDING RECOVERY OF HORIZONTAL AND VERTICAL CONTROL RELATIVE TO PROJECT DATUM AS PREVIOUSLY ESTABLISHED. COST: \$8,008		
b.	<b>CITY OF POMPANO BEACH</b> SW 2 <sup>ND</sup> STREET NEIGHBORHOOD IMPROVEMENTS	PROFESSIONAL SERVICES SURVEYING AND MAPPING 2018	CONSTRUCTION (IF APPLICABLE) TBD
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE ROUTE SURVEY INCLUDING ALL ABOVE GROUND FEATURES WITHIN EXISTING RIGHT-OF-WAY AND OFF-SITE SURVEYING OF CRITICAL DRAINAGE STRUCTURES. SCOPE OF WORK INCLUDES 2D GRP UTILITY LOCATES WITHIN THE PROJECT CORRIDOR (SW 2 <sup>ND</sup> STREET BETWEEN DIXIE HIGHWAY AND CYPRESS ROAD, SW 1 <sup>ST</sup> AVENUE BETWEEN SW 2 <sup>ND</sup> STREET AND ATLANTIC BOULEVARD, AND SW 1 <sup>ST</sup> TERRACE & COURT BETWEEN SW 2 <sup>ND</sup> STREET AND SOUTH CYPRESS ROAD). COST: \$22,300		
c.	<b>TOWN OF PEMBROKE PARK</b> SW 25 <sup>TH</sup> STREET NEIGHBORHOOD IMPROVEMENTS PEMBROKE PARK, FLORIDA	PROFESSIONAL SERVICES SURVEYING AND MAPPING 2016	CONSTRUCTION (IF APPLICABLE) TBD
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE ROUTE SURVEY INCLUDING ALL ABOVE GROUND FEATURES WITHIN EXISTING RIGHT-OF-WAY. SCOPE OF WORK INCLUDES 2D GPR AND VACUUM EXCAVATION FOR UTILITY LOCATES FOR A MULTI-PHASE STORMWATER IMPROVEMENT PROJECT TOTALING 14.34 ACRES. COST: \$8,500		

d.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF MIAMI BEACH PALM AND HIBISCUS ISLAND NEIGHBORHOOD STORMWATER AND ROADWAY IMPROVEMENTS MIAMI BEACH, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING 2015	CONSTRUCTION (IF APPLICABLE) <b>TBD</b>
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE <b>MAP OF TOPOGRAPHIC SURVEY/ROUTE SURVEY ADHERING TO THE MIAMI BEACH PUBLIC WORKS MANUAL – SECTION 1A – SURVEYING STANDARDS AND REQUIREMENTS. CROSS-SECTIONS WERE TAKEN AT 25 TO 50 FOOT INTERVALS DUE TO THE RESTRICTIVE ENVIRONMENT. ELEVATIONS AT ENTRY THRESHOLDS OF STRUCTURES WERE ALSO PROVIDED. COST: \$105,798</b>			
e.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF MIAMI BEACH LIGHT RAIL/MODERN STREETCAR PROJECT MIAMI BEACH, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING 2016	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE <b>MAP OF TOPOGRAPHIC SURVEY/ROUTE SURVEYS ADHERING TO THE MIAMI BEACH PUBLIC WORKS MANUAL – SECTION 1A – SURVEYING STANDARDS AND REQUIREMENTS ALONG THE CORRIDORS. ALL VISIBLE IMPROVEMENTS WERE LOCATED AND SHOWN. ABOVE AND BELOW GROUND UTILITIES AND DRAINAGE WERE IDENTIFIED AS WELL AS TREES AND LANDSCAPED AREAS TO 25 FEET OUTSIDE EACH RIGHT OF WAY LINE. CROSS-SECTIONS WERE TAKEN AT 50-FOOT INTERVALS. ELEVATIONS AT ENTRY THRESHOLDS OF STRUCTURES WERE ALSO PROVIDED. COST: \$300,000(+)</b>			
f.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF LAKE WORTH LAKE OSBORNE ESTATES NEIGHBORHOOD WATER MAIN REPLACEMENT – PHASE I LAKE WORTH, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING 2018	CONSTRUCTION (IF APPLICABLE) <b>SCHEDULED TO BEGIN 2019</b>
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE <b>ROUTE SURVEY ALONG RESIDENTIAL STREETS THROUGHOUT COMMUNITY, INCLUDING ALL VISIBLE IMPROVEMENTS, ABOVE AND BELOW GROUND UTILITIES, DRAINAGE STRUCTURES AS WELL AS TREES AND LANDSCAPED AREAS 10 FEET OUTSIDE RIGHT OF WAY, PROPERTY LINES, UTILITY EASEMENTS AND SUBSURFACE UTILITY ENGINEERING (UTILITY LOCATES). COST: \$109,963</b>			
g.	(1) TITLE AND LOCATION (CITY AND STATE) <b>PALM BEACH COUNTY WATER UTILITIES DEPARTMENT LYONS ROAD FORCE MAIN REPLACEMENT – PHASE II</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING 2018	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE <b>ROUTE SURVEY AND UTILITY LOCATES WITHIN EXISTING RIGHT-OF-WAY. COST: \$12,750</b>			
h.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF MARGATE 2018 NEIGHBORHOOD WATER MAIN IMPROVEMENTS MARGATE, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING 2016	CONSTRUCTION (IF APPLICABLE) <b>ON-GOING</b>
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE <b>ROUTE SURVEY INCLUDING LOCATION OF ALL ABOVE GROUND FEATURES AND VISIBLE IMPROVEMENTS WITHIN THE EXISTING RIGHT-OF-WAY. ESTABLISH SURVEY BASELINE, CROSS SECTIONS AND VACUUM EXCAVATION TEST HOLES TO VERIFY LOCATION OF BURIED UTILITIES. COST: \$46,250</b>			
i.	(1) TITLE AND LOCATION (CITY AND STATE) <b>SEACOAST UTILITY AUTHORITY – NORTHLAKE BOULEVARD/US-1 WATER &amp; SEWER FORCE MAIN REPLACEMENT JUPITER, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING 2018	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>

	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE ROUTE SURVEY ALONG NORTHLAKE BOULEVARD AND US-1 (APPROXIMATELY 2.8 MILES) INCLUDING IDENTIFICATION OF RIGHT-OF-WAY, PROPERTY LINES, ABOVE GROUND IMPROVEMENTS, UTILITY EASEMENTS, TREE SURVEY, CROSS SECTIONS AND SUBSURFACE UTILITY ENGINEERING (UTILITY LOCATES) COST: \$203,325	X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
j.	(1) TITLE AND LOCATION (CITY AND STATE) CITY OF SWEETWATER NEIGHBORHOOD IMPROVEMENTS MIAMI-DADE COUNTY, FLORIDA	(2) YEAR COMPLETED PROFESSIONAL SERVICES SURVEYING AND MAPPING 2018	CONSTRUCTION (IF APPLICABLE) N/A
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE SURVEYING PROVIDED ROUTE SURVEYS THROUGH 4 PHASES OF DRAINAGE DESIGN TO ALLEVIATE MAJOR FLOODING WITHIN THE CITY ALONG VARIOUS STREET RIGHTS OF WAYS AND WITHIN PARCELS OF LAND (APPROXIMATELY THREE (3) MILES). COST: \$200,000+	X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
k.	(1) TITLE AND LOCATION (CITY AND STATE) VILLAGE OF BAL HARBOUR MIAMI-DADE COUNTY, FLORIDA	(2) YEAR COMPLETED PROFESSIONAL SERVICES SURVEYING AND MAPPING 2016	CONSTRUCTION (IF APPLICABLE) N/A
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE VARIOUS SURVEY MAPPING AND CONSTRUCTION PROJECTS FOR THE EXPANSION AND/ OR REHABILITATION OF UTILITIES, ACTING AS THE VILLAGE ENGINEERS. PROJECTS INCLUDE COLLINS AVE. (SR A-1-A) FROM 73 <sup>RD</sup> STREET TO 96 <sup>TH</sup> STREET AND 96 <sup>TH</sup> STREET TO THE HAULOVER CUT (APPROXIMATELY THREE (3) MILES). ALSO INCLUDED IS ONGOING SURVEYING AS NEEDED AND A MAJOR ROUTE SURVEY FOR THE REHABILITATION OF THE VILLAGE OF BAL HARBOUR UTILITY SYSTEM AND ROADWAYS. (APPROXIMATELY THREE (3) MILES) COST: \$200,000+	X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
l.	(1) TITLE AND LOCATION (CITY AND STATE) PALM BEACH WATER UTILITIES DEPARTMENT LAKE REGION WTP NO. 11 UTILITY LOCATES PALM BEACH COUNTY, FLORIDA	(2) YEAR COMPLETED PROFESSIONAL SERVICES SURVEYING AND MAPPING 2015	CONSTRUCTION (IF APPLICABLE) N/A
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE SURVEY AND SUBSURFACE UTILITY ENGINEERING TO LOCATE EXISTING UTILITIES AT WATER TREATMENT PLANT FOR RECORD DRAWING UPDATE. UTILITY LOCATES INCLUDED ESTABLISHING BENCHMARKS, HORIZONTAL CONTROL, DEPTH, SIZE, MATERIAL AND UTILITY TYPE. COST: \$74,928	X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
m.	(1) TITLE AND LOCATION (CITY AND STATE) BRICKELL CITICENTRE MIAMI DADE COUNTY, FLORIDA	(2) YEAR COMPLETED PROFESSIONAL SERVICES SURVEYING AND MAPPING 2012	CONSTRUCTION (IF APPLICABLE) N/A
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE SURVEYING MAPPED ABOVE AND BELOW GROUND UTILITIES BASED ON RADAR TOMOGRAPHY AND TRADITIONAL SUE METHODS ON SITE AND OFF SITE. THE PROJECT IS IN DOWNTOWN MIAMI BETWEEN MIAMI AVE. AND 1 <sup>ST</sup> ON 6 <sup>TH</sup> , 7 <sup>TH</sup> AND 8 <sup>TH</sup> STREETS. COST: \$100,000+	X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
n.	(1) TITLE AND LOCATION (CITY AND STATE) TOWN OF GOLDEN BEACH NEIGHBORHOOD IMPROVEMENTS MIAMI-DADE COUNTY, FLORIDA	(2) YEAR COMPLETED PROFESSIONAL SERVICES SURVEYING AND MAPPING 2012	CONSTRUCTION (IF APPLICABLE) N/A
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE SURVEYING WITHIN THE RIGHTS OF WAYS OF GOLDEN BEACH DRIVE, OUT TO THE THREE ISLANDS AND ALONG COLLINS AVE. (SR A-1-A) FOR DRAINAGE IMPROVEMENTS DUE TO MAJOR FLOODING ISSUES; TOTAL ROADWAY RECONSTRUCTION; UNDERGROUNDING OF ALL UTILITIES; STREET LIGHTING; WATER MAIN REPLACEMENT AND MISCELLANEOUS SURVEYS, AS NEEDED. ROUTE SPANNED APPROXIMATELY THREE (3) MILES. COST: \$1,000,000+	X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
o.	(1) TITLE AND LOCATION (CITY AND STATE) INTERSTATE I-595 BROWARD COUNTY, FLORIDA	(2) YEAR COMPLETED PROFESSIONAL SERVICES SURVEYING AND MAPPING 2011	CONSTRUCTION (IF APPLICABLE) N/A
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE SURVEYING MAPPED ABOVE AND BELOW GROUND UTILITIES BASED ON RADAR TOMOGRAPHY AND TRADITIONAL SUE METHODS ON SITE AND OFF SITE. SPECIFIC AREAS WERE REQUESTED BY THE PROJECT ENGINEER BASED ON ANTICIPATED UTILITY CONFLICTS. COST: \$1,000,000+	X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	

**E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT**

*(Complete one Section E for each key person.)*

12. NAME SANDRO ELVIR  	13. ROLE IN THIS CONTRACT SURVEY COORDINATION MANAGER	14. YEARS EXPERIENCE	
		a. TOTAL 19	b. WITH CURRENT FIRM 15

15. FIRM NAME AND LOCATION (City and State)  
 CRAIG A. SMITH & ASSOCIATES  
 BOCA RATON, FLORIDA

16. EDUCATION (DEGREE AND SPECIALIZATION)  
 ASSOCIATE DEGREE  
 DRAFTING & COMPUTER ASSISTED DESIGN

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

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

**20. RELEVANT PROJECTS**

a.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF MARGATE WWTP TRIPLEX LIFT STATION REHABILITATION MARGATE, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING ON-GOING	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE SURVEY AND UTILITY LOCATES OF EXISTING BURIED UTILITIES, INCLUDING RECOVERY OF HORIZONTAL AND VERTICAL CONTROL RELATIVE TO PROJECT DATUM AS PREVIOUSLY ESTABLISHED. COST: \$8,008 X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
b.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF POMPANO BEACH SW 2<sup>ND</sup> STREET NEIGHBORHOOD DRAINAGE IMPROVEMENTS</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING ON-GOING	CONSTRUCTION (IF APPLICABLE) <b>ON-GOING</b>
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE ROUTE SURVEY INCLUDING ALL ABOVE GROUND FEATURES WITHIN EXISTING RIGHT-OF-WAY AND OFF-SITE SURVEYING OF CRITICAL DRAINAGE STRUCTURES. SCOPE OF WORK INCLUDES 2D GRP UTILITY LOCATES WITHIN THE PROJECT CORRIDOR (SW 2 <sup>ND</sup> STREET BETWEEN DIXIE HIGHWAY AND CYPRESS ROAD, SW 1 <sup>ST</sup> AVENUE BETWEEN SW 2 <sup>ND</sup> STREET AND ATLANTIC BOULEVARD, AND SW 1 <sup>ST</sup> TERRACE & COURT BETWEEN SW 2 <sup>ND</sup> STREET AND SOUTH CYPRESS ROAD). COST: \$22,300 X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
c.	(1) TITLE AND LOCATION (CITY AND STATE) <b>TOWN OF PEMBROKE PARK SW 25<sup>TH</sup> STREET STORMWATER NEIGHBORHOOD IMPROVEMENTS PEMBROKE PARK, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING ON-GOING	CONSTRUCTION (IF APPLICABLE) <b>TBD</b>
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE ROUTE SURVEY INCLUDING ALL ABOVE GROUND FEATURES WITHIN EXISTING RIGHT-OF-WAY. SCOPE OF WORK INCLUDES 2D GPR AND VACUUM EXCAVATION FOR UTILITY LOCATES FOR A MULTI-PHASE STORMWATER IMPROVEMENT PROJECT TOTALING 14.34 ACRES. COST: \$8,500 X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		

d.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF MIAMI BEACH PALM AND HIBISCUS ISLAND NEIGHBORHOOD STORMWATER AND ROADWAY IMPROVEMENTS MIAMI BEACH, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING 2015	CONSTRUCTION (IF APPLICABLE) TBD
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE MAP OF TOPOGRAPHIC SURVEY/ROUTE SURVEY ADHERING TO THE MIAMI BEACH PUBLIC WORKS MANUAL – SECTION 1A – SURVEYING STANDARDS AND REQUIREMENTS. CROSS-SECTIONS WERE TAKEN AT 25 TO 50 FOOT INTERVALS DUE TO THE RESTRICTIVE ENVIRONMENT. ELEVATIONS AT ENTRY THRESHOLDS OF STRUCTURES WERE ALSO PROVIDED. COST: \$105,798			
e.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF MIAMI BEACH LIGHT RAIL/MODERN STREETCAR PROJECT MIAMI BEACH, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING 2016	CONSTRUCTION (IF APPLICABLE) N/A
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE MAP OF TOPOGRAPHIC SURVEY/ROUTE SURVEYS ADHERING TO THE MIAMI BEACH PUBLIC WORKS MANUAL – SECTION 1A – SURVEYING STANDARDS AND REQUIREMENTS ALONG THE CORRIDORS. ALL VISIBLE IMPROVEMENTS WERE LOCATED AND SHOWN. ABOVE AND BELOW GROUND UTILITIES AND DRAINAGE WERE IDENTIFIED AS WELL AS TREES AND LANDSCAPED AREAS TO 25 FEET OUTSIDE EACH RIGHT OF WAY LINE. CROSS-SECTIONS WERE TAKEN AT 50-FOOT INTERVALS. ELEVATIONS AT ENTRY THRESHOLDS OF STRUCTURES WERE ALSO PROVIDED. COST: \$300,000(+)			
f.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF WEST PALM BEACH EAST CENTRAL REGIONAL (ECR) WATER RECLAMATION FACILITY SUBSURFACE UTILITY ENGINEERING AND UTILITY MAPPING WEST PALM BEACH, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING ON-GOING	CONSTRUCTION (IF APPLICABLE) N/A
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE SURVEYING INCLUDING ESTABLISHING BENCHMARKS, HORIZONTAL CONTROL AND BASELINES RELATIVE TO WELL DEFINED LAND LINES OR PHYSICAL FEATURES. SCOPE OF WORK ALSO INCLUDES UTILITY LOCATES USING 2D GPR AND 3D RADAR TOMOGRAPHY SCANNING ALONG WITH TEN (10) EXCAVATED TEST BORING HOLES FOR IDENTIFICATION OF ONSITE BURIED UTILITIES FOR UPDATING EXISTING FACILITY RECORD DRAWINGS. COST: \$36,330			
g.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF LAKE WORTH LAKE OSBORNE ESTATES NEIGHBORHOOD WATER MAIN REPLACEMENT – PHASE I LAKE WORTH, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING 2018	CONSTRUCTION (IF APPLICABLE) SCHEDULED TO BEGIN 2019
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE ROUTE SURVEY ALONG RESIDENTIAL STREETS THROUGHOUT COMMUNITY, INCLUDING ALL VISIBLE IMPROVEMENTS, ABOVE AND BELOW GROUND UTILITIES, DRAINAGE STRUCTURES AS WELL AS TREES AND LANDSCAPED AREAS 10 FEET OUTSIDE RIGHT OF WAY, PROPERTY LINES, UTILITY EASEMENTS AND SUBSURFACE UTILITY ENGINEERING (UTILITY LOCATES). COST: \$109,963			
h.	(1) TITLE AND LOCATION (CITY AND STATE) <b>PALM BEACH COUNTY WATER UTILITIES DEPARTMENT LYONS ROAD FORCE MAIN REPLACEMENT – PHASE II</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING 2018	CONSTRUCTION (IF APPLICABLE) N/A
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE ROUTE SURVEY AND UTILITY LOCATES WITHIN EXISTING RIGHT-OF-WAY. COST: \$12,750			
i.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF MARGATE 2018 NEIGHBORHOOD WATER MAIN IMPROVEMENTS MARGATE, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING 2016	CONSTRUCTION (IF APPLICABLE) ON-GOING
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE ROUTE SURVEY INCLUDING LOCATION OF ALL ABOVE GROUND FEATURES AND VISIBLE IMPROVEMENTS WITHIN THE EXISTING RIGHT-OF-WAY. ESTABLISH SURVEY BASELINE, CROSS SECTIONS AND VACUUM EXCAVATION TEST HOLES TO VERIFY LOCATION OF BURIED UTILITIES. COST: \$46,250			

j.	(1) TITLE AND LOCATION (CITY AND STATE) <b>SEACOAST UTILITY AUTHORITY – NORTHLAKE BOULEVARD/US-1 WATER &amp; SEWER FORCE MAIN REPLACEMENT JUPITER, FLORIDA</b>	(2) YEAR COMPLETED PROFESSIONAL SERVICES SURVEYING AND MAPPING 2018	CONSTRUCTION (IF APPLICABLE) N/A
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM ROUTE SURVEY ALONG NORTHLAKE BOULEVARD AND US-1 (APPROXIMATELY 2.8 MILES) INCLUDING IDENTIFICATION OF RIGHT-OF-WAY, PROPERTY LINES, ABOVE GROUND IMPROVEMENTS, UTILITY EASEMENTS, TREE SURVEY, CROSS SECTIONS AND SUBSURFACE UTILITY ENGINEERING (UTILITY LOCATES) COST: \$203,325		
k.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF SWEETWATER NEIGHBORHOOD IMPROVEMENTS MIAMI-DADE COUNTY, FLORIDA</b>	(2) YEAR COMPLETED PROFESSIONAL SERVICES SURVEYING AND MAPPING 2018	CONSTRUCTION (IF APPLICABLE) N/A
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM SURVEYING PROVIDED ROUTE SURVEYS THROUGH 4 PHASES OF DRAINAGE DESIGN TO ALLEVIATE MAJOR FLOODING WITHIN THE CITY ALONG VARIOUS STREET RIGHTS OF WAYS AND WITHIN PARCELS OF LAND (APPROXIMATELY THREE (3) MILES). COST: \$200,000+		
l.	(1) TITLE AND LOCATION (CITY AND STATE) <b>VILLAGE OF BAL HARBOUR MIAMI-DADE COUNTY, FLORIDA</b>	(2) YEAR COMPLETED PROFESSIONAL SERVICES SURVEYING AND MAPPING 2016	CONSTRUCTION (IF APPLICABLE) N/A
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM VARIOUS SURVEY MAPPING AND CONSTRUCTION PROJECTS FOR THE EXPANSION AND/ OR REHABILITATION OF UTILITIES, ACTING AS THE VILLAGE ENGINEERS. PROJECTS INCLUDE COLLINS AVE. (SR A-1-A) FROM 73 <sup>RD</sup> STREET TO 96 <sup>TH</sup> STREET AND 96 <sup>TH</sup> STREET TO THE HAULOVER CUT (APPROXIMATELY THREE (3) MILES). ALSO INCLUDED IS ONGOING SURVEYING AS NEEDED AND A MAJOR ROUTE SURVEY FOR THE REHABILITATION OF THE VILLAGE OF BAL HARBOUR UTILITY SYSTEM AND ROADWAYS. (APPROXIMATELY THREE (3) MILES) COST: \$200,000+		
m.	(1) TITLE AND LOCATION (CITY AND STATE) <b>PALM BEACH WATER UTILITIES DEPARTMENT LAKE REGION WTP NO. 11 UTILITY LOCATES PALM BEACH COUNTY, FLORIDA</b>	(2) YEAR COMPLETED PROFESSIONAL SERVICES SURVEYING AND MAPPING 2015	CONSTRUCTION (IF APPLICABLE) N/A
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM SURVEY AND SUBSURFACE UTILITY ENGINEERING TO LOCATE EXISTING UTILITIES AT WATER TREATMENT PLANT FOR RECORD DRAWING UPDATE. UTILITY LOCATES INCLUDED ESTABLISHING BENCHMARKS, HORIZONTAL CONTROL, DEPTH, SIZE, MATERIAL AND UTILITY TYPE. COST: \$74,928		
n.	(1) TITLE AND LOCATION (CITY AND STATE) <b>BRICKELL CITICENTRE MIAMI DADE COUNTY, FLORIDA</b>	(2) YEAR COMPLETED PROFESSIONAL SERVICES SURVEYING AND MAPPING 2012	CONSTRUCTION (IF APPLICABLE) N/A
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM SURVEYING MAPPED ABOVE AND BELOW GROUND UTILITIES BASED ON RADAR TOMOGRAPHY AND TRADITIONAL SUE METHODS ON SITE AND OFF SITE. THE PROJECT IS IN DOWNTOWN MIAMI BETWEEN MIAMI AVE. AND 1 <sup>ST</sup> ON 6 <sup>TH</sup> , 7 <sup>TH</sup> AND 8 <sup>TH</sup> STREETS. COST: \$100,000+		
o.	(1) TITLE AND LOCATION (CITY AND STATE) <b>TOWN OF GOLDEN BEACH NEIGHBORHOOD IMPROVEMENTS MIAMI-DADE COUNTY, FLORIDA</b>	(2) YEAR COMPLETED PROFESSIONAL SERVICES SURVEYING AND MAPPING 2012	CONSTRUCTION (IF APPLICABLE) N/A
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM SURVEYING WITHIN THE RIGHTS OF WAYS OF GOLDEN BEACH DRIVE, OUT TO THE THREE ISLANDS AND ALONG COLLINS AVE. (SR A-1-A) FOR DRAINAGE IMPROVEMENTS DUE TO MAJOR FLOODING ISSUES; TOTAL ROADWAY RECONSTRUCTION; UNDERGROUNDING OF ALL UTILITIES; WATER MAIN REPLACEMENT AND MISCELLANEOUS SURVEYS, AS NEEDED. ROUTE SPANNED APPROXIMATELY THREE (3) MILES. COST: \$1,000,000+		
p.	(1) TITLE AND LOCATION (CITY AND STATE) <b>INTERSTATE I-595 BROWARD COUNTY, FLORIDA</b>	(2) YEAR COMPLETED PROFESSIONAL SERVICES SURVEYING AND MAPPING 2011	CONSTRUCTION (IF APPLICABLE) N/A
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM SURVEYING MAPPED ABOVE AND BELOW GROUND UTILITIES BASED ON RADAR TOMOGRAPHY AND TRADITIONAL SUE METHODS ON SITE AND OFF SITE. SPECIFIC AREAS WERE REQUESTED BY THE PROJECT ENGINEER BASED ON ANTICIPATED UTILITY CONFLICTS. COST: \$1,000,000+		

**E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT**

*(Complete one Section E for each key person.)*

12. NAME DAVID LOOKABILL  	13. ROLE IN THIS CONTRACT SURVEY CREW LEADER	14. YEARS EXPERIENCE	
		a. TOTAL 35	b. WITH CURRENT FIRM 5

15. FIRM NAME AND LOCATION (City and State)  
 CRAIG A. SMITH & ASSOCIATES  
 BOCA RATON, FLORIDA

16. EDUCATION (DEGREE AND SPECIALIZATION)      17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

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

**21. RELEVANT PROJECTS**

a.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF MARGATE WWTP TRIPLEX LIFT STATION REHABILITATION MARGATE, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING ON-GOING	CONSTRUCTION (IF APPLICABLE)  N/A
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE      X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM SURVEY AND UTILITY LOCATES OF EXISTING BURIED UTILITIES, INCLUDING RECOVERY OF HORIZONTAL AND VERTICAL CONTROL RELATIVE TO PROJECT DATUM AS PREVIOUSLY ESTABLISHED. COST: \$8,008		
b.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF POMPANO BEACH SW 2<sup>ND</sup> STREET DRAINAGE NEIGHBORHOOD IMPROVEMENTS</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING ON-GOING	CONSTRUCTION (IF APPLICABLE)  ON-GOING
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE      X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM ROUTE SURVEY INCLUDING ALL ABOVE GROUND FEATURES WITHIN EXISTING RIGHT-OF-WAY AND OFF-SITE SURVEYING OF CRITICAL DRAINAGE STRUCTURES. SCOPE OF WORK INCLUDES 2D GRP UTILITY LOCATES WITHIN THE PROJECT CORRIDOR (SW 2 <sup>ND</sup> STREET BETWEEN DIXIE HIGHWAY AND CYPRESS ROAD, SW 1 <sup>ST</sup> AVENUE BETWEEN SW 2 <sup>ND</sup> STREET AND ATLANTIC BOULEVARD, AND SW 1 <sup>ST</sup> TERRACE & COURT BETWEEN SW 2 <sup>ND</sup> STREET AND SOUTH CYPRESS ROAD). COST: \$22,300		
c.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF WEST PALM BEACH EAST CENTRAL REGIONAL (ECR) WATER RECLAMATION FACILITY SUBSURFACE UTILITY ENGINEERING AND UTILITY MAPPING WEST PALM BEACH, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING ON-GOING	CONSTRUCTION (IF APPLICABLE)  N/A
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE      X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM SURVEYING INCLUDING ESTABLISHING BENCHMARKS, HORIZONTAL CONTROL AND BASELINES RELATIVE TO WELL DEFINED LAND LINES OR PHYSICAL FEATURES. SCOPE OF WORK ALSO INCLUDES UTILITY LOCATES USING 2D GPR AND 3D RADAR TOMOGRAPHY SCANNING ALONG WITH TEN (10) EXCAVATED TEST BORING HOLES FOR IDENTIFICATION OF ONSITE BURIED UTILITIES FOR UPDATING EXISTING FACILITY RECORD DRAWINGS. COST: \$36,330		

d.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF MIAMI BEACH PALM AND HIBISCUS ISLAND STORMWATER AND ROADWAY NEIGHBORHOOD IMPROVEMENTS MIAMI BEACH, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING 2015	CONSTRUCTION (IF APPLICABLE) <b>TBD</b>
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM MAP OF TOPOGRAPHIC SURVEY/ROUTE SURVEY ADHERING TO THE MIAMI BEACH PUBLIC WORKS MANUAL – SECTION 1A – SURVEYING STANDARDS AND REQUIREMENTS. CROSS-SECTIONS WERE TAKEN AT 25 TO 50 FOOT INTERVALS DUE TO THE RESTRICTIVE ENVIRONMENT. ELEVATIONS AT ENTRY THRESHOLDS OF STRUCTURES WERE ALSO PROVIDED. COST: \$105,798			
e.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF MIAMI BEACH LIGHT RAIL/MODERN STREETCAR PROJECT MIAMI BEACH, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING 2016	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM MAP OF TOPOGRAPHIC SURVEY/ROUTE SURVEYS ADHERING TO THE MIAMI BEACH PUBLIC WORKS MANUAL – SECTION 1A – SURVEYING STANDARDS AND REQUIREMENTS ALONG THE CORRIDORS. ALL VISIBLE IMPROVEMENTS WERE LOCATED AND SHOWN. ABOVE AND BELOW GROUND UTILITIES AND DRAINAGE WERE IDENTIFIED AS WELL AS TREES AND LANDSCAPED AREAS TO 25 FEET OUTSIDE EACH RIGHT OF WAY LINE. CROSS-SECTIONS WERE TAKEN AT 50-FOOT INTERVALS. ELEVATIONS AT ENTRY THRESHOLDS OF STRUCTURES WERE ALSO PROVIDED. COST: \$300,000(+)			
f.	(1) TITLE AND LOCATION (CITY AND STATE) <b>PALM BEACH COUNTY WATER UTILITIES DEPARTMENT LYONS ROAD FORCE MAIN REPLACEMENT – PHASE II</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING 2018	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM ROUTE SURVEY AND UTILITY LOCATES WITHIN EXISTING RIGHT-OF-WAY. COST: \$12,750			
g.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF MARGATE 2018 NEIGHBORHOOD WATER MAIN IMPROVEMENTS MARGATE, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING 2016	CONSTRUCTION (IF APPLICABLE) <b>ON-GOING</b>
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM ROUTE SURVEY INCLUDING LOCATION OF ALL ABOVE GROUND FEATURES AND VISIBLE IMPROVEMENTS WITHIN THE EXISTING RIGHT-OF-WAY. ESTABLISH SURVEY BASELINE, CROSS SECTIONS AND VACUUM EXCAVATION TEST HOLES TO VERIFY LOCATION OF BURIED UTILITIES. COST: \$46,250			
h.	(1) TITLE AND LOCATION (CITY AND STATE) <b>SEACOAST UTILITY AUTHORITY – NORTHLAKE BOULEVARD/US-1 WATER &amp; SEWER FORCE MAIN REPLACEMENT JUPITER, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING 2018	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM ROUTE SURVEY ALONG NORTHLAKE BOULEVARD AND US-1 (APPROXIMATELY 2.8 MILES) INCLUDING IDENTIFICATION OF RIGHT-OF-WAY, PROPERTY LINES, ABOVE GROUND IMPROVEMENTS, UTILITY EASEMENTS, TREE SURVEY, CROSS SECTIONS AND SUBSURFACE UTILITY ENGINEERING (UTILITY LOCATES) COST: \$203,325			
i.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF LAKE WORTH LAKE OSBORNE ESTATES NEIGHBORHOOD WATER MAIN REPLACEMENT – PHASE I LAKE WORTH, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2018	CONSTRUCTION (IF APPLICABLE) <b>SCHEDULED TO BEGIN 2019</b>
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM ROUTE SURVEY ALONG RESIDENTIAL STREETS THROUGHOUT COMMUNITY, INCLUDING ALL VISIBLE IMPROVEMENTS, ABOVE AND BELOW GROUND UTILITIES, DRAINAGE STRUCTURES AS WELL AS TREES AND LANDSCAPED AREAS 10 FEET OUTSIDE RIGHT OF WAY, PROPERTY LINES, UTILITY EASEMENTS AND SUBSURFACE UTILITY ENGINEERING (UTILITY LOCATES). COST: \$109,963			

**E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT**

(Complete one Section E for each key person.)

12. NAME DONALD DRAKE 	13. ROLE IN THIS CONTRACT SURVEY CREW LEADER	14. YEARS EXPERIENCE	
		a. TOTAL 35	b. WITH CURRENT FIRM 2

15. FIRM NAME AND LOCATION (City and State)  
 CRAIG A. SMITH & ASSOCIATES  
 BOCA RATON, FLORIDA

16. EDUCATION (DEGREE AND SPECIALIZATION)      17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

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

**22. RELEVANT PROJECTS**

a.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF POMPANO BEACH                  SW 2<sup>ND</sup> STREET DRAINAGE NEIGHBORHOOD IMPROVEMENTS</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING ON-GOING	CONSTRUCTION (IF APPLICABLE) ON-GOING
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE ROUTE SURVEY INCLUDING ALL ABOVE GROUND FEATURES WITHIN EXISTING RIGHT-OF-WAY AND OFF-SITE SURVEYING OF CRITICAL DRAINAGE STRUCTURES. SCOPE OF WORK INCLUDES 2D GRP UTILITY LOCATES WITHIN THE PROJECT CORRIDOR (SW 2 <sup>ND</sup> STREET BETWEEN DIXIE HIGHWAY AND CYPRESS ROAD, SW 1 <sup>ST</sup> AVENUE BETWEEN SW 2 <sup>ND</sup> STREET AND ATLANTIC BOULEVARD, AND SW 1 <sup>ST</sup> TERRACE & COURT BETWEEN SW 2 <sup>ND</sup> STREET AND SOUTH CYPRESS ROAD). COST: \$22,300		
b.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF WEST PALM BEACH                  EAST CENTRAL REGIONAL (ECR) WATER RECLAMATION FACILITY                  SUBSURFACE UTILITY ENGINEERING AND UTILITY MAPPING                  WEST PALM BEACH, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING ON-GOING	CONSTRUCTION (IF APPLICABLE) N/A
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE SURVEYING INCLUDING ESTABLISHING BENCHMARKS, HORIZONTAL CONTROL AND BASELINES RELATIVE TO WELL DEFINED LAND LINES OR PHYSICAL FEATURES. SCOPE OF WORK ALSO INCLUDES UTILITY LOCATES USING 2D GPR AND 3D RADAR TOMOGRAPHY SCANNING ALONG WITH TEN (10) EXCAVATED TEST BORING HOLES FOR IDENTIFICATION OF ONSITE BURIED UTILITIES FOR UPDATING EXISTING FACILITY RECORD DRAWINGS. COST: \$36,330		
c.	(1) TITLE AND LOCATION (CITY AND STATE) <b>SEACOAST UTILITY AUTHORITY – NORTHLAKE BOULEVARD/US-1                  WATER &amp; SEWER FORCE MAIN REPLACEMENT                  JUPITER, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING 2018	CONSTRUCTION (IF APPLICABLE) N/A
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE ROUTE SURVEY ALONG NORTHLAKE BOULEVARD AND US-1 (APPROXIMATELY 2.8 MILES) INCLUDING IDENTIFICATION OF RIGHT-OF-WAY, PROPERTY LINES, ABOVE GROUND IMPROVEMENTS, UTILITY EASEMENTS, TREE SURVEY, CROSS SECTIONS AND SUBSURFACE UTILITY ENGINEERING (UTILITY LOCATES) COST: \$203,325		

d.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF LAKE WORTH LAKE OSBORNE ESTATES NEIGHBORHOOD WATER MAIN REPLACEMENT - PHASE I LAKE WORTH, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES <b>2018</b>	CONSTRUCTION (IF APPLICABLE) <b>SCHEDULED TO BEGIN 2019</b>
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM <b>ROUTE SURVEY ALONG RESIDENTIAL STREETS THROUGHOUT COMMUNITY, INCLUDING ALL VISIBLE IMPROVEMENTS, ABOVE AND BELOW GROUND UTILITIES, DRAINAGE STRUCTURES AS WELL AS TREES AND LANDSCAPED AREAS 10 FEET OUTSIDE RIGHT OF WAY, PROPERTY LINES, UTILITY EASEMENTS AND SUBSURFACE UTILITY ENGINEERING (UTILITY LOCATES). COST: \$109,963</b>			
e.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CCPWA - CITY OF MOORE HAVEN AVENUE N, O, S AND 4<sup>TH</sup> NEIGHBORHOOD SANITARY SEWER EXPANSION MOORE HAVEN, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES <b>2018</b>	CONSTRUCTION (IF APPLICABLE) <b>TBD</b>
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM <b>SURVEY/ENGINEERING FOR THE LATEST PHASE OF CONSTRUCTION FOR THE SANITARY SEWER EXPANSION IN THE CITY OF MOORE HAVEN. THE PROJECT INCLUDED APPROXIMATELY 0.8 MILES OF ROUTE SURVEY. SURVEY WAS TASKED WITH PROVIDING THE MAP OF TOPOGRAPHIC SURVEY/ROUTE SURVEYS WITHIN THE CORRIDORS SPECIFIED. ALL VISIBLE IMPROVEMENTS, AS WELL AS ABOVE AND BELOW GROUND UTILITIES AND DRAINAGE WERE IDENTIFIED. ADDITIONALLY, ALL TREES (3" OR GREATER) AND LANDSCAPED AREAS TO 10 FEET OUTSIDE EACH RIGHT OF WAY LINE WERE LOCATED AND SHOWN. ADDITIONAL ROADWAY LEGAL DESCRIPTIONS AND EASEMENTS WERE REQUIRED. COST: \$19,525</b>			
f.	(1) TITLE AND LOCATION (CITY AND STATE) <b>DEERFIELD BEACH (OLD SAYBROOK GOLF) FAIRWAY MEMORIAL GARDENS CEMETERY DEERFIELD BEACH, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES <b>SURVEYING AND MAPPING ON-GOING</b>	CONSTRUCTION (IF APPLICABLE) <b>ON-GOING</b>
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM <b>SURVEYING INCLUDING BOUNDARY, TOPOGRAPHIC AND TREE SURVEY. LAYING OUT ALL PROPOSED IMPROVEMENTS. COST: \$75,000</b>			

**E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT**

(Complete one Section E for each key person.)

<b>12. NAME</b> JAMES F. DRISCOLL  	<b>13. ROLE IN THIS CONTRACT</b> SUE DIRECTOR	<b>14. YEARS EXPERIENCE</b>	
		a. TOTAL 28	b. WITH CURRENT FIRM 25

**15. FIRM NAME AND LOCATION (City and State)**  
 CRAIG A. SMITH & ASSOCIATES  
 BOCA RATON, FLORIDA

**16. EDUCATION (DEGREE AND SPECIALIZATION)**      **17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)**

**18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organization, Training, Awards, etc.)**  
 CADD CENTERS OF FLORIDA – CADD TECHNICIAN  
 TRAFFIC SAFETY IN THE WORKPLACE, FDOT  
 METRO TECH – 9890 XT OPERATOR  
 MALA GEOSCIENCES – GROUND PENETRATING RADAR THEORY  
 MALA GEOSCIENCES – GPR SCANNING TECHNIQUES  
 MALA GEOSCIENCES – EASY LOCATOR & RAMAC X3M OPERTOR  
 NATIONAL UTILITY LOCATING CONTRACTORS ASSOCIATION (NULCA)

**23. RELEVANT PROJECTS**

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING	CONSTRUCTION (IF APPLICABLE)
a.	<b>CITY OF POMPANO BEACH</b> <b>SW 2<sup>ND</sup> STREET NEIGHBORHOOD DRAINAGE IMPROVEMENTS</b>	ON-GOING	ON-GOING
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE      X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM ROUTE SURVEY INCLUDING ALL ABOVE GROUND FEATURES WITHIN EXISTING RIGHT-OF-WAY AND OFF-SITE SURVEYING OF CRITICAL DRAINAGE STRUCTURES. SCOPE OF WORK INCLUDES 2D GRP UTILITY LOCATES WITHIN THE PROJECT CORRIDOR (SW 2 <sup>ND</sup> STREET BETWEEN DIXIE HIGHWAY AND CYPRESS ROAD, SW 1 <sup>ST</sup> AVENUE BETWEEN SW 2 <sup>ND</sup> STREET AND ATLANTIC BOULEVARD, AND SW 1 <sup>ST</sup> TERRACE & COURT BETWEEN SW 2 <sup>ND</sup> STREET AND SOUTH CYPRESS ROAD). COST: \$22,300		
b.	<b>CITY OF WEST PALM BEACH</b> <b>EAST CENTRAL REGIONAL (ECR) WATER RECLAMATION FACILITY</b> <b>SUBSURFACE UTILITY ENGINEERING AND UTILITY MAPPING</b> <b>WEST PALM BEACH, FLORIDA</b>	ON-GOING	N/A
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE      X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM SURVEYING INCLUDING ESTABLISHING BENCHMARKS, HORIZONTAL CONTROL AND BASELINES RELATIVE TO WELL DEFINED LAND LINES OR PHYSICAL FEATURES. SCOPE OF WORK ALSO INCLUDES UTILITY LOCATES USING 2D GPR AND 3D RADAR TOMOGRAPHY SCANNING ALONG WITH TEN (10) EXCAVATED TEST BORING HOLES FOR IDENTIFICATION OF ONSITE BURIED UTILITIES FOR UPDATING EXISTING FACILITY RECORD DRAWINGS. COST: \$36,330		
c.	<b>CITY OF HOLLYWOOD UTILITIES</b> <b>HOLLYWOOD, FLORIDA</b>	ONGOING	N/A
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE      X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM COMPLETE RESPONSIBILITY FOR PROVIDING ONE CALL UTILITY LOCATES FOR CITY OWNED WATER, SEWER, RECLAIM, STREETS LIGHTS AND MONIR POWER FACILITIES. COST: \$200,000+ANNUALLY		
d.	<b>TOWN OF DAVIE UTILITIES</b> <b>BROWARD COUNTY, FLORIDA</b>	ONGOING	N/A
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE      X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM COMPLETE RESPONSIBILITY FOR PROVIDING ONE CALL UTILITY LOCATES FOR CITY OWNED WATER, SEWER, RECLAIM, STREETS LIGHTS AND MONIR POWER FACILITIES. COST: \$150,000+ANNUALLY		

		(2) YEAR COMPLETED	
e.	(1) TITLE AND LOCATION (CITY AND STATE) CITY OF MIAMI BEACH PALM AND HIBISCUS ISLAND NEIGHBORHOOD STORMWATER AND ROADWAY IMPROVEMENTS MIAMI BEACH, FLORIDA	PROFESSIONAL SERVICES SURVEYING AND MAPPING 2015	CONSTRUCTION (IF APPLICABLE) TBD
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE MAP OF TOPOGRAPHIC SURVEY/ROUTE SURVEY ADHERING TO THE MIAMI BEACH PUBLIC WORKS MANUAL – SECTION 1A – SURVEYING STANDARDS AND REQUIREMENTS. CROSS-SECTIONS WERE TAKEN AT 25 TO 50 FOOT INTERVALS DUE TO THE RESTRICTIVE ENVIRONMENT. ELEVATIONS AT ENTRY THRESHOLDS OF STRUCTURES WERE ALSO PROVIDED. COST: \$105,798		
		(2) YEAR COMPLETED	
f.	(1) TITLE AND LOCATION (CITY AND STATE) CITY OF MIAMI BEACH LIGHT RAIL/MODERN STREETCAR PROJECT MIAMI BEACH, FLORIDA	PROFESSIONAL SERVICES SURVEYING AND MAPPING 2016	CONSTRUCTION (IF APPLICABLE) N/A
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE MAP OF TOPOGRAPHIC SURVEY/ROUTE SURVEYS ADHERING TO THE MIAMI BEACH PUBLIC WORKS MANUAL – SECTION 1A – SURVEYING STANDARDS AND REQUIREMENTS ALONG THE CORRIDORS. ALL VISIBLE IMPROVEMENTS WERE LOCATED AND SHOWN. ABOVE AND BELOW GROUND UTILITIES AND DRAINAGE WERE IDENTIFIED AS WELL AS TREES AND LANDSCAPED AREAS TO 25 FEET OUTSIDE EACH RIGHT OF WAY LINE. CROSS-SECTIONS WERE TAKEN AT 50-FOOT INTERVALS. ELEVATIONS AT ENTRY THRESHOLDS OF STRUCTURES WERE ALSO PROVIDED. COST: \$300,000(+)		
		(2) YEAR COMPLETED	
g.	(1) TITLE AND LOCATION (CITY AND STATE) UNITED STATES NAVY NAVAL AIR STATION KEY WEST MONROE COUNTY, FLORIDA	PROFESSIONAL SERVICES SURVEYING AND MAPPING 2018	CONSTRUCTION (IF APPLICABLE) N/A
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE COMPLETE RESPONSIBILITY FOR ALL UTILITY LOCATES AND SUBSURFACE UTILITY ENGINEERING FOR US NAVY FACILITIES AT ALL BASE AREAS AND ANNEXES IN AND AROUND NAVAL AIR STATION KEY WEST INCLUDING, WATER, SEWER, RECLAIM, BRINE, FIBER OPTIC, ALL ELECTRIC (PRIMARY, FEEDER, SECONDARY & SERVICE LINES), STREET LIGHTING, SCADA, AND SECURE COMMUNICATION LINES COST: \$75,000+ANNUALLY		
		(2) YEAR COMPLETED	
h.	(1) TITLE AND LOCATION (CITY AND STATE) PALM BEACH COUNTY WATER UTILITIES DEPARTMENT LYONS ROAD FORCE MAIN REPLACEMENT – PHASE II	PROFESSIONAL SERVICES SURVEYING AND MAPPING 2018	CONSTRUCTION (IF APPLICABLE) N/A
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE ROUTE SURVEY AND UTILITY LOCATES WITHIN EXISTING RIGHT-OF-WAY. COST: \$12,750		
		(2) YEAR COMPLETED	
i.	(1) TITLE AND LOCATION (CITY AND STATE) CITY OF MARGATE 2018 NEIGHBORHOOD WATER MAIN IMPROVEMENTS MARGATE, FLORIDA	PROFESSIONAL SERVICES SURVEYING AND MAPPING 2016	CONSTRUCTION (IF APPLICABLE) ON-GOING
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE ROUTE SURVEY INCLUDING LOCATION OF ALL ABOVE GROUND FEATURES AND VISIBLE IMPROVEMENTS WITHIN THE EXISTING RIGHT-OF-WAY. ESTABLISH SURVEY BASELINE, CROSS SECTIONS AND VACUUM EXCAVATION TEST HOLES TO VERIFY LOCATION OF BURIED UTILITIES. COST: \$46,250		
		(2) YEAR COMPLETED	
j.	(1) TITLE AND LOCATION (CITY AND STATE) SEACOAST UTILITY AUTHORITY – NORTHLAKE BOULEVARD/US-1 WATER & SEWER FORCE MAIN REPLACEMENT JUPITER, FLORIDA	PROFESSIONAL SERVICES SURVEYING AND MAPPING 2018	CONSTRUCTION (IF APPLICABLE) N/A
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE ROUTE SURVEY ALONG NORTHLAKE BOULEVARD AND US-1 (APPROXIMATELY 2.8 MILES) INCLUDING IDENTIFICATION OF RIGHT-OF-WAY, PROPERTY LINES, ABOVE GROUND IMPROVEMENTS, UTILITY EASEMENTS, TREE SURVEY, CROSS SECTIONS AND SUBSURFACE UTILITY ENGINEERING (UTILITY LOCATES) COST: \$203,325		

k.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF LAKE WORTH LAKE OSBORNE ESTATES NEIGHBORHOOD WATER MAIN REPLACEMENT – PHASE I LAKE WORTH, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING <b>2018</b>	CONSTRUCTION (IF APPLICABLE) <b>SCHEDULED TO BEGIN 2019</b>
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM ROUTE SURVEY ALONG RESIDENTIAL STREETS THROUGHOUT COMMUNITY, INCLUDING ALL VISIBLE IMPROVEMENTS, ABOVE AND BELOW GROUND UTILITIES, DRAINAGE STRUCTURES AS WELL AS TREES AND LANDSCAPED AREAS 10 FEET OUTSIDE RIGHT OF WAY, PROPERTY LINES, UTILITY EASEMENTS AND SUBSURFACE UTILITY ENGINEERING (UTILITY LOCATES). COST: \$109,963			
l.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF SWEETWATER NEIGHBORHOOD IMPROVEMENTS MIAMI-DADE COUNTY, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING <b>2018</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM SURVEYING PROVIDED ROUTE SURVEYS THROUGH 4 PHASES OF DRAINAGE DESIGN TO ALLEVIATE MAJOR FLOODING WITHIN THE CITY ALONG VARIOUS STREET RIGHTS OF WAYS AND WITHIN PARCELS OF LAND (APPROXIMATELY THREE (3) MILES). COST: \$200,000+			
m.	(1) TITLE AND LOCATION (CITY AND STATE) <b>MOTIVA OIL TANK FARM PORT EVERGLADES BROWARD COUNTY, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING <b>2017</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM SURVEYING PROVIDED BOUNDARY AND TOPOGRAPHIC SURVEYS OF THE MOTIVA SITE AS WELL AS OFF SITE AREAS FOR RAIL SPUR REHABILITATION. INCLUDED IN THE SURVEYS WERE THE MAPPING OF ABOVE AND BELOW GROUND UTILITIES BASED ON TRADITIONAL SUE METHODS . COST: \$30,000+			
n.	(1) TITLE AND LOCATION (CITY AND STATE) <b>VILLAGE OF BAL HARBOUR MIAMI-DADE COUNTY, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING <b>2016</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM VARIOUS SURVEY MAPPING AND CONSTRUCTION PROJECTS FOR THE EXPANSION AND/ OR REHABILITATION OF UTILITIES, ACTING AS THE VILLAGE ENGINEERS. PROJECTS INCLUDE COLLINS AVE. (SR A-1-A) FROM 73 <sup>RD</sup> STREET TO 96 <sup>TH</sup> STREET AND 96 <sup>TH</sup> STREET TO THE HAULOVER CUT (APPROXIMATELY THREE (3) MILES). ALSO INCLUDED IS ONGOING SURVEYING AS NEEDED AND A MAJOR ROUTE SURVEY FOR THE REHABILITATION OF THE VILLAGE OF BAL HARBOUR UTILITY SYSTEM AND ROADWAYS. (APPROXIMATELY THREE (3) MILES) COST: \$200,000+			
o.	(1) TITLE AND LOCATION (CITY AND STATE) <b>FORT LAUDERDALE INTERNATIONAL AIRPORT SOUTH RUNWAY EXPANSION BROWARD COUNTY, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING <b>2015</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM PERFORMED SUBSURFACE UTILITY ENGINEERING SERVICES, MORE SPECIFICALLY VACUUM SOFT DIGS, 2D GPR AND EM TO LOCATE ALL PUBLIC AND PRIVATE UTILITIES IN PROJECT AREA IN ADVANCE OF CONSTRUCTION ACTIVITIES. COST: \$50,000			
p.	(1) TITLE AND LOCATION (CITY AND STATE) <b>PALM BEACH WATER UTILITIES DEPARTMENT LAKE REGION WTP NO. 11 UTILITY LOCATES PALM BEACH COUNTY, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING <b>2015</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM SURVEY AND SUBSURFACE UTILITY ENGINEERING TO LOCATE EXISTING UTILITIES AT WATER TREATMENT PLANT FOR RECORD DRAWING UPDATE. UTILITY LOCATES INCLUDED ESTABLISHING BENCHMARKS, HORIZONTAL CONTROL, DEPTH, SIZE, MATERIAL AND UTILITY TYPE. COST: \$74,928			

q.	(1) TITLE AND LOCATION (CITY AND STATE) <b>BRICKELL CITICENTRE MIAMI DADE COUNTY, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING 2012	CONSTRUCTION (IF APPLICABLE) N/A
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM SURVEYING MAPPED ABOVE AND BELOW GROUND UTILITIES BASED ON RADAR TOMOGRAPHY AND TRADITIONAL SUE METHODS ON SITE AND OFF SITE. THE PROJECT IS IN DOWNTOWN MIAMI BETWEEN MIAMI AVE. AND 1 <sup>ST</sup> ON 6 <sup>TH</sup> , 7 <sup>TH</sup> AND 8 <sup>TH</sup> STREETS. COST: \$100,000+			
r.	(1) TITLE AND LOCATION (CITY AND STATE) <b>TOWN OF GOLDEN BEACH NEIGHBORHOOD IMPROVEMENTS MIAMI-DADE COUNTY, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING 2012	CONSTRUCTION (IF APPLICABLE) N/A
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM SURVEYING WITHIN THE RIGHTS OF WAYS OF GOLDEN BEACH DRIVE, OUT TO THE THREE ISLANDS AND ALONG COLLINS AVE. (SR A-1-A) FOR DRAINAGE IMPROVEMENTS DUE TO MAJOR FLOODING ISSUES; TOTAL ROADWAY RECONSTRUCTION; UNDERGROUNDING OF ALL UTILITIES; WATER MAIN REPLACEMENT AND MISCELLANEOUS SURVEYS, AS NEEDED. ROUTE SPANNED APPROXIMATELY THREE (3) MILES. COST: \$1,000,000+			
s.	(1) TITLE AND LOCATION (CITY AND STATE) <b>FEC RAILROAD RT PILOT WEST PALM BEACH, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING 2012	CONSTRUCTION (IF APPLICABLE) N/A
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM SURVEYING MAPPED ABOVE AND BELOW GROUND UTILITIES BASED ON RADAR TOMOGRAPHY AND TRADITIONAL SUE METHODS AT THREE (3) INTERSECTIONS IN THE CITY OF WEST PALM BEACH. THE RESULTS WERE PROVIDED TO THE CLIENT FOR AS BUILT COMPARISONS. COST: \$25,000+			
t.	(1) TITLE AND LOCATION (CITY AND STATE) <b>INTERSTATE I-595 BROWARD COUNTY, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING 2011	CONSTRUCTION (IF APPLICABLE) N/A
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM SURVEYING MAPPED ABOVE AND BELOW GROUND UTILITIES BASED ON RADAR TOMOGRAPHY AND TRADITIONAL SUE METHODS ON SITE AND OFF SITE. SPECIFIC AREAS WERE REQUESTED BY THE PROJECT ENGINEER BASED ON ANTICIPATED UTILITY CONFLICTS. COST: \$1,000,000+			
u.	(1) TITLE AND LOCATION (CITY AND STATE) <b>HOLLYWOOD TRANSMISSION CORRIDOR BROWARD COUNTY, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2008	CONSTRUCTION (IF APPLICABLE) N/A
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM PERFORM COMPLETE SUBSURFACE UTILITY ENGINEERING USING GPR & VACUUM EXCAVATION FOR THE PLACEMENT OF 50 HIGH-STRENGTH CONCRETE POLES AT VARIOUS LOCATIONS IN HOLLYWOOD, FL COST \$50,000+.			
v.	(1) TITLE AND LOCATION (CITY AND STATE) <b>PASCO COUNTY UTILITY LOCATES PASCO COUNTY, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2007	CONSTRUCTION (IF APPLICABLE) N/A
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM PROJECT MANAGER FOR EXTENSIVE UTILITY LOCATE CONTRACT. PROVIDE LOCATES FOR WATER, SEWER, RECALIM FACILITIES FOR ENTIRETY OF PASCO COUNTY, FL, ANNUALLY \$220,000			
w.	(1) TITLE AND LOCATION (CITY AND STATE) <b>McCALL TAP LINE CHARLOTTE COUNTY, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2007	CONSTRUCTION (IF APPLICABLE) N/A
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM PERFORM COMPLETE SUBSURFACE UTILITY ENGINEERING USING GPR & VACUUM EXCAVATION FOR THE PLACEMENT OF 90 HIGH-STRENGTH CONCRETE POLES ALONG McCALL AVENUE IN NORTH PORT, FL COST \$68,000+.			

x.	(1) TITLE AND LOCATION (CITY AND STATE) <b>PORT EVERGLADES STORN SECURE BROWARD COUNTY, FLORIDA</b>	PROFESSIONAL SERVICES <b>2006</b>	(2) YEAR COMPLETED CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE x CHECK IF PROJECT PERFORMED WITH CURRENT FIRM <b>PERFORM COMPLETE SUBSURFACE UTILITY ENGINEERING USING GPR &amp; VACUUM EXCAVATION FOR THE PLACEMENT OF 230 HIGH-STRENGTH CONCRETE POLES WITHIN PORT EVERGLADES BOUNDARIES COST \$100,000+.</b>		
y.	(1) TITLE AND LOCATION (CITY AND STATE) <b>ULMERTON ROAD S.U.E. AND R.T. PINELLAS COUNTY, FLORIDA</b>	PROFESSIONAL SERVICES <b>2006</b>	(2) YEAR COMPLETED CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE x CHECK IF PROJECT PERFORMED WITH CURRENT FIRM <b>PROJECT MANAGER FOR \$600,000 SUBSURFACE UTILITY LOCATING AND TOMOGRAPHIC IMAGING PROJECT, FDOT, 1.8MM SF, 237K OF UNDERGROUND LINES.</b>		
z.	(1) TITLE AND LOCATION (CITY AND STATE) <b>PORT EVERGLADES SECURITY ENHANCEMENTS BROWARD COUNTY, FLORIDA</b>	PROFESSIONAL SERVICES <b>2005</b>	(2) YEAR COMPLETED CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE x CHECK IF PROJECT PERFORMED WITH CURRENT FIRM <b>PROJECT MANAGER FOR COMPLETE S.U.E. SERVICES PROJECT INVOLVING 80 MILES OF CONDUIT AND FIBER OPTIC INSTALLATION, 4,000 VACUUM SOFT DIGS AND GPR. \$251,000</b>		
aa.	(1) TITLE AND LOCATION (CITY AND STATE) <b>YBOR CITY (TAMPA) S.U.E. &amp; R.T. SERVICES HILLSBOROUGH COUNTY, FLORIDA</b>	PROFESSIONAL SERVICES <b>2005</b>	(2) YEAR COMPLETED CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE x CHECK IF PROJECT PERFORMED WITH CURRENT FIRM <b>PROJECT MANAGER S.U.E. AND R.T. OF 15<sup>TH</sup> STREET CORRIDOR FOR 120,000 SF OF TOMOGRAPHIC IMAGING, VACUUM SOFT DIGS AND SURFACE DESIGNATING. \$70,000</b>		
bb.	(1) TITLE AND LOCATION (CITY AND STATE) <b>BROWARD COUNTY UTILITY LOCATES BROWARD COUNTY, FLORIDA</b>	PROFESSIONAL SERVICES <b>2005</b>	(2) YEAR COMPLETED CONSTRUCTION (IF APPLICABLE) <b>2012</b>
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE x CHECK IF PROJECT PERFORMED WITH CURRENT FIRM <b>PROJECT MANAGER FOR EXTENSIVE UTILITY LOCATE CONTRACT. PROVIDE LOCATES FOR 250 MILES OF TRAFFIC SIGNAL FACILITIES AND OVER 300 MILES OF WATER, SEWER AND RECLAIM FACILITIES. PROCESS OVER 2,000 LOCATES PER MONTH. \$400,000 ANNUALLY</b>		

**E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT**

*(Complete one Section E for each key person.)*

<b>12. NAME</b> ALAN LOPEZ  	<b>13. ROLE IN THIS CONTRACT</b> SUE FIELD SUPERVISOR	<b>14. YEARS EXPERIENCE</b>	
		a. TOTAL 18	b. WITH CURRENT FIRM 11

**15. FIRM NAME AND LOCATION (City and State)**  
 CRAIG A. SMITH & ASSOCIATES  
 BOCA RATON, FLORIDA

**16. EDUCATION (DEGREE AND SPECIALIZATION)**      **17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)**

**18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organization, Training, Awards, etc.)**  
 IMSA WORK ZONE SAFETY CERTIFICATION  
 METRO TECH – THEORIES OF SUBSURFACE DESIGNATING  
 MALA GEOSCIENCES – GROUND PENETRATING RADAR THEORY  
 MALA GEOSCIENCES – GPR SCANNING TECHNIQUES  
 MALA GEOSCIENCES – EASY LOCATOR & RAMAC X3M OPERATOR  
 NATIONAL UTILITY LOCATING CONTRACTORS ASSOCIATION (NULCA)

**24. RELEVANT PROJECTS**

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING	CONSTRUCTION (IF APPLICABLE)
a.	<b>CITY OF POMPANO BEACH SW 2<sup>ND</sup> STREET NEIGHBORHOOD DRAINAGE</b>	2018	TBD
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE      X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM ROUTE SURVEY INCLUDING ALL ABOVE GROUND FEATURES WITHIN EXISTING RIGHT-OF-WAY AND OFF-SITE SURVEYING OF CRITICAL DRAINAGE STRUCTURES. SCOPE OF WORK INCLUDES 2D GRP UTILITY LOCATES WITHIN THE PROJECT CORRIDOR (SW 2 <sup>ND</sup> STREET BETWEEN DIXIE HIGHWAY AND CYPRESS ROAD, SW 1 <sup>ST</sup> AVENUE BETWEEN SW 2 <sup>ND</sup> STREET AND ATLANTIC BOULEVARD, AND SW 1 <sup>ST</sup> TERRACE & COURT BETWEEN SW 2 <sup>ND</sup> STREET AND SOUTH CYPRESS ROAD). COST: \$22,300		
c.	<b>CITY OF HOLLYWOOD UTILITIES HOLLYWOOD, FLORIDA</b>	ONGOING	N/A
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE      X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM COMPLETE RESPONSIBILITY FOR PROVIDING ONE CALL UTILITY LOCATES FOR CITY OWNED WATER, SEWER, RECLAIM, STREETS LIGHTS AND MONIR POWER FACILITIES. COST: \$200,000+ANNUALLY		
b.	<b>PALM BEACH COUNTY WATER UTILITIES SEMINOLE PRATT-WHITNEY ROAD/NORTHLAKE WATER AND FORCE MAIN IMPROVEMENTS PALM BEACH, FLORIDA</b>	2019	N/A
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE      X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM PERFORMED SUBSURFACE UTILITY ENGINEERING USING GPR AND 40 VACUUM EXCAVATIONS FOR WATER AND FORCE MAIN IMPROVEMENTS. COST: \$24,875		

c.	(1) TITLE AND LOCATION (CITY AND STATE) <b>BROWARD COUNTY ENGINEERING WILES ROAD IMPROVEMENTS BROWARD COUNTY, FLORIDA</b>	PROFESSIONAL SERVICES <b>2019</b>	(2) YEAR COMPLETED CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE x CHECK IF PROJECT PERFORMED WITH CURRENT FIRM <b>PERFORMED SUBSURFACE UTILITY ENGINEERING USING GRP &amp; 100 VACUUM EXCAVATIONS ON EXISTING BURIED UTILITIES FOR PAVING AND DRAINAGE IMPROVEMENTS. COST \$54,000</b>		
e.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF MIAMI BEACH LIGHT RAIL/MODERN STREETCAR PROJECT MIAMI BEACH, FLORIDA</b>	PROFESSIONAL SERVICES SURVEYING AND MAPPING <b>2016</b>	(2) YEAR COMPLETED CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE x CHECK IF PROJECT PERFORMED WITH CURRENT FIRM <b>MAP OF TOPOGRAPHIC SURVEY/ROUTE SURVEYS ADHERING TO THE MIAMI BEACH PUBLIC WORKS MANUAL – SECTION 1A – SURVEYING STANDARDS AND REQUIREMENTS ALONG THE CORRIDORS. ALL VISIBLE IMPROVEMENTS WERE LOCATED AND SHOWN. ABOVE AND BELOW GROUND UTILITIES AND DRAINAGE WERE IDENTIFIED AS WELL AS TREES AND LANDSCAPED AREAS TO 25 FEET OUTSIDE EACH RIGHT OF WAY LINE. CROSS-SECTIONS WERE TAKEN AT 50-FOOT INTERVALS. ELEVATIONS AT ENTRY THRESHOLDS OF STRUCTURES WERE ALSO PROVIDED. COST: \$300,000(+)</b>		
f.	(1) TITLE AND LOCATION (CITY AND STATE) <b>TOWN OF DAVIE UTILITIES BROWARD COUNTY, FLORIDA</b>	PROFESSIONAL SERVICES <b>ONGOING</b>	(2) YEAR COMPLETED CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE x CHECK IF PROJECT PERFORMED WITH CURRENT FIRM <b>COMPLETE RESPONSIBILITY FOR PROVIDING ONE CALL UTILITY LOCATES FOR CITY OWNED WATER, SEWER, RECLAIM, STREETS LIGHTS AND MONIR POWER FACILITIES. COST: \$150,000+ANNUALLY</b>		
h.	(1) TITLE AND LOCATION (CITY AND STATE) <b>UNITED STATES NAVY NAVAL AIR STATION KEY WEST MONROE COUNTY, FLORIDA</b>	PROFESSIONAL SERVICES <b>2018</b>	(2) YEAR COMPLETED CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE x CHECK IF PROJECT PERFORMED WITH CURRENT FIRM <b>COMPLETE RESPONSIBILITY FOR ALL UTILITY LOCATES AND SUBSURFACE UTILITY ENGINEERING FOR US NAVY FACILITIES AT ALL BASE AREAS AND ANNEXES IN AND AROUND NAVAL AIR STATION KEY WEST INCLUDING, WATER, SEWER, RECLAIM, BRINE, FIBER OPTIC, ALL ELECTRIC (PRIMARY, FEEDER, SECONDARY &amp; SERVICE LINES), STREET LIGHTING, SCADA, AND SECURE COMMUNICATION LINES COST: \$75,000+ANNUALLY</b>		
i.	(1) TITLE AND LOCATION (CITY AND STATE) <b>PALM BEACH COUNTY WATER UTILITIES DEPARTMENT LYONS ROAD FORCE MAIN REPLACEMENT – PHASE II</b>	PROFESSIONAL SERVICES SURVEYING AND MAPPING <b>2018</b>	(2) YEAR COMPLETED CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE x CHECK IF PROJECT PERFORMED WITH CURRENT FIRM <b>ROUTE SURVEY AND UTILITY LOCATES WITHIN EXISTING RIGHT-OF-WAY. COST: \$12,750</b>		

**E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT**

(Complete one Section E for each key person.)

<b>12. NAME</b> STEPHEN C. SMITH, P.E.  	<b>13. ROLE IN THIS CONTRACT</b> SENIOR VICE PRESIDENT – QUALITY ASSURANCE	<b>14. YEARS EXPERIENCE</b>	
		<b>a. TOTAL</b> 33	<b>b. WITH CURRENT FIRM</b> 30

**15. FIRM NAME AND LOCATION (City and State)**  
 CRAIG A. SMITH & ASSOCIATES  
 BOCA RATON, FLORIDA

<b>16. EDUCATION (DEGREE AND SPECIALIZATION)</b> BACHELOR OF SCIENCE, CIVIL ENGINEERING, 1988 AUBURN UNIVERSITY, AUBURN, ALABAMA  BACHELOR OF SCIENCE BUILDING CONSTRUCTION, 1986 AUBURN UNIVERSITY, AUBURN, ALABAMA	<b>17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)</b> PROFESSIONAL ENGINEER STATE OF FLORIDA LICENSE NO. 48914	
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**18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organization, Training, Awards, etc.)**

**25. RELEVANT PROJECTS**

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
a.	VILLAGE ENGINEER, BAL HARBOUR VILLAGE BAL HARBOUR, FLORIDA	1989-2018	1989-2017
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM ACTING VILLAGE ENGINEER AS IT RELATES TO ALL STORMWATER ISSUES, WATER AND WASTEWATER UTILITY ISSUES, ROADS, NPDES, PROJECTS, SITE PLAN REVIEW AND AGENCY COORDINATION (FDOT, FDEP, DERM, ETC.).		
b.	CONSULTING ENGINEER, TOWN OF PEMBROKE PARK PEMBROKE PARK, FLORIDA	ON-GOING	ON-GOING
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM CONSULTING ENGINEER AS IT RELATES TO ALL WATER, WASTEWATER, ROAD AND BRIDGE ISSUES, NPDES, PROJECTS, SITE PLAN REVIEW AND AGENCY COORDINATION (FDOT, SFWMD, ETC.).		
c.	NEIGHBORHOOD SANITARY SEWER IMPROVEMENTS PHASE I BAL HARBOUR, FLORIDA	2015	2017
	(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM THE WASTEWATER PUMP STATION NO. 3 AND GRAVITY SEWER IMPROVEMENTS (SANITARY SEWER IMPROVEMENTS PHASE I) PROJECT FOR BAL HARBOUR VILLAGE INCLUDES THE INSTALLATION OF A NEW TRIPLEX SUBMERSIBLE PUMP STATION WITH A 12-FOOT DIAMETER WET WELL, CONTROL PANEL, AUTOMATIC TRANSFER SWITCH RECEPTACLE, EMERGENCY GENERATOR, AND ALL ASSOCIATED APPURTENANCES, IN ADDITION TO APPROXIMATELY 1,350 LINEAR FEET OF 18" GRAVITY SEWER LINES TO THE PUMP STATION. CONSTRUCTION COST: \$2,970,000		

d.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF MIAMI BEACH PALM AND HIBISCUS ISLAND NEIGHBORHOOD STORMWATER AND ROADWAY IMPROVEMENTS MIAMI BEACH, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING 2015	CONSTRUCTION (IF APPLICABLE) <b>TBD</b>
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM MAP OF TOPOGRAPHIC SURVEY/ROUTE SURVEY ADHERING TO THE MIAMI BEACH PUBLIC WORKS MANUAL – SECTION 1A – SURVEYING STANDARDS AND REQUIREMENTS. CROSS-SECTIONS WERE TAKEN AT 25 TO 50 FOOT INTERVALS DUE TO THE RESTRICTIVE ENVIRONMENT. ELEVATIONS AT ENTRY THRESHOLDS OF STRUCTURES WERE ALSO PROVIDED. COST: \$105,798			
e.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF MIAMI BEACH LIGHT RAIL/MODERN STREETCAR PROJECT MIAMI BEACH, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES SURVEYING AND MAPPING 2016	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM MAP OF TOPOGRAPHIC SURVEY/ROUTE SURVEYS ADHERING TO THE MIAMI BEACH PUBLIC WORKS MANUAL – SECTION 1A – SURVEYING STANDARDS AND REQUIREMENTS ALONG THE CORRIDORS. ALL VISIBLE IMPROVEMENTS WERE LOCATED AND SHOWN. ABOVE AND BELOW GROUND UTILITIES AND DRAINAGE WERE IDENTIFIED AS WELL AS TREES AND LANDSCAPED AREAS TO 25 FEET OUTSIDE EACH RIGHT OF WAY LINE. CROSS-SECTIONS WERE TAKEN AT 50-FOOT INTERVALS. ELEVATIONS AT ENTRY THRESHOLDS OF STRUCTURES WERE ALSO PROVIDED. COST: \$300,000(+)			
f.	(1) TITLE AND LOCATION (CITY AND STATE) <b>CITY OF SUNNY ISLES BEACH NE 174<sup>TH</sup> STREET NEIGHBORHOOD STORMWATER AND PAVEMENT IMPROVEMENTS SUNNY ISLES BEACH, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2011	CONSTRUCTION (IF APPLICABLE) 2017
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM THE PROJECT CONSISTS OF RECONSTRUCTION OF BOTH DRAINAGE AND ROADWAY ALONG NE 174 <sup>TH</sup> STREET FOR APPROXIMATELY 0.2 MILES FROM COLLINS AVENUE TO NORTH BAY ROAD. THE DESIGN ALSO INCLUDES A NEW DRAINAGE SYSTEM THAT MEETS WATER QUALITY REQUIREMENTS, SITE DEMOLITION, ROAD REGRADING, UTILITY RELOCATIONS, SIDEWALKS, PAVER WALKWAYS, LANDSCAPING, CURBING, BIKE PATHS AND PARALLEL PARKING. CONSTRUCTION COST: \$2,147,800 (PHASE I)			
g.	(1) TITLE AND LOCATION (CITY AND STATE) <b>STORMWATER &amp; PUMP STATION IMPROVEMENTS PHASE IV SWEETWATER, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2011	CONSTRUCTION (IF APPLICABLE) 2013
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM DUE TO REPETITIVE, HISTORICAL FLOODING WITHIN THE 138 ACRE RESIDENTIAL AREA, PHASE IV STORMWATER IMPROVEMENTS FOR THE CITY OF SWEETWATER RECEIVED SUBSTANTIAL HMGP FUNDING FROM FEMA. THE PROJECTS CONSISTED OF 130 STRUCTURES, 10,795 LINEAR FEET OF DRAINAGE PIPE RANGING IN SIZE FROM 15-INCH TO 72-INCH, 1,506 LINEAR FEET OF 30-INCH FORCE MAIN AND 2-TRIPLEX PUMPING STATIONS (28 HP). CONSTRUCTION COST: \$ 4,090,000			
h.	(1) TITLE AND LOCATION (CITY AND STATE) <b>TOWN OF GOLDEN BEACH CIP PHASE III &amp; IV NEIGHBORHOOD STORMWATER COLLECTION SYSTEM WITH MASTER PUMP STATIONS GOLDEN BEACH, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2008	CONSTRUCTION (IF APPLICABLE) 2011
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM THE PROJECT CONSISTED OF A STORMWATER MASTER PUMP STATION, 14,500 LINEAR FEET OF DIP DRAINAGE PIPE AND STORMWATER FORCE MAIN RANGING IN SIZE FROM 16-INCH TO 72-INCH. CONSTRUCTION COST: \$7,667,276			
i.	(1) TITLE AND LOCATION (CITY AND STATE) <b>TOWN OF GOLDEN BEACH PHASE IV NEIGHBORHOOD STORMWATER IMPROVEMENTS GOLDEN BEACH, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2004	CONSTRUCTION (IF APPLICABLE) 2006
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM INSTALLATION OF 1,775 LINEAR FEET OF DRAINAGE PIPE RANGING IN SIZE FROM 15-INCH TO 72-INCH, 600 LINEAR FEET OF FORCE MAIN, 32 DRAINAGE STRUCTURES, A STORMWATER PUMP STATION, A BYPASS WEIR STRUCTURE AND A WATER QUALITY STRUCTURE. CONSTRUCTION COST: \$2,031,740			

j.	(1) TITLE AND LOCATION (CITY AND STATE) <b>TOWN OF PEMBROKE PARK SOUTHWEST 30<sup>TH</sup> AVENUE  NEIGHBORHOOD LIGHTING IMPROVEMENTS  PEMBROKE PARK, FLORIDA</b>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES <b>2004</b>	CONSTRUCTION (IF APPLICABLE) <b>2004</b>
(3) BRIEF DESCRIPTION (brief scope, size, cost, etc.) AND SPECIFIC ROLE <b>THE PROJECT INVOLVED INSTALLATION OF NEW STREET LIGHTING ALONG SOUTHWEST 30<sup>TH</sup> AVENUE AS PART OF THE TOWN'S  "ANTIQUE ROW" BEAUTIFICATION PROJECT.  CONSTRUCTION COST: \$175,596</b>			

X CHECK IF PROJECT PERFORMED WITH CURRENT FIRM

<b>F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT</b> <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i>	<b>20. EXAMPLE PROJECT KEY NUMBER:</b> <b>1</b>	
<b>21. Title and Location (City and State)</b>  <b>CITY OF POMPANO BEACH</b> <b>SW 2<sup>ND</sup> STREET NEIGHBORHOOD DRAINAGE IMPROVEMENTS</b> <b>POMPANO BEACH, FLORIDA</b>	<b>22. YEAR COMPLETED</b>	
	<small>PROFESSIONAL SERVICES</small>  <b>2018</b>	<small>CONSTRUCTION (If Applicable)</small>  <b>TBD</b>

**23. PROJECT OWNER'S INFORMATION**

a. PROJECT OWNER: City of Pompano Beach	b. POINT OF CONTACT NAME: Tammy Good, Engineering Project Manager	c. POINT OF CONTACT TELEPHONE: 954-786-5520
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**24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost):**

**Project Description:**

The SW 2<sup>nd</sup> Street Drainage Improvements project is located between Dixie Highway and Cypress Road and south of Atlantic Boulevard within the City's Government District. The project also includes a proposed stormwater system on SW 1<sup>st</sup> Avenue and SW 1<sup>st</sup> Court. The 0.43 miles of roadway are to be designed to alleviate existing flooding concerns with the possibility of an offsite discharge to a nearby canal. CAS performed complete right of way survey including: buildings, manholes, pipe inverts, utility poles, utility boxes, fire hydrants, traffic signs, underground and overhead utilities, trees, fences, hedges, existing pavement markings and signal equipment. Total design costs for the project is \$115,493 with an estimated construction cost of \$550,000.

**Responsibilities:**

Survey, utility locates, geotechnical engineering, engineering drainage analysis, preparation of preliminary engineering design and construction plans, cost estimates, contract documents and assistance during bidding, shop drawing review, construction observation and engineering services during construction, and certification through project closeout.



**25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT**

(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
A CRAIG A. SMITH & ASSOCIATES	Boca Raton, FL	Project Director – Survey, SUE & Design (Prime Consultant)

<b>F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT</b> <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i>	<b>20. EXAMPLE PROJECT KEY NUMBER:</b> <b>2</b>				
<b>21. Title and Location (City and State)</b>  <b>TOWN OF PEMBROKE PARK  SW 25<sup>TH</sup> STREET NEIGHBORHOOD STORMWATER IMPROVEMENTS  PEMBROKE PARK, FLORIDA</b>	<b>22. YEAR COMPLETED</b> <table border="1"> <tr> <td>PROFESSIONAL SERVICES</td> <td>CONSTRUCTION (If Applicable)</td> </tr> <tr> <td><b>2016</b></td> <td><b>TBD</b></td> </tr> </table>	PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)	<b>2016</b>	<b>TBD</b>
PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)				
<b>2016</b>	<b>TBD</b>				

**23. PROJECT OWNER'S INFORMATION**

<b>a. PROJECT OWNER:</b> Town of Pembroke Park	<b>b. POINT OF CONTACT NAME:</b> Dr. Robert Levy, Town Manager	<b>c. POINT OF CONTACT TELE:</b> 954-966-4600
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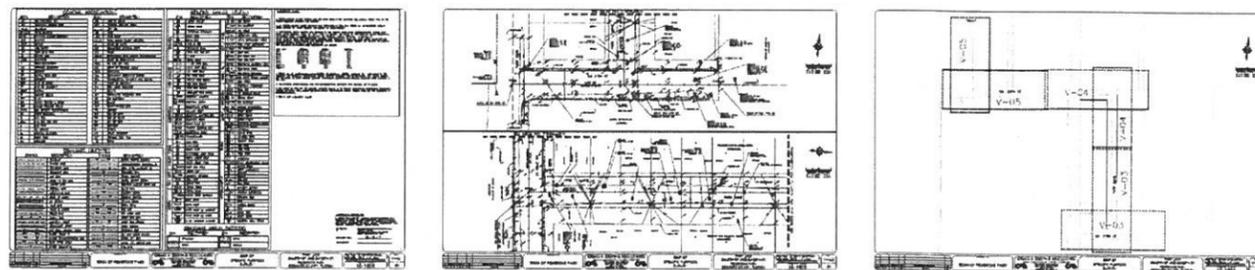
**24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT** *(Include scope, size, and cost):*

**Project Description:**

The Southwest 25th Street Stormwater Improvements for the Town of Pembroke Park is part of a multi-phase stormwater improvement project totaling 14.34 acres. CAS performed complete right of way survey including: buildings, manholes, pipe inverts, utility poles, utility boxes, fire hydrants, traffic signs, underground and overhead utilities, trees, fences, hedges, existing pavement markings and signal equipment. Phase I and II included 2.44 acres of drainage sub basin area. The purpose of the project was to alleviate flooding in the town by improving hydraulic conveyance throughout the existing stormwater drainage system serving the 14.34 acre study area. A hydraulic analysis to determine the acceptable level of service to the town was performed by the development of an ICPR model for the project area. After the model was completed, proposed recommendations were made for upsizing the existing stormwater drainage pipes by analyzing the ICPR results for reduction in peak stages and flood duration times in the pre and post conditions. Existing discharge pipes were upsized from 24" to new 54" diameter drainage pipes. The total design costs for the project was \$50,305 with anticipated construction costs totaling \$300,000. The project is currently in the design phase.

**Responsibilities:**

Survey, hydraulic modeling, design, construction contract development and bidding services. CAS Survey provided the Map of Topographic Survey/Route survey within the project corridor. All visible improvements, as well as above and below ground utilities and drainage were identified. Additionally, trees (4" or greater) and landscaped areas to 10 feet outside each right of way line were located and shown.



**25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT**

(1) FIRM NAME	(2) FIRM LOCATION <i>(City and State)</i>	(3) ROLE
A CRAIG A. SMITH & ASSOCIATES	Boca Raton, FL	Project Director – Survey & Design (Prime Consultant)

<b>F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT</b> <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i>	<b>20. EXAMPLE PROJECT KEY NUMBER:</b> <b>3</b>					
<b>21. Title and Location (City and State)</b>  <b>SEACOAST UTILITY AUTHORITY  NORTHLAKE BOULEVARD/US-1 WATER &amp; SEWER FORCE  MAIN IMPROVEMENTS  JUPITER, FLORIDA</b>	<b>22. YEAR COMPLETED</b> <table border="1"> <tr> <td data-bbox="1010 262 1205 332">PROFESSIONAL SERVICES</td> <td data-bbox="1205 262 1386 332">CONSTRUCTION (If Applicable)</td> </tr> <tr> <td data-bbox="1010 332 1205 542">2018</td> <td data-bbox="1205 332 1386 542">N/A</td> </tr> </table>		PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)	2018	N/A
PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)					
2018	N/A					

**23. PROJECT OWNER'S INFORMATION**

a. PROJECT OWNER: Hazen and Sawyer, P.C.	b. POINT OF CONTACT NAME: George Brown, P.E.	c. POINT OF CONTACT TELEPHONE: 954-987-0066
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**24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost):**

**Project Description:**

Surveying for the Seacoast Utility Authority phases I through III of construction for water and sewer pipeline replacements in the cities of North Palm Beach and Palm Beach Gardens, Florida. CAS performed complete right of way survey including: manholes, pipe inverts, utility poles, utility boxes, fire hydrants, traffic signs, underground and overhead utilities, trees, fences, hedges, existing pavement markings and signal equipment. Total survey and SUE costs for the project was \$61,125.

**Responsibilities:**

CAS Survey was tasked with providing the Map of Topographic Survey/Route Surveys within the corridors specified. All visible improvements, as well as above and below ground utilities and drainage were identified. Additionally, all trees (4" or greater) and landscaped areas to 10 feet outside each right of way line were located and shown. Utility test hole locations included.



**25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT**

(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
A CRAIG A. SMITH & ASSOCIATES	Boca Raton, FL	Project Director – Survey & SUE (Subconsultant)

<b>F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT</b> <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i>	<b>20. EXAMPLE PROJECT KEY NUMBER:</b> <b>4</b>				
<b>21. Title and Location (City and State)</b>  <b>CITY OF MIAMI BEACH  PALM AND HIBISCUS ISLAND NEIGHBORHOOD  STORMWATER AND ROADWAY IMPROVEMENTS  MIAMI BEACH, FLORIDA</b>	<b>22. YEAR COMPLETED</b> <table border="1"> <tr> <td data-bbox="1010 221 1212 282">PROFESSIONAL SERVICES</td> <td data-bbox="1212 221 1398 282">CONSTRUCTION (If Applicable)</td> </tr> <tr> <td data-bbox="1010 282 1212 499">2015</td> <td data-bbox="1212 282 1398 499">TBD</td> </tr> </table>	PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)	2015	TBD
PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)				
2015	TBD				

23. PROJECT OWNER'S INFORMATION		
a. PROJECT OWNER: Stantec Consulting Services, Inc.	b. POINT OF CONTACT NAME: Jeffrey Crews, P.E.	c. POINT OF CONTACT TELEPHONE: 954-804-2715

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

**Project Description:**

The Palm and Hibiscus Island Stormwater and Roadway Improvements is a Capital Improvement Project structured as a design/build with Lanzo Construction. CAS performed complete right of way survey including: buildings, manholes, pipe inverts, utility poles, utility boxes, fire hydrants, traffic signs, underground and overhead utilities, trees, fences, hedges, existing pavement markings and signal equipment. CAS was also responsible for the drainage system, roadway design and harmonization components of the CIP. The design incorporated engineering techniques to reduce future sea level rises such as elevating the existing roadways, increasing the size of the drainage system, providing water quality, installing three pump stations and backflow prevention devices to avoid extreme high tides from re-entering the systems. Total survey and SUE costs for the project was \$105,798. Estimated costs for the project is \$8 million. Project design began in January 2014 and was completed in November 2015. Construction for this project is anticipated to be completed in the first quarter of 2019.

**Responsibilities:**

CAS Survey was tasked with providing the Map of Topographic Survey/Route Survey adhering to the Miami Beach Public Works Manual – Section 1A - Surveying Standards and Requirements. Cross-sections were taken at 25 to 50 foot intervals due to the restrictive environment. Elevations at entry thresholds of structures were also provided.



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

(1) FIRM NAME	(2) FIRM LOCATION <i>(City and State)</i>	(3) ROLE
A CRAIG A. SMITH & ASSOCIATES	Boca Raton, FL	Project Director – Survey, SUE & Design (Subconsultant)

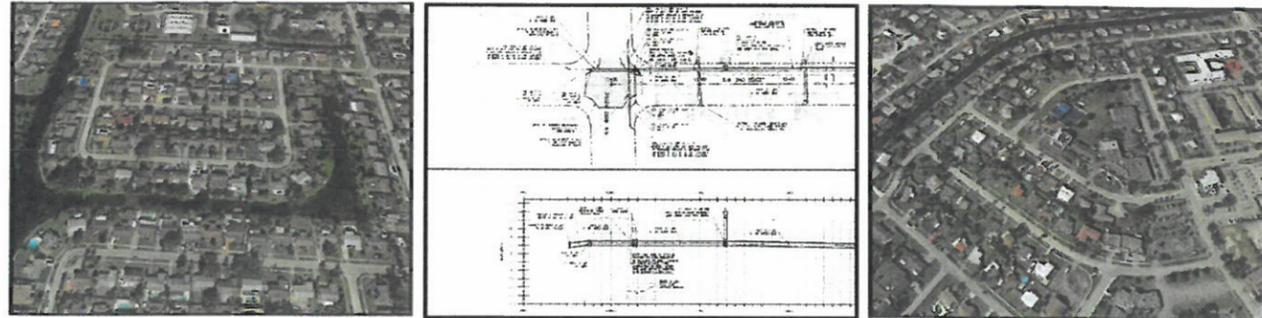
<b>F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT</b> <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i>		<b>20. EXAMPLE PROJECT KEY NUMBER:</b> 5				
<b>21. Title and Location (City and State)</b>  <b>CITY OF MARGATE          PHASE II NEIGHBORHOOD WATER MAIN IMPROVEMENTS (2018 WATER MAIN IMPROVEMENTS)          MARGATE, FLORIDA</b>		<b>22. YEAR COMPLETED</b> <table border="1"> <tr> <td>PROFESSIONAL SERVICES</td> <td>CONSTRUCTION (If Applicable)</td> </tr> <tr> <td>2018</td> <td>SCHEDULED FOR 2019</td> </tr> </table>	PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)	2018	SCHEDULED FOR 2019
PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)					
2018	SCHEDULED FOR 2019					

23. PROJECT OWNER'S INFORMATION		
a. PROJECT OWNER: City of Margate	b. POINT OF CONTACT NAME: Kelly McAtee, P.E., Project Manager	c. POINT OF CONTACT TEL: 954-972-0828

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

**Project Description:**  
 The Phase II Watermain Improvements project consists of survey, design and construction management for the replacement of 2-inch galvanized steel WM with 6-inch DIP at 15 different locations throughout the City including a total replacement of approximately 12,000 linear feet of water main infrastructure. CAS Survey was tasked with providing the Map of Topographic Survey/Route Surveys within the corridors specified. CAS performed complete right of way survey including: manholes, pipe inverts, utility poles, utility boxes, fire hydrants, traffic signs, underground and overhead utilities, trees, fences, hedges, existing pavement markings and signal equipment. Additionally, all trees (4" or greater) and landscaped areas to 10 feet outside each right of way line were located and shown. Utility test hole locations were included. Duration of professional surveying services and utility locates was February 2016 to August 2016. Total survey and SUE costs for the project was \$57,060. Estimated construction cost is \$1,800,000.

**Responsibilities:**  
 Preliminary planning, survey, utility locates, soft digs, design, preparation of construction plans and contract documents, and permitting. CAS Survey was tasked with providing the Map of Topographic Survey/Route Surveys within the corridors specified. All visible improvements, as well as above and below ground utilities and drainage were identified. Additionally, all trees (4" or greater) and landscaped areas to 10 feet outside each right of way line were located and shown. Utility test hole locations included.



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT		
(1) FIRM NAME	(2) FIRM LOCATION <i>(City and State)</i>	(3) ROLE
A CRAIG A. SMITH & ASSOCIATES	Boca Raton, FL	Project Director – Survey, SUE & Design (Prime Consultant)

<b>F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT</b> <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i>		<b>20. EXAMPLE PROJECT KEY NUMBER:</b> <b>6</b>
<b>21. Title and Location (City and State)</b>  <b>CITY OF SUNNY ISLES BEACH</b> <b>174<sup>TH</sup> STREET STORMWATER &amp; PAVEMENT IMPROVEMENTS</b> <b>SUNNY ISLES BEACH, FLORIDA</b>	<b>22. YEAR COMPLETED</b>	
	PROFESSIONAL SERVICES <b>2014</b>	CONSTRUCTION (If Applicable) <b>2017</b>

**23. PROJECT OWNER'S INFORMATION**

a. PROJECT OWNER: City of Sunny Isles Beach	b. POINT OF CONTACT NAME: Christopher Russo, City Manager	c. POINT OF CONTACT TELEPHONE: 305-792-1776
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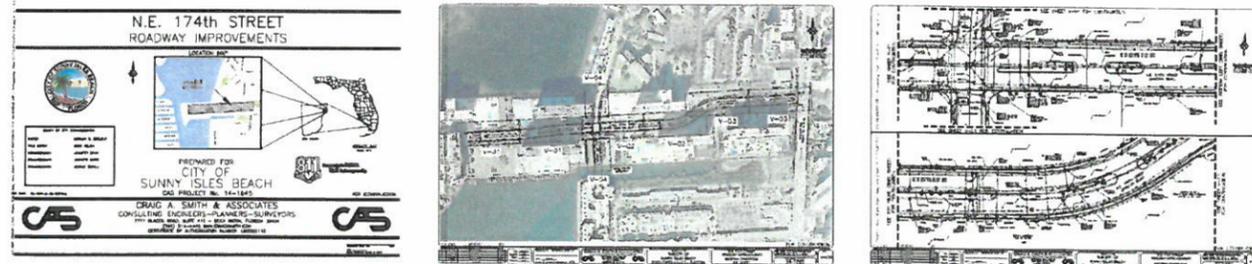
**24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost):**

**Project Description:**

The Roadway Improvements Project for NE 174th Street consists of a reconstruction of both the drainage and the road for approximately 0.2 miles from Collins Avenue to North Bay Road. The existing roadway system was failing due to poor soil conditions, a limited drainage system and an undersized outfall. The new roadway incorporated a reconstructed base with geotech fabric to offset the soils. CAS performed complete right of way survey including: buildings, manholes, pipe inverts, utility poles, utility boxes, fire hydrants, traffic signs, underground and overhead utilities, trees, fences, hedges, existing pavement markings and signal equipment. The design included a new drainage system that meets water quality requirements, site demolition, road regrading, utility relocations, sidewalks and paver walkways, landscaping, curbing, bike paths and parallel parking. Total survey and SUE costs for the project was \$19,948. Construction of the project was completed in the Spring of 2017 with a construction cost of \$3,682,392.

**Responsibilities:**

CAS Survey was tasked with providing the Map of Topographic Survey/Route Survey for the entire length of the project. Cross sections were taken at 50-foot intervals to 10 feet beyond each right of way line. All visible improvements as well as above and below ground utilities and drainage were located and shown on the survey. Utility test holes were also located and included on the survey.



**25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT**

(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
A CRAIG A. SMITH & ASSOCIATES	Boca Raton, FL	Project Director – Survey, SUE & Design (Prime Consultant)

<b>F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT</b> <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i>	<b>20. EXAMPLE PROJECT KEY NUMBER:</b> <b>7</b>				
<b>21. Title and Location (City and State)</b>  <b>CITY OF MIAMI BEACH</b> <b>LIGHT RAIL/MODERN STREETCAR PROJECT</b> <b>MIAMI BEACH, FLORIDA</b>	<b>22. YEAR COMPLETED</b> <table border="1"> <tr> <td data-bbox="1010 221 1212 292">PROFESSIONAL SERVICES</td> <td data-bbox="1212 221 1398 292">CONSTRUCTION (If Applicable)</td> </tr> <tr> <td data-bbox="1010 292 1212 504">2016</td> <td data-bbox="1212 292 1398 504">N/A</td> </tr> </table>	PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)	2016	N/A
PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)				
2016	N/A				

**23. PROJECT OWNER'S INFORMATION**

<b>a. PROJECT OWNER:</b> Kimley-Horn & Associates, Inc.	<b>b. POINT OF CONTACT NAME:</b> Greg Kyle, AICP, Senior Vice President	<b>c. POINT OF CONTACT TELEPHONE:</b> 305-673-2025
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**24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost):**

**Project Description:**

Preliminary survey/engineering for the first phase of construction of a street car loop around the City of Miami Beach. The project included approximately 4.5 miles. CAS performed complete right of way survey including: buildings, manholes, pipe inverts, utility poles, utility boxes, fire hydrants, traffic signs, underground and overhead utilities, trees, fences, hedges, existing pavement markings and signal equipment. Total survey and SUE costs for the project was \$300,000(+).

**Responsibilities:**

CAS Survey was tasked with providing the Map of Topographic Survey/Route Surveys adhering to the Miami Beach Public Works Manual - Section 1 A. Surveying Standards and Requirements along the corridors. All visible improvements were located and shown. Above and below ground utilities and drainage were identified as well as trees and landscaped areas to 25 feet outside each right of way line. Cross-sections were taken at 50-foot intervals. Elevations at entry thresholds of structures were also provided.



**25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT**

(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
A CRAIG A. SMITH & ASSOCIATES	Boca Raton, FL	Project Director – Survey & SUE (Subconsultant)

<b>F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT</b> <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i>	<b>20. EXAMPLE PROJECT KEY NUMBER:</b> <b>8</b>	
<b>21. Title and Location (City and State)</b>  <b>CITY OF LAKE WORTH</b> <b>LAKE OSBORNE NEIGHBORHOOD WATER MAIN REPLACEMENT PHASE I</b> <b>LAKE WORTH, FLORIDA</b>	<b>22. YEAR COMPLETED</b>	
	PROFESSIONAL SERVICES  <b>2018</b>	CONSTRUCTION (If Applicable)  <b>SCHEDULED FOR 2019</b>

23. PROJECT OWNER'S INFORMATION		
a. PROJECT OWNER: City of Lake Worth	b. POINT OF CONTACT NAME: Giles M. Rhoads, P.E., Utilities Engineer	c. POINT OF CONTACT TELEPHONE: 561-586-1640

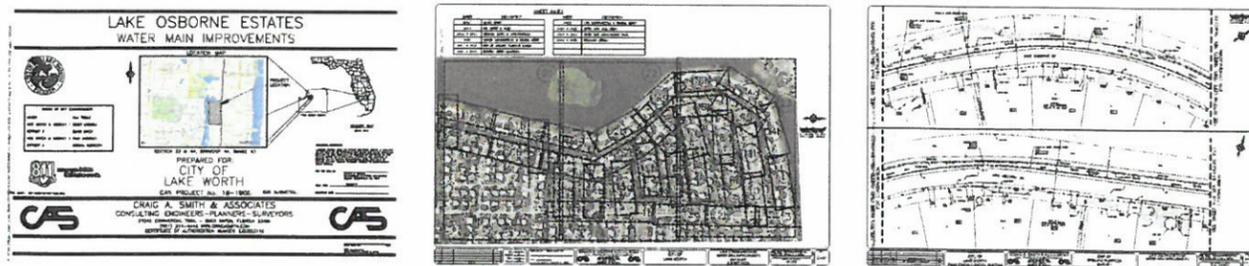
24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost):*

**Project Description:**

Survey/engineering for the first phase of construction for the water main replacement and water meter relocations in the Lake Osborne Estates residential area located in the City of Lake Worth. The project included approximately 3.1 miles of route survey. CAS performed complete right of way survey including: manholes, pipe inverts, utility poles, utility boxes, fire hydrants, traffic signs, underground and overhead utilities, trees, fences, hedges, existing pavement markings and signal equipment. Total survey and SUE costs for the project was \$109,963.

**Responsibilities:**

CAS Survey was tasked with providing the Map of Topographic Survey/Route Surveys within the designated corridors including property lines and utility easement designations. All visible improvements, as well as above and below ground utilities and drainage were identified. Trees (3" or greater) and landscaped areas were located and shown to 10 feet outside each right of way line.



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
A CRAIG A. SMITH & ASSOCIATES	Boca Raton, FL	Project Director – Survey, SUE & Design (Prime Consultant)

<b>F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT</b> <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i>		<b>20. EXAMPLE PROJECT KEY NUMBER:</b> <b>9</b>				
<b>21. Title and Location (City and State)</b>  <b>CCPWA – CITY OF MOORE HAVEN</b> <b>AVENUE N, O, S AND 4<sup>TH</sup> NEIGHBORHOOD SANITARY SEWER EXPANSION</b> <b>MOORE HAVEN, FLORIDA</b>		<b>22. YEAR COMPLETED</b> <table border="1"> <tr> <td>PROFESSIONAL SERVICES</td> <td>CONSTRUCTION (If Applicable)</td> </tr> <tr> <td><b>2018</b></td> <td><b>TBD</b></td> </tr> </table>	PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)	<b>2018</b>	<b>TBD</b>
PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)					
<b>2018</b>	<b>TBD</b>					

**23. PROJECT OWNER'S INFORMATION**

a. PROJECT OWNER: City of Moore Haven CCPWA	b. POINT OF CONTACT NAME: David Miller, City Manager	c. POINT OF CONTACT TELEPHONE: 863-946-0711
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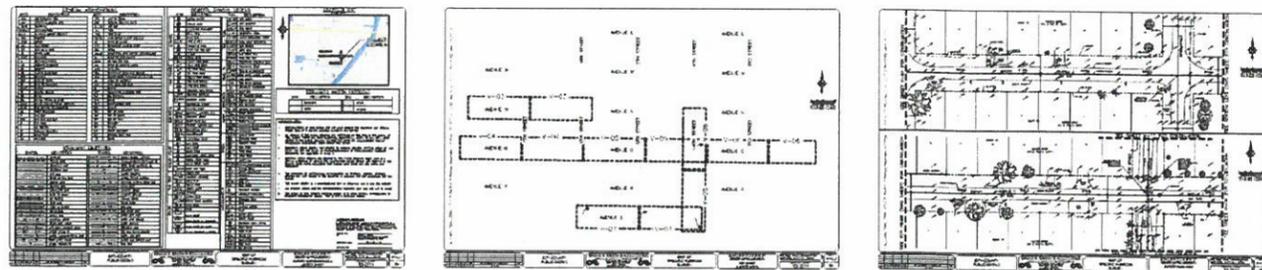
**24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost):**

**Project Description:**

Survey/engineering for the latest phase of construction for the sanitary sewer expansion in the City of Moore Haven. CAS performed complete right of way survey including: manholes, pipe inverts, utility poles, utility boxes, fire hydrants, traffic signs, overhead utilities, trees, fences, hedges, existing pavement markings and signal equipment. The project included approximately 0.8 miles of route survey. Total survey and SUE costs for the project was \$19,525.

**Responsibilities:**

CAS Survey was tasked with providing the Map of Topographic Survey/Route Surveys within the corridors specified. All visible improvements, as well as above and below ground utilities and drainage were identified. Additionally, all trees (3" or greater) and landscaped areas to 10 feet outside each right of way line were located and shown. Additional roadway legal descriptions and easements were required.



**25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT**

(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
A CRAIG A. SMITH & ASSOCIATES	Boca Raton, FL	Project Director – Survey, SUE & Design (Prime Consultant)

<b>F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT</b> <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i>	<b>20. EXAMPLE PROJECT KEY NUMBER:</b> <b>10</b>	
<b>21. Title and Location (City and State)</b>  <b>BAL HARBOUR VILLAGE          COLLINS AVENUE WATER MAIN REPLACEMENT          BAL HARBOUR, FLORIDA</b>	<b>22. YEAR COMPLETED</b>	
	PROFESSIONAL SERVICES  <b>2011</b>	CONSTRUCTION (If Applicable)  <b>2013</b>

**23. PROJECT OWNER'S INFORMATION**

a. PROJECT OWNER: Bal Harbour Village	b. POINT OF CONTACT NAME: John Oldenburg, Director of Parks & Public Spaces	c. POINT OF CONTACT TELEPHONE: 305-866-4633
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**24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost):**

**Project Description:**

The Bal Harbour Village Water Main Replacement Project consisted of the installation of a 12-inch water main along the east side of Collins Avenue intended to augment the existing water main system to boost existing pressures and flows to the village's high rise district. CAS performed complete right of way survey including: buildings, manholes, pipe inverts, utility poles, utility boxes, fire hydrants, traffic signs, underground and overhead utilities, trees, fences, hedges, existing pavement markings, construction staking and signal equipment. Construction included the installation of 1,800 linear feet of 12-inch directionally drilled water main, 680 LF of 12-inch DIP water main, fire hydrant assemblies and connection to nine (9) existing mains. Total design costs including construction management for the project were \$123,970. Total construction costs were \$558,590. The project began in 2011 and was completed in 2013 without liquidated damages.

**Responsibilities:**

Survey, utility locates, preparation of engineering design and construction plans, permitting, cost estimates, contract documents, bidding, construction management and construction observation, and certification through project close-out. CAS Survey provided the Map of Topographic Survey/route surveys within the corridor specified. All visible improvements, as well as above and below ground utilities and drainage were identified. Additionally, all trees (3" or greater) and landscaped areas 10 feet outside each right of way line were located and shown.



**25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT**

(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
A CRAIG A. SMITH & ASSOCIATES	Boca Raton, FL	Project Director – Survey, SUE & Design (Prime Consultant)

<b>F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT</b> <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i>	<b>20. EXAMPLE PROJECT KEY NUMBER:</b> <b>11</b>					
<b>21. Title and Location (City and State)</b>  <b>BRICKELL CITICENTRE  SURVEY AND SUBSURFACE UTILITY SERVICES  MIAMI, FLORIDA</b>	<b>22. YEAR COMPLETED</b> <table border="1"> <tr> <td data-bbox="1010 252 1212 332">PROFESSIONAL SERVICES</td> <td data-bbox="1212 252 1398 332">CONSTRUCTION (If Applicable)</td> </tr> <tr> <td data-bbox="1010 332 1212 514">2012</td> <td data-bbox="1212 332 1398 514">N/A</td> </tr> </table>		PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)	2012	N/A
PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)					
2012	N/A					

**23. PROJECT OWNER'S INFORMATION**

a. PROJECT OWNER: Balfour Beatty Construction USA	b. POINT OF CONTACT NAME: Clinton Glass, Sr. Vice President	c. POINT OF CONTACT TELEPHONE: 954-585-4240
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**24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost):**

**Project Description:**

CAS was tasked to perform specific purpose survey and extensive 3D Radar Tomography for the Brickell CitiCentre in downtown Miami, located at 601, 700 and 701 South Miami Avenue. CAS performed complete right of way survey including: manholes, pipe inverts, utility poles, utility boxes, fire hydrants, traffic signs, underground and overhead utilities, existing pavement markings and signal equipment. The 9-acre site required extensive rebuild of off-site infrastructure and substantial relocation of existing subsurface facilities that included the development of a multi-level 6-acre parking garage and three 40 story residential and commercial towers. CAS performed over 390,000 square feet of 3D RT, GPR and EM location along with 25 vacuum excavation soft digs. The subsurface utility services began in May of 2012 and was completed in June of 2012 for a total fee of \$50,000.

**Responsibilities:**

Specific purpose survey, electronic surface designations, utility locations marked by use of ground penetrating radar (2D/3D radar and electromagnetics), vacuum soft digs to confirm GPR results and GPS coordinates utilizing sub-centimeter equipment.



**25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT**

(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
A CRAIG A. SMITH & ASSOCIATES	Boca Raton, FL	Project Director – Survey & SUE (Subconsultant)

<b>F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT</b> <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i>	<b>20. EXAMPLE PROJECT KEY NUMBER:</b> <b>12</b>	
<b>21. Title and Location (City and State)</b>  <b>TOWN OF GOLDEN BEACH          PHASE 4 STORMWATER IMPROVEMENTS          GOLDEN BEACH, FLORIDA</b>	<b>22. YEAR COMPLETED</b>	
	PROFESSIONAL SERVICES  <b>2004</b>	CONSTRUCTION (If Applicable)  <b>2006</b>

**23. PROJECT OWNER'S INFORMATION**

a. PROJECT OWNER: Town of Golden Beach	b. POINT OF CONTACT NAME: Alexander Diaz, Town Manager	c. POINT OF CONTACT TELEPHONE: 305-932-0744
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**24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT** *(Include scope, size, and cost):*

**Project Description:**

The Town of Golden Beach Phase 4 Stormwater Improvements were the initial phase of development from the Town's Stormwater Master Plan. CAS performed complete right of way survey including: buildings, manholes, pipe inverts, utility poles, utility boxes, fire hydrants, traffic signs, underground and overhead utilities, trees, fences, hedges, existing pavement markings, construction staking and signal equipment. Construction included the installation of 1,775 linear feet of DIP drainage pipe ranging in diameter from 15-inch to 72-inch, 600 linear feet of force main, 32 drainage structures, a stormwater pump station with two 28-HP pumps, a bypass weir structure and a water quality structure in the Town's north and south park areas. Due to the Town's soils make-up, all structures and pipe were placed on piles to avoid settling. Total design costs including construction management for the project was \$318,170. Total construction cost was \$2,031,740. The project began in July 2004 and was completed in April 2006 without liquidated damages.

**Responsibilities:**

Survey, utility locates, preparation of engineering design and construction plans, cost estimates, contract documents, bidding, construction management and construction observation, and certification through project close-out. CAS Survey was tasked with providing the Map of Topographic Survey/route survey within the right of way corridor specified. All visible improvements, as well as above and buried utilities and drainage were identified. Additionally, all trees (4" or greater) and landscaped areas 10 feet outside each right of way line were located and shown. Utility locates included soft digs and 2D ground penetrating radar.



**25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT**

(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
A CRAIG A. SMITH & ASSOCIATES	Boca Raton, FL	Project Director – Survey, SUE & Design (Prime Consultant)

<b>F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT</b> <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i>	<b>20. EXAMPLE PROJECT KEY NUMBER:</b> <b>13</b>	
<b>21. Title and Location (City and State)</b>  <b>AECOM / DRAGADOS USA</b> <b>INTERSTATE 595 ROADWAY RECONSTRUCTION</b> <b>SURVEY AND SUBSURFACE UTILITY SERVICES</b> <b>BROWARD COUNTY, FLORIDA</b>	<b>22. YEAR COMPLETED</b>	
	PROFESSIONAL SERVICES  <b>2010</b>	CONSTRUCTION (If Applicable)  <b>N/A</b>

23. PROJECT OWNER'S INFORMATION		
a. PROJECT OWNER: AECOM	b. POINT OF CONTACT NAME: Adebayo Coker, P.E., SUE Coordinator	c. POINT OF CONTACT TELEPHONE: 305-232-7932

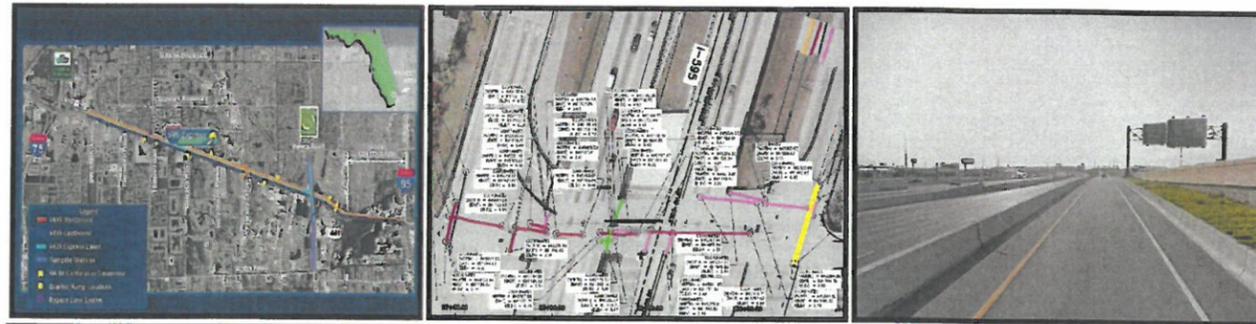
24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost):*

**Project Description:**

CAS was tasked with performing complete specific purpose survey and subsurface utility engineering services enhanced with 3D Radar Tomography in advance of construction activities. CAS performed complete right of way survey including: manholes, pipe inverts, utility poles, utility boxes, traffic signs, underground and overhead utilities, jersey barriers, sound walls, existing pavement markings and signal equipment. The \$1.62 billion dollar design/build project included the expansion and reconstruction of the Interstate 595 corridor to include reversible express lanes, braided entry and exit ramps, improved interchanges, overhead message signage and tolling facilities, CCTV systems and enhanced signalization. CAS performed over one million square feet of 3D RT, GPR, EM locating and 750 vacuum excavation soft digs to assist in identifying potential conflicts between existing subsurface systems and numerous proposed bridge, column and sign foundations. CAS began the project in September of 2009 and completed its portion of the work in May of 2010 for a total fee of \$968,302.

**Responsibilities:**

Specific purpose route survey, electronic surface designations, utility locations marked by use of ground penetrating radar (2D/3D Radar Tomography and electromagnetics), vacuum soft digs to confirm GPR results and GPS coordinates utilizing sub-centimeter equipment, 3D CADD modeling of existing utility systems.



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
A CRAIG A. SMITH & ASSOCIATES	Boca Raton, FL	Project Director – Survey & SUE (Subconsultant)

<b>F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT</b> <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i>	<b>20. EXAMPLE PROJECT KEY NUMBER:</b> <b>14</b>					
<b>21. Title and Location (City and State)</b>  <b>TOWN OF PEMBROKE PARK  SW 52<sup>ND</sup> AVENUE (NORTH) NEIGHBORHOOD ROADWAY  AND DRAINAGE IMPROVEMENTS  PEMBROKE PARK, FLORIDA</b>	<b>22. YEAR COMPLETED</b> <table border="1"> <tr> <td data-bbox="1010 231 1196 302">PROFESSIONAL SERVICES</td> <td data-bbox="1196 231 1392 302">CONSTRUCTION (If Applicable)</td> </tr> <tr> <td data-bbox="1010 302 1196 514">2010</td> <td data-bbox="1196 302 1392 514">2010</td> </tr> </table>		PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)	2010	2010
PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)					
2010	2010					

**23. PROJECT OWNER'S INFORMATION**

a. PROJECT OWNER: Town of Pembroke Park	b. POINT OF CONTACT NAME: Dr. Robert Levy, Town Manager	c. POINT OF CONTACT TELEPHONE: 954-966-4600
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**24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT** *(Include scope, size, and cost):*

**Project Description:**

The Town of Pembroke Park SW 52<sup>nd</sup> Avenue (North) Project was the second phase of a roadway and drainage project. The project consisted of approximately 2,400 linear feet of new roadway (south of Hallandale Beach Boulevard), 2,200 linear feet of 36" HDPE pipe and exfiltration trench and 14 inlets. CAS performed complete right of way survey including: manholes, pipe inverts, utility poles, utility boxes, fire hydrants, traffic signs, underground and overhead utilities, trees, fences, hedges, existing pavement markings and signal equipment. The project was funded through a CDBG grant for \$844,200. The project included a change order for \$580,000 when additional grant funds became available and the scope of work expanded. Design fees for this project totaled \$206,594. The project was completed in May 2010 within the accepted schedule with no liquidated damages.

**Responsibilities:**

Survey, utility locates, design, cost estimates, preparation of construction plans and contract documents, permitting, bidding, construction management and construction observation, survey as-builts and certification through project close-out. CAS Survey was tasked with providing the Map of Topographic Survey/Route Surveys within the designated corridors including property lines and utility easement designations. All visible improvements, as well as above and below ground utilities and drainage were identified. Trees (3" or greater) and landscaped areas were located and shown to 10 feet outside each right of way line.



**25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT**

(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
A CRAIG A. SMITH & ASSOCIATES	Boca Raton, FL	Project Director – Survey, SUE & Design (Prime Consultant)

**G. KEY PERSONNEL PARTICIPATION IN EXAMPLE PROJECTS**

26. NAMES OF KEY PERSONNEL (From Section E, Block 12)	27. ROLE IN THIS CONTRACT (From Section E, Block 13)	28. EXAMPLE 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	11	12	13	14
Robert D. Keener, PSM	Vice President - Survey	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Sandro Elvir	Survey Coordination Manager	X	X	X	X	X	X	X	X	X	X	X	X	X	X
David Lookabill	Survey Crew Leader	X		X	X	X		X	X	X					
Donald Drake	Survey Crew Leader	X		X					X	X					
James F. Driscoll	SUE Director	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Alan Lopez	Field Supervisor			X			X				X		X	X	
Stephen C. Smith, P.E.	Sr. VP – Quality Assurance	X	X	X	X		X	X	X		X	X	X	X	X

**29. EXAMPLE PROJECT KEY**

No.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)	NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)
1	City of Pompano Beach SW 2 <sup>nd</sup> Street Neighborhood Drainage Improvements Pompano Beach, Florida	8	City of Lake Worth Lake Osborne Estates Neighborhood Water Main Replacement Phase I Lake Worth, Florida
2	Town of Pembroke Park SW 25 <sup>th</sup> Street Neighborhood Stormwater Improvements Pembroke Park, Florida	9	CCPWA – City of Moore Haven Avenue N, O, S and 4 <sup>th</sup> Neighborhood Sanitary Sewer Expansion Moore Haven, Florida
3	Seacoast Utility Authority Northlake Boulevard / US-1 Water & Sewer Force Main Improvements Jupiter, Florida	10	Bal Harbour Village Collins Ave. Water Main Replacement Bal Harbour, Florida
4	City of Miami Beach Palm & Hibiscus Island Neighborhood Stormwater & Roadway Improvements Miami Beach, Florida	11	Brickell Citicentre Survey and Subsurface Utility Services Miami, Florida
5	City of Margate Phase II Water Main Improvements (2018) Neighborhood Water Main Improvements) Margate, Florida	12	Town of Golden Beach Phase 4 Stormwater Improvements Golden Beach, Florida
6	City of Sunny Isles Beach 174 <sup>th</sup> Street Neighborhood Stormwater & Pavement Improvements Sunny Isles Beach, Florida	13	AECOM / Dragados USA Interstate 595 Roadway Reconstruction Survey and Subsurface Utility Services Broward County, Florida
7	City of Miami Beach Light Rail/Modern Streetcar Project Miami Beach, Florida	14	Town of Pembroke Park SW 52 <sup>nd</sup> Avenue (North) Neighborhood Roadway and Drainage Improvements Pembroke Park, Florida

**H. ADDITIONAL INFORMATION**

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

**OVERALL FIRM QUALIFICATIONS**

Craig A. Smith & Associates (CAS) is a multi-disciplined firm with extensive experience in Florida with respect to surveying and mapping, utility engineering – water, wastewater, storm water/drainage systems, master planning and design. The firm has a Surveying Division, Civil Engineering Division, Utility Locates (S.U.E.) Division and Construction Services Management Section.

Our staff of 35+ professional and technical personnel specializes in providing surveying and engineering consulting services to many clients in South Florida.

Mr. Robert D. Keener has been licensed in the State of Florida for 29 years and has 41 years of surveying experience. Mr. Keener is Vice President of our Surveying Division and heads a staff that includes both CADD operators and field personnel. His staff is proficient with the latest survey technology available to the industry including Trimble conventional, robotic and GPS Instruments, Leica 3D Digital Scanner equipment and TDS Data Collection in the field and/or AutoCAD 2018 software with Civil 3D for surveying as a COGO package in the office. Mr. Keener manages his personnel so that they remain well-versed in all aspects of survey to meet the needs of any project from subdivision layout to the more complex projects such as surveying for storm water or utility master planning.

CAS is proficient in project surveying, mapping and locating services and has a proven track record of accomplishing large-scale projects while promoting concepts of quality, integrity and teamwork within the firm and with our clientele. We are confident you will find the CAS team to be a tremendous asset for your project. We pride ourselves on our ability to tailor our services to meet our clients' needs. We are proud of our history of successful survey and utility locates projects as noted. This success is a result of our highly experienced staff members who have created a cohesive team ensuring projects are completed in a timely and cost-effective manner.

**I. AUTHORIZED REPRESENTATIVE  
the foregoing is a statement of facts.**

31. SIGNATURE OF AUTHORIZED REPRESENTATIVE:

32. DATE SIGNED:

08/27/2019

33. NAME AND TITLE OF SIGNER:

**Stephen C. Smith, P.E., Senior Vice President**

**ARCHITECT-ENGINEER QUALIFICATIONS** 1. SOLICITATION NUMBER (If Any)  
**DCRA 19-026**

**PART II - GENERAL QUALIFICATIONS**

(If a firm has branch offices, complete for each specific branch office seeking work.)

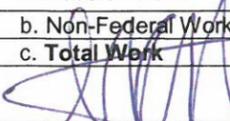
2a. FIRM (OR BRANCH OFFICE) NAME: <b>Craig A. Smith &amp; Associates, Inc.</b>		3. YEAR ESTABLISHED: <b>1980</b>	4. DUNS NUMBER: <b>03-8695029</b>
2b. STREET: <b>21045 Commercial Trail</b>		5. OWNERSHIP: a. TYPE <b>Corporation</b>	
2c. CITY: <b>Boca Raton</b>	2d. STATE: <b>FL</b>	2e. ZIP CODE: <b>33486</b>	b. SMALL BUSINESS STATUS: <b>N/A</b>
6a. POINT OF CONTACT NAME AND TITLE: <b>Robert D. Keener, P.S.M.</b>		7. NAME OF FIRM (If block 2a is a branch office): <b>N/A</b>	
6b. TELEPHONE NUMBER: <b>(561) 314-4445</b>	6c. E-MAIL ADDRESS: <b>rkeener@craigasmith.com</b>		

8a. FORMER FIRM NAME(S) (If any) N/A	8b. YR. ESTABLISHED	8c. DUNS NUMBER
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9. EMPLOYEES BY DISCIPLINE			10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS			
a. Function Code	b. Discipline	c. No. of Employees		a. Profile Code	b. Experience	c. Revenue Index Number (see below)
		(1) FIRM	(2) BRANCH			
02	Administrative	6		C10	Commercial Buildings	1
08	CADD Technical	2		C11	Commercial Facilities	1
12	Civil Engineering	7		C16	Construction Survey	3
15	Construction Inspection	3		D04	Design Building	1
42	Mechanical Engineer	1		D05	Digital Elevation	1
38	Land Surveyor	5		D08	Dredging	1
	Utility Locators	12		E09	Environmental Impact Studies	1
				G04	GIS	1
				C15	Construction Management	3
				H07	Highways/Streets	2
				I06	Drainage	4
				L02	Land Surveying	4
				001	Office Buildings	1
				PO5	Planning	2
				R07	Remote Sensing	1
				R09	Recycling	1
				R11	Waterways	1
				S07	Solid Waste	1
				S10	Survey	4
				S13	Storm water Handling & Facile	4
				T04	Topo Survey & Mapping	3
				W03	Water Supply	3
	Other Employees					
	<b>Total</b>	<b>36</b>				

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS (Insert revenue index number shown at)		PROFESSIONAL SERVICES REVENUE INDEX NUMBER			
a. Federal Work	1	1. Less than \$100,000	6. \$2 million to less than \$5 millior	7. \$5 million to less than \$10 millic	8. \$10 million to less than \$25 mill
b. Non-Federal Work	7	2. \$100,000 to less than \$250,000	9. \$25 million to less than \$50 mill	10. \$50 million or greater	
c. Total Work	7	3. \$250,000 to less than \$500,000			
		4. \$500,000 to less than \$1 million			
		5. \$1 million to less than \$2 million			

12. AUTHORIZED REPRESENTATIVE.  
The foregoing is a statement of facts.

a. SIGNATURE: 	b. DATE: <b>08/27/2019</b>
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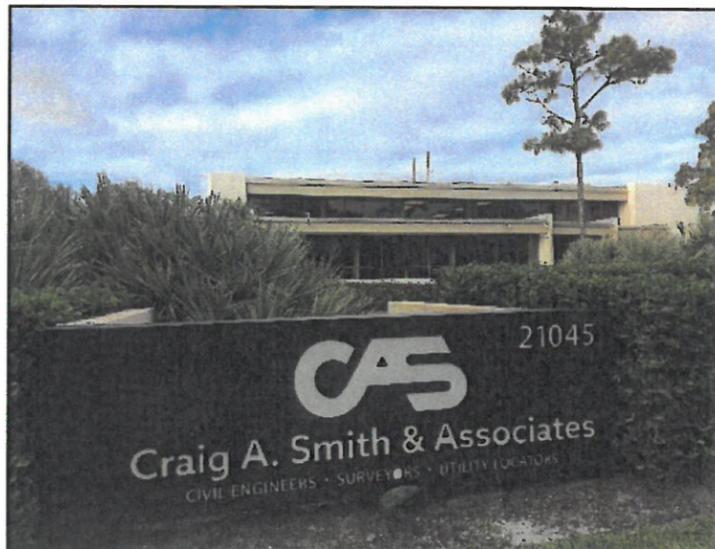
c. NAME AND TITLE: **Stephen C. Smith, P.E., Senior Vice President**



**Craig A. Smith & Associates, Inc.**  
Engineers • Surveyors • Subsurface Utility Engineering  
3D Subsurface Imaging • Utility Coordination

## 3A - ORGANIZATION TYPE

**Craig A. Smith and Associates, Inc. (CAS)** has been providing quality professional engineering, surveying and utility locating services since 1980 and is a **local** Florida Corporation licensed company. CAS' corporate headquarters are located in Boca Raton with satellite offices in Broward and Miami-Dade County.



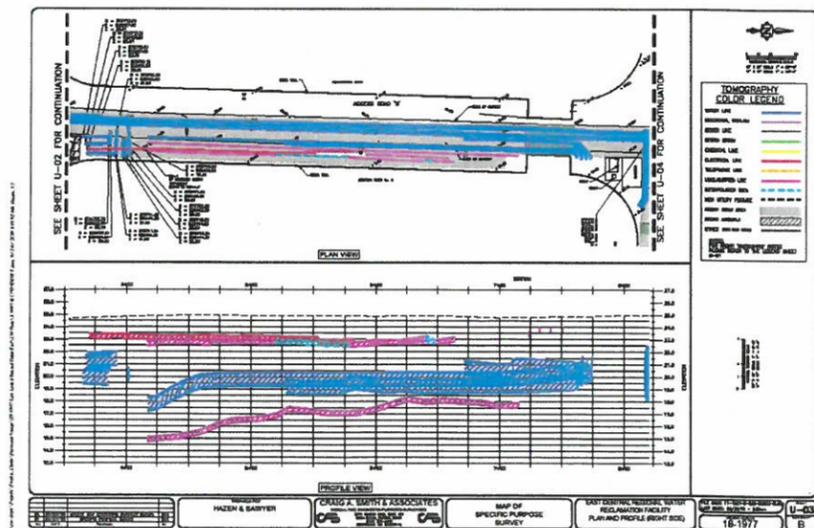


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**3B - FIRM LOCATION**

All assigned work under this contract will be performed from the firm's corporate headquarters. CAS is committed to assigning at least one of its three surveying crews **exclusively** for the duration of the project and a professional Surveyor to manage the project.

**Palm Beach Office:  
 Corporate Headquarters  
 21045 Commercial Trail  
 Boca Raton, Florida 33486  
 (561) 314-4445**





**Craig A. Smith & Associates, Inc.**  
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## 3C – FIRM SIZE & RANGE OF DISCIPLINES

**CAS was established in 1980.** Since then, the firm expanded from its original, technical orientation in municipal engineering and surveying into a full service civil engineering practice with specialized expertise in engineering, surveying & mapping, construction management, utility locates and CAD design & development.

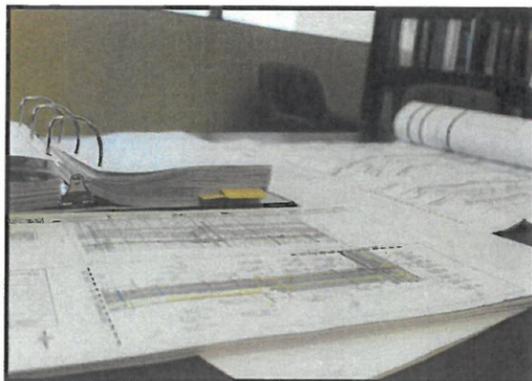
**FIRM SIZE:** CAS's professional, technical and administrative personnel numbering 40+ people represent professionals in the fields of civil engineering, water and wastewater engineering, storm water engineering, surveying, mechanical engineering, construction engineering, grant specialists, utility locating, computer sciences, and finance. More specifically, for the professional surveying services required under this contract, CAS staff members consists of one (1) Registered Professional Surveyor with three (3) survey crews, two (2) ADDA Certified Drafters and one (1) GIS Specialist. Additional support personnel included six (6) Registered Professional Engineers, three (3) certified field inspectors; ten (10) utility locators including additional technical CADD drafting personnel, as well as competent administrative, clerical and accounting personnel, to provide the City with the comprehensive expertise required to perform the all scope of work requested under this contract.

**ORGANIZATION:** CAS is organized into five technical operating divisions each under the supervision of a Vice President or Director. These operating divisions are:

### Civil Engineering

- Civil Engineering
- CADD (Computer –Aided Design & Drafting)
- Construction Management
- Surveying
- Subsurface Utility Engineering (Utility Locates)

**FIRM PHILOSOPHY** - CAS is committed to providing its clients with cost-effective, timely, comprehensive, high-quality professional services in the practice of civil engineering, surveying, construction management, utility locating and grant/legislative services. This commitment to excellence is achieved through the development of a team spirit of service to clients. CAS is a full-service civil engineering firm and has extensive experience in providing these professional services in Miami-Dade, Broward, Palm Beach Counties for the past 39 years.





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## 3C - FIRM SIZE AND RANGE OF DISCIPLINES

**EXPERIENCE & CAPABILITIES - Craig A. Smith & Associates (CAS) is a local South Florida firm tailored to serving the needs of many local governmental clients. We currently serve numerous Florida counties, cities, towns, special districts and utility departments/authorities. We are currently providing professional engineering and/or surveying services to the following municipal clients:**

- |   |  |
|---|--|
| City of Moore Haven (since 1995)              | City of Pompano Beach (since 2015)           |
| City of Sweetwater (since 2000)               | Hardee County (since 2000)                   |
| City of Belle Glade (since 2013)              | City of Lauderhill (since 2013)              |
| City of Sunny Isles Beach (since 2013)        | City of Lake Worth (since 2018)              |
| Spring Lake Improvement District (since 2001) | City of Margate (since 1988)                 |
| Town of Golden Beach (since 2000)             | Town of Pembroke Park (since 1987)           |
| Village of Bal Harbour (since 1989)           | Village of El Portal (since 2003)            |
| CCPWA Utility Authority (since 1994)          | Sunshine Water Control District (since 2015) |
| Glades County (since 1993)                    |  |
| Town of Southwest Ranches (since 2014)        |  |

Our success can be exhibited by our tenure with our clients, many of which we have served for over 20 years. We put premium value on the opinions and input of the end users of our services, officials, staff and residents and strive to produce an end product that addresses their needs and expectations. CAS is committed to making clients successful by understanding their organization, methods of operation, challenges and achieving their objectives through a multi-discipline approach based on experience, innovation and teamwork. We pride ourselves in establishing long-term relationships with our clients by providing them with the ultimate in successful consulting services. We believe in providing clear and concise face-to-face communication with clients. And any communication via phone, fax, email or other method shall be provided clearly and concisely. Response time to a client's request is usually within the hour if not by the close of the business day.





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## 3C - FIRM SIZE AND RANGE OF DISCIPLINES



### SURVEYING:

CAS is one of South Florida tenured and respected surveying firms that provides complete land surveying services. Our surveying staff is comprised of licensed land surveyors who adhere to strict standards as per the Standards of Practice for Professional Surveying and Mapping pursuant Chapter 5J-17 of the Florida Administrative Code and give special attention to accuracy and detail. CAS utilizes the most modern electronic survey equipment such as Topcon and Trimble SC Robotic Total Stations, Trimble 5800, R2 and R8 RTK Rovers, Leica P 30 Laser Scanner, Recon 400 TDS, TSCE 2 and Ranger 500X Data Collectors along with Topcon ATC Levels and tablets. In addition, our three (3) survey crews have been trained based on engineering principles and implement daily quality control measures that ensure our clients receive the highest quality service and most accurate basemaps. CAS surveying services include:

- Mapping & Platting
- Boundary & Acreage Surveys
- Land Description Preparation
- Construction Surveys
- Subdivision Designs & Calculation
- GPS Mapping
- Route Surveys
- Canal Cross-Sections
- Parcel Description & Sketches
- Condemnation Surveys
- Highway Construction Surveys
- Quantity Surveys
- Accident Surveys
- As-Built Certifications
- Mean High Water Surveys





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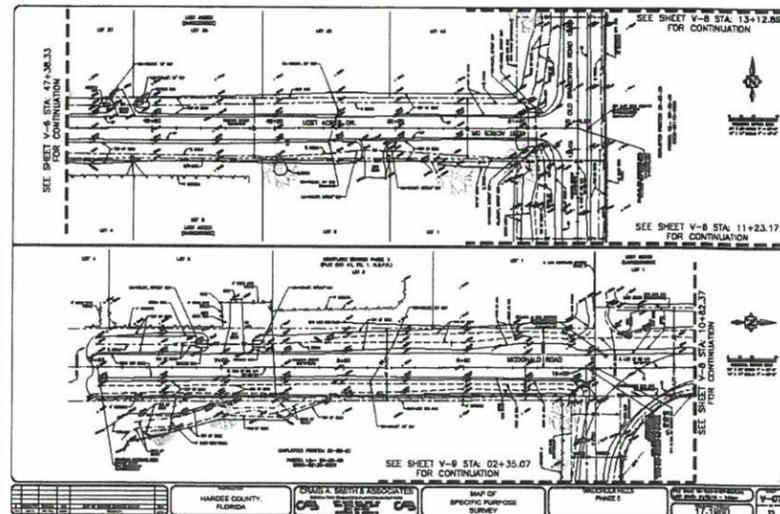
## 3C - FIRM SIZE AND RANGE OF DISCIPLINES

### EXPERTISE IN OTHER DISCIPLINES

#### CIVIL ENGINEERING:

CAS also provides our clients with a full range of engineering consulting services. Our engineers and trained specialists have extensive experience in assisting municipalities and utility departments with daily engineering needs such as planning, design, permitting and construction of cost-efficient operational utility systems. CAS engineering consulting services include:

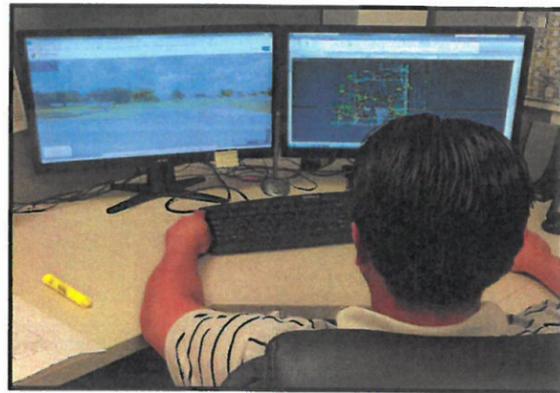
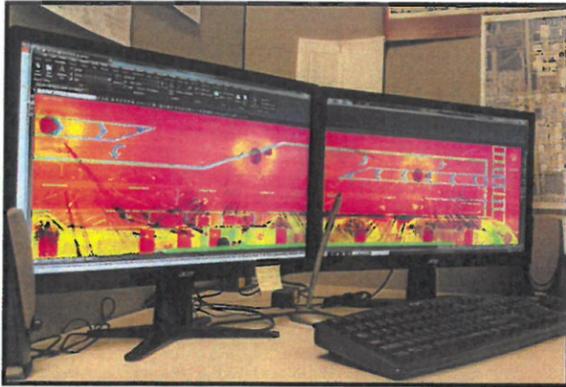
- Storm Water Management
- Storm Water Utilities
- Water Treatment & Distribution Systems
- Wastewater Collection/Transmission & Treatment
- Potable Water Treatment Systems
- Wastewater Pump Station Design
- Stormwater pump Station Design
- Canal Dredging and Sediment Removal
- Surface Water Management
- Utility Permitting
- Water/Wastewater Treatment Plant Design/Rehabilitation
- Utility Pipeline Design & Relocation (Water, Wastewater & Reclaimed Water)
- Utility Master Planning
- Facility Planning
- Solid Waste Studies
- Solid Waste Disposal and Leachate Treatment
- Development Permitting
- Feasibility Studies
- Inflow & Infiltration Studies
- Construction Cost Estimate
- Construction Management
- Construction Observation and Certification
- Contract Administration
- Effluent Reuse & Disposal
- Sludge Treatment & Disposal
- Roadway & Drainage Design
- Grant Funding Assistance





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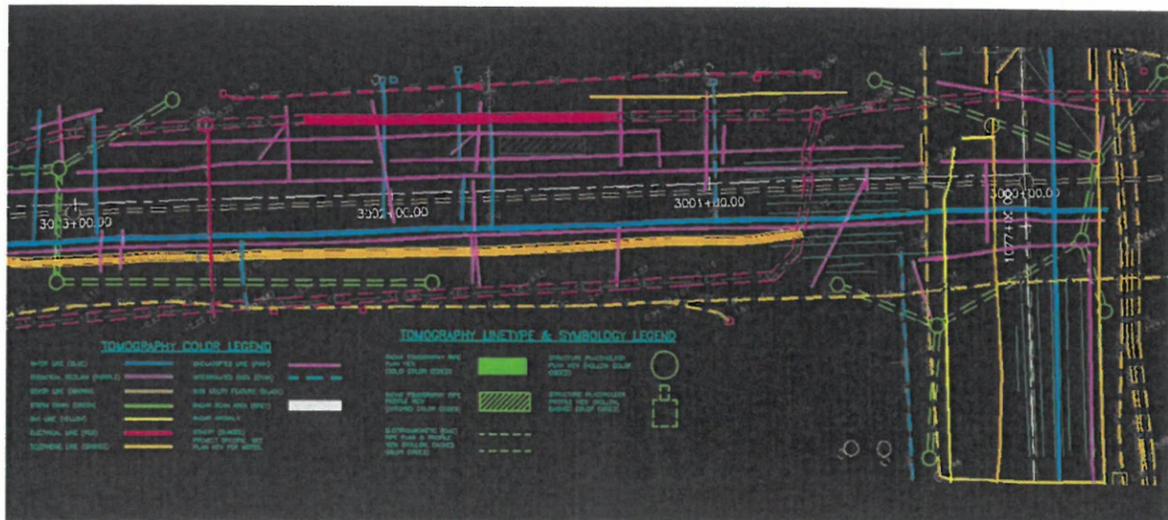
## 3C - FIRM SIZE AND RANGE OF DISCIPLINES



### CADD (COMPUTER-AIDED DESIGN & DRAFTING):

CAS employs an on-staff Florida Certified American Design & Drafting Association CADD operator and an Autodesk Certified professional. Our CADD technicians prepare detailed drawings, layouts, exhibits, topographical maps, and graphic representations of survey information & engineering designs. Designs relate to engineering projects such as water, sewer, reclaimed water, paving and drainage systems. Craig A. Smith & Associates prides itself on keeping its workforce educated and equipped to handle today's most challenging and rewarding tasks. CAS is utilizing the latest AutoCAD software (Civil3D), custom-built AutoCAD systems and functions, as well as some industry-first hardware including 3D laser scanning technologies. In summation, the CADD systems CAS uses are:

- AutoCAD
- Autodesk Civil 3D
- Autodesk Map 3D





**Craig A. Smith & Associates, Inc.**

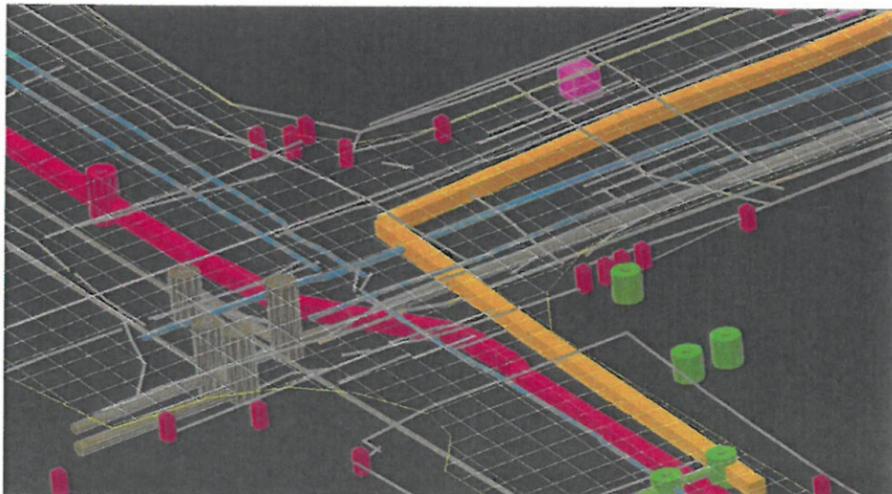
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## 3C - FIRM SIZE AND RANGE OF DISCIPLINES



### SUE (SUBSURFACE UTILITY ENGINEERING):

CAS provides complete subsurface utility engineering and location services utilizing the latest in electronic verification, ground penetrating radar, vacuum excavation and GPS survey equipment. CAS can provide utility location information in various formats from simplistic 2D (two dimensional) to comprehensive 3D (three dimensional) Radar Tomography coupled with advanced software platforms (AutoCAD Civil 3D). CAS performs subsurface utility engineering providing utility mapping, electromagnetic designating (EMD), 2D radar designating/ground penetrating radar (GPR), 3D radar tomography (RT), vacuum soft digs, and conventional and GPS utility surveys. CAS also provides utility coordination services, interfacing with utility owner/operators on behalf of engineers, planners and project designers. **CAS' extensive SUE experience coupled with its EMD, 2D GPR and unique 3D RT capabilities will provide the City with accurate and comprehensive utility locates for complete survey basemaps irregardless of quality of existing record drawings and thus superior engineering design for the City's lighting and streetscape project. This will translate also to time saving and minimization of charge orders during construction by eliminating "unforeseen" field conditions.**





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## 3C - FIRM SIZE AND RANGE OF DISCIPLINES



### CONSTRUCTION MANAGEMENT:

The CAS construction management team has a combined total experience of nearly 80 years. CAS field representatives are qualified to perform a full-service program, assuring total monitoring on-site to protect the client's interest on their projects. The CAS construction management team keeps clients informed of all facets of construction including, but not limited to, weekly progress notices, advice on any change orders and monthly monitoring of project finances. The construction management team of professionals provides extra attention to detail to ensure that all projects are built to specifications and are fully operational to meet the needs of our clients. CAS construction management services include:

- Value Engineering
- Design Document Review
- Contract Administration
- Contract Documents
- Construction Management
- Construction Engineering & Inspection
- Cost & Payment Verification
- Bidding Coordination
- Contract Negotiation
- Residential/Commercial/Municipal Project Observations



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## 3D – SIMILAR PROJECT EXPERIENCE & REFERENCES

### NORTHLAKE BOULEVARD WATER & SEWER REPLACEMENT: PHASE 1-3

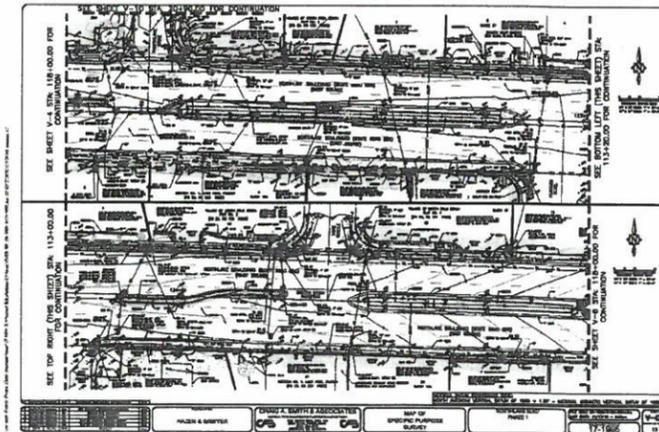
Seacoast Utility Authority (SUA)  
 4200 Hood Road  
 Palm Beach Gardens, Florida 33410

Contact: George A. Brown, P.E., Project Mgr.  
 Hazen & Sawyer, Inc.  
 2101 NW Corporate Blvd., Suite 301  
 Boca Raton, FL 33431  
 Telephone: (561) 997-8070  
 E-mail: [gbrown@hazenandsawyer.com](mailto:gbrown@hazenandsawyer.com)



Work performed: CAS was hired as a subconsultant to Hazen & Sawyer to perform surveying, mapping and utility locating and provide a pre-design survey for 3 phases of a water distribution and sewer force main replacement project. CAS performed a complete right-of-way survey which included all existing above-ground/below-ground utilities, easements, trees, landscaping, property ownership and utility poles and wires. The project included 1.3 miles of Northlake Boulevard from Old Dixie Highway (SR 811) in Phase 1, 1 mile of US Highway 1 from Northlake Boulevard south to Silver Beach Road in Phase 2, and 1.7 miles of US Highway 1 from Northlake Boulevard north to the North Palm Beach waterway in Phase 3. 3D laser scanning was utilized to accurately capture point clouds in order to re-create all surface objects. Surveying and utility locating services were completed on 11/15/2018. The survey and utility locating for the project totaled \$203,325.00.

CAS Key Staff: Stephen C. Smith, P.E. – Senior Vice President, Robert D. Keener, P.S.M. – Vice President of Survey, Sandro Elvir – Survey Coordination Manager, David Lookabill – Survey Crew Leader, Jim Driscoll – Director of SUE







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## 3D - SIMILAR PROJECT EXPERIENCE & REFERENCES

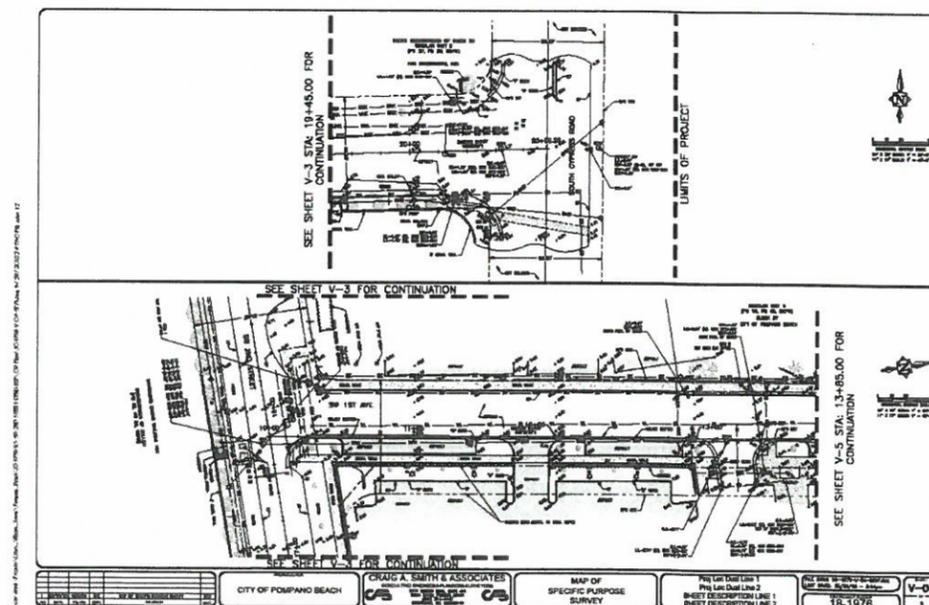
**SW 2<sup>nd</sup> STREET NEIGHBORHOOD DRAINAGE IMPROVEMENTS**  
**CITY OF POMPANO BEACH**  
 1201 NE 5<sup>th</sup> Avenue  
 Pompano Beach, Florida 33060



Contact: Tammy Good, Engineering Project Mgr.  
 Telephone: (954) 786-5520  
 E-mail: [tammy.good@copbfl.com](mailto:tammy.good@copbfl.com)

Work Performed: CAS performed complete right-of-way surveying and utility locating services for the proposed drainage improvements within the project limits of SW 2<sup>nd</sup> Street between Dixie Highway and Cypress Road, SW 1<sup>st</sup> Avenue between SW 2<sup>nd</sup> Street and Atlantic Blvd, SW 1<sup>st</sup> Terrace and SW 1<sup>st</sup> Court between SW 2<sup>nd</sup> Street and S. Cypress Road in Pompano Beach. Survey included manholes, stormwater pipe inverts, utility poles, utility boxes, traffic signs, underground and overhead utilities, trees, fences, hedges, sidewalks and existing pavement markings. Surveying and utility locating services were completed on 5/15/2018. The survey and utility locating for the project totaled \$22,500.00.

CAS Key Staff: Stephen C. Smith, P.E. – Senior Vice President, Robert D. Keener, P.S.M. – Vice President of Survey, Sandro Elvir – Survey Coordination Manager, David Lookabill – Survey Crew Leader, Jim Driscoll – Director of SUE





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## 3D – SIMILAR PROJECT EXPERIENCE & REFERENCES

### LOWSON BOULEVARD ROADWAY & DRAINAGE IMPROVEMENTS CITY OF DELRAY BEACH, ENVIRONMENTAL SERVICES DEPARTMENT

434 S. Swinton Avenue  
Delray Beach, Florida 33444

Contact: Marwan Mufleh, P.E., Principal  
Kimley-Horn & Associates, Inc.  
1920 Wekiva Way, Suite 200  
West Palm Beach, FL 33411  
Telephone: (561) 840-0850  
E-mail: [Marwan.Mufleh@kimley-horn.com](mailto:Marwan.Mufleh@kimley-horn.com)



Work Performed: CAS performed survey and subsurface utility engineering as a subconsultant to Kimley-Horn & Associates, Inc. for the City of Delray Beach. The scope of work included a survey of all above ground visible improvements and utilities within the right-of-way of Lawson Boulevard (SW 10<sup>th</sup> Street) and 10 feet beyond the right-of-way line from the east right-of-way of Congress Avenue to the intersection of SE 6<sup>th</sup> Avenue. In addition, rims, pipe invert elevations, sizes and pipe materials were acquired for all existing drainage structures within the project limits. CAS shall perform subsurface utility engineering included soft digs at fifty (50) designated locations to verify depths, sizes and materials of conflicting buried utilities as per client's direction. Surveying services were completed on 4/10/2019. CAS is awaiting soft locations from client to complete the utility locating services. The survey and utility locating for the project totaled \$58,550.00.

CAS Key Staff: Stephen C. Smith, P.E. – Senior Vice President, Robert D. Keener, P.S.M. – Vice President of Survey, Sandro Elvir – Survey Coordination Manager, David Lookabill – Survey Crew Leader, Jim Driscoll – Director of SUE



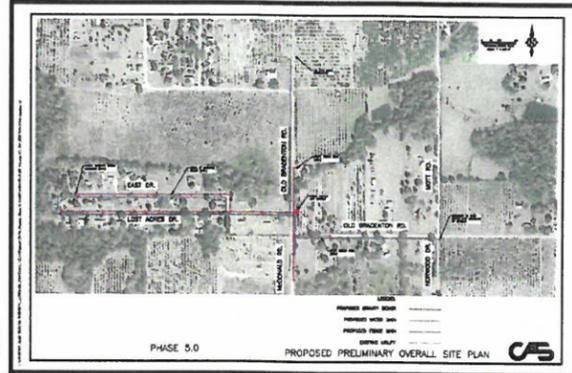


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## 3D – SIMILAR PROJECT EXPERIENCE & REFERENCES

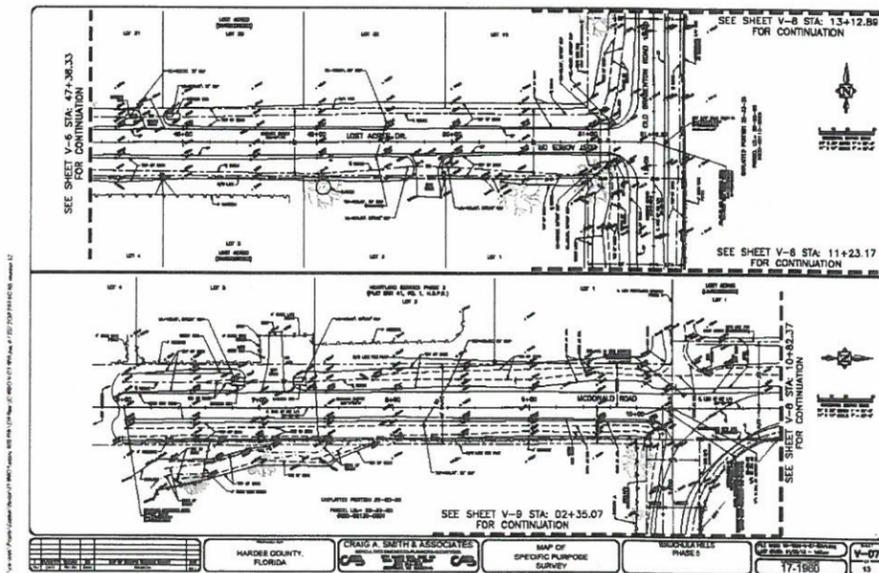
**WAUCHULA HILLS WATER & SANITARY SEWER IMPROVEMENTS – PHASE V**  
**HARDEE COUNTY UTILITIES**  
 2428 Commerce Court  
 Bowling Green, Florida 33834

Contact: Park Winter, Utilities Director  
 Telephone: (863) 773-3030  
 E-mail: [park.winter@hardeecounty.net](mailto:park.winter@hardeecounty.net)



**Work Performed:** Phase V of the Wauchula Hills Water and Sanitary Sewer Improvements project consists of the construction of approximately 6,885 linear feet of 8" water main including fire hydrants, one duplex submersible wastewater lift station, approximately 1,500 linear feet of 4" force main and approximately 6,750 linear feet of 8" gravity sanitary sewer. CAS performed complete right-of-way survey which included manholes, pipe inverts, utility poles, utility boxes, fire hydrants, water main valves, traffic signals, traffic signs, overhead utilities, trees, fences, hedges, existing pavement markings, sidewalks and signal equipment. Surveying services were completed on 11/2/2017. The survey services for the project totaled \$14,930.

**CAS Key Staff:** Robert D. Keener, P.S.M. – Vice President of Survey, Sandro Elvir – Survey Coordination Manager, David Lookabill – Survey Crew Leader





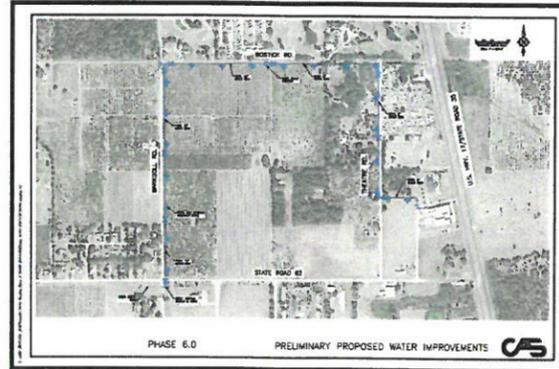
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## 3D – SIMILAR PROJECT EXPERIENCE & REFERENCES

### WAUCHULA HILLS WATER & SANITARY SEWER IMPROVEMENTS – PHASE VI HARDEE COUNTY UTILITIES

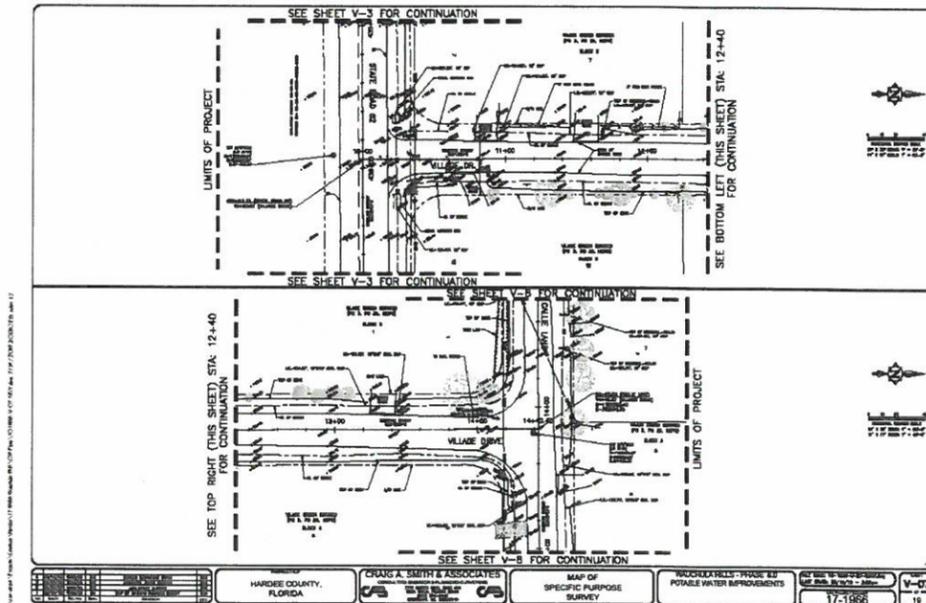
2428 Commerce Court  
 Bowling Green, Florida 33834

Contact: Park Winter, Utilities Director  
 Telephone: (863) 773-3030  
 E-mail: [park.winter@hardeecounty.net](mailto:park.winter@hardeecounty.net)



**Work Performed:** Phase VI of the Wauchula Hills Water and Sanitary Sewer Improvements project consists of the construction of approximately 1,325 linear feet of 6" water main, 6,460 linear feet of 8" water main, and 4,862 linear feet of 10" water main including roadway/driveway restoration, fire hydrants and valves, and connections to existing 4" and 12" water mains. CAS performed complete right-of-way survey which included manholes, pipe inverts, utility poles, utility boxes, fire hydrants, water main valves, traffic signals, traffic signs, overhead utilities, trees, fences, hedges, existing pavement markings, sidewalks, curbs and signal equipment. Surveying services were completed on 5/1/2019. The survey services for the project totaled \$39,196.

**CAS Key Staff:** Robert D. Keener, P.S.M. – Vice President of Survey, Sandro Elvir – Survey Coordination Manager, David Lookabill – Survey Crew Leader





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## 3E - LITIGATION

# Litigation



August 22, 2019

To Whom It May Concern,

**RE: LITIGATION HISTORY FOR PAST FIVE YEARS**

Craig A. Smith & Associates is a full service firm with a 40 year history in offering professional services. It would be inconceivable for a company in business for this length of time to not be the subject of professional liability claims and lawsuits. The great majority of these claims over the years have been without merit and discharged by our insurance company counsel. CAS maintains professional liability insurance and this insurance carrier handles all claims.

Our corporate counsel has recommended, for confidentiality reasons, that we not include actual claimant names, but the following describes the nature of such claims and presents a fair picture of CAS's professional liability claims history over the past five years:

Claimant v. Craig A. Smith & Associates, Inc.

- Date of Loss: 08/25/2015
- Project: TECO Power Utility Locates
- Personal Injury/Vehicle Accident
- CAS utility locator was involved in a vehicle accident with plaintiff. Plaintiff claimed additional injury to existing health issues. Settlement was offered to CAS's insurance carrier which was declined by carrier. Case was ultimately closed at twice the offered settlement of \$650,000.

Claimant

- Date of Loss: 10/31/2016
- Project: 174<sup>th</sup> Street, Sunny Isles Beach Construction Observation
- Personal Injury
- Claimant, while walking in proximity to the construction site, claimed to have debris which was floating in the air get into their eye causing medical attention. CAS and the contractor were sued, and CAS's insurance company settled for \$3,500.

Claimant v. Craig A. Smith & Associates, Inc.

- Date of Loss: 04/02/2018
- Project: City of Hollywood Utility Locating Services
- Claimant alleges CAS did not properly mark facilities.
- CAS provides utility location services for the City of Hollywood Utilities Department. Plaintiff was performing work within the city and damaged a city outfall pipe. Plaintiff contends CAS is at fault for not marking the facility. However, the plaintiff failed to call in a Sunshine One Call Ticket for the subject location. CAS's position is that it is not at fault due to the fact that a ticket did not exist for the subject location. Suit is pending.

Sincerely,

Stephen C. Smith, P.E.

Senior Vice President



**Craig A. Smith & Associates, Inc.**

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## 3F – KEY STAFF EXPERIENCE AND QUALIFICATIONS

**Stephen C. Smith, P.E.,** *Senior Vice President & COO.* Mr. Smith's responsibilities include management of daily business operations for 40+ member civil engineering and surveying firm with gross sales of \$5.0 million. Mr. Smith oversees all areas of business including engineering, surveying, construction management services, accounting and human resources, more specifically oversees engineering and surveying projects and all transportation/roadway projects including studies, reports and design. He ensures proper allocation of resources, staffing, financial management, quality control and timely project completion. Mr. Smith managed the survey, utility locating, design and construction of approximately 15,000 linear feet of 6"-12" water mains for the Town of Golden Beach as part of a complete retrofit of the town's entire existing water distribution system. In addition, Mr. Smith was responsible for the master planning, project management, resource allocation and quality assurance of the stormwater design, as well as the project management of stormwater construction projects for the City of Sweetwater, Miami-Dade and the City of Oakland Park. He has extensive experience in the design and management of roadway improvement projects as well. Mr. Smith was responsible for the Andrews Avenue Widening and Intersection Improvements in Broward County and roadway widening and intersection improvements for Biscayne Boulevard from NE 163<sup>rd</sup> Street to 203<sup>rd</sup> Street (along with stormwater improvements) and the 174<sup>th</sup> Street Stormwater & Pavement Improvements for the City of Sunny Isles Beach.

**Robert D. Keener, P.S.M.,** *Vice President of Surveying.* Mr. Keener has been licensed in the State of Florida for 41 years and with over 30 years of specific surveying experience for utility (water and wastewater) and stormwater design and master planning. As Vice President of the CAS Survey Division, Mr. Keener heads a qualified survey staff that includes both CADD and field personnel. His staff is proficient with the latest survey technology available to the industry including AutoCAD 2018. Mr. Keener was also responsible for creating route surveys used for engineering design for many municipalities including the City of Belle Glade, Indian Trails Improvement District, City of Lake Worth, Seacoast Utility Authority, Town of Golden Beach, Town of Pembroke Park, Bal Harbour Village, City of Sunny Isles Beach, City of Miami Beach, City of Margate, City of Sweetwater, Glades County, Hardee County, City of Moore Haven, Miccosukee Tribe of Florida, City of Oakland Park, City of South Bay, City Delray Beach, City of Pahokee, City of Pompano Beach and Okeechobee County.

**Sandro Elvir,** *Survey Coordination Manager.* Mr. Elvir has 19 years of experience and is responsible for supervising survey field crews for the preparation of field traverses, control surveys, boundary surveys, right-of-way surveys, right-of-way maps, earthworks computations, as-built surveys and construction surveying.

**David Lookabill,** *Crew Leader.* Mr. Lookabill has 35 years of experience and is responsible for field management, client field coordination, survey crew management and quality control in the field. He has varied experience in many facets of surveying. He also has vast experience in utility construction such as directional drilling and fuel pipe line staking and as-builts performed across the United States.

**Donald Drake,** *Survey Crew Leader.* Mr. Lookabill 35 years of experience and is responsible for field management, client field coordination, survey crew management and quality control in the field. He also has extensive experience in construction layout and hydrographic surveys.



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## 3F – KEY STAFF EXPERIENCE AND QUALIFICATIONS

### UTILITY LOCATES:

**James F. Driscoll**, *Director of Subsurface Utility Engineering (SUE)*. Mr. Driscoll has 28 years of experience in the engineering, survey and utility locates fields. Mr. Driscoll coordinates the utility locate crews that perform horizontal locates as well as vertical utility locating using both vacuum pothole excavation, electromagnetic induction (EM) for toned utilities, 2-D ground penetrating radar (GPR) and 3-D scanning (radar tomography).

**Alan Lopez**, *Utility Locates (SUE) Field Supervisor*. Mr. Lopez has 18 years of experience in the survey, utility locating and utility construction fields. He has performed or overseen in excess of 5,000 vacuum soft digs and conducted thousands of 2-D ground penetrating radar studies and 3-D radar tomography scannings for buried utility mapping efforts.

(See resumes attached)



**Craig A. Smith & Associates, Inc.**

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## 3F – KEY STAFF EXPERIENCE AND QUALIFICATIONS

### Areas of Expertise

- Project Management
- Quality Assurance/Quality Control
- Stormwater Master Planning, Design, Implementation & Management
- Roadway Design & Management
- Resource Management
- Project Scheduling
- Project Budgeting
- Constructability Review

### Education

- Auburn University, Auburn, Alabama  
Bachelor of Science, Civil Engineering 1988
- Auburn University, Auburn, Alabama  
Bachelor of Science, Building Construction - 1986

### Licensure

- Florida Licensed Engineer  
PE48914

### Affiliations

- Florida Engineering Society (FES)
- American Society of Civil Engineers (ASCE)
- Florida Institute of Consulting Engineers

### Stephen C. Smith, P.E.

Senior Vice President/COO



Mr. Smith has over 33 years of experience in the engineering, survey and utility construction fields.

Mr. Smith's responsibilities include management of daily business operations for a 40+ member civil engineering and surveying firm with gross sales of \$5+ million. He oversees all areas of business including engineering, surveying, construction management services, subsurface utility engineering, accounting and human resources. Specifically, Mr. Smith also oversees all transportation/roadway and stormwater projects including studies, reports and design. He ensures proper allocation of resources, staffing, financial management, quality control and timely project completion.

### Selected Relative Experience:

**Stormwater Master Plan, Design and Construction Management for Town Wide 6 Phase Stormwater Improvement Plan and Water Main Replacement - Town of Golden Beach, Miami-Dade County, Florida.** Responsible for the master planning, project management, resource allocation, scheduling, budgeting and quality assurance of the stormwater and watermain design. Also responsible for the project management of the stormwater and water main construction and implementation.

**Stormwater Master Plan, Design and Construction Management for City Wide Priority Based Stormwater Improvement Plan - City of Oakland Park, Broward County, Florida.** Responsible for the master planning, project management, resource allocation and quality assurance of the stormwater design, as well as the project management of the stormwater construction and implementation.

**Stormwater Master Plan, Design and Construction Management for City Wide 6 Phase Stormwater Improvement Plan - City of Sweetwater, Miami-Dade County, Florida.** Responsible for the master planning, project management, resource allocation, scheduling, budgeting and quality assurance of the stormwater design, as well as the project management of the stormwater construction and implementation.

**Andrews Avenue Widening and Intersection Improvements - Broward County, Florida.** Responsible for the roadway widening and stormwater design improvements from Cypress Road to Racetrack Road, including intersection improvements at McNab Road and Racetrack Road. Performed project management for construction observation services.

**Biscayne Boulevard Widening and Intersection Improvements - Miami-Dade County, Florida (FDOT District 6).** Responsible for the roadway widening and stormwater design improvements from NE 163<sup>rd</sup> Street to 203<sup>rd</sup> Street, including intersection improvements.



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Engineers • Surveyors • Subsurface Utility Engineering  
3D Subsurface Imaging • Utility Coordination

## 3F – KEY STAFF EXPERIENCE AND QUALIFICATIONS

### Areas of Expertise

- Land Surveying
- Boundary / Topo
- Control Surveys
- Utility Surveys
- 3D Radar Tomography
- GPS
- Platting
- Route Surveys
- Legal Descriptions
- Plat Reviews
- Laser Scanning
- Crew Supervision
- Technical Reviews
- Scheduling & Productivity

### Education

- Associates of Art, Atlantic Community College
- CEU's – On going

### Licensure

- Professional Surveyor & Mapper, Florida #LS4846

### Affiliations

Florida Surveying and Mapping Society (FSMS)

### Robert D. Keener, P.S.M.

Vice President  
Survey / Geomatics



Mr. Keener has over 41 years of experience in the survey, engineering and utility construction fields.

Mr. Keener has been employed with CAS since April of 1995. Mr. Keener began his career at CAS as a Project Surveyor, advancing to Senior Surveyor and Mapper In charge of surveying in a satellite office and advanced to Vice President in 2005. Mr. Keener will serve as Principal Surveyor for all surveys and will coordinate all survey activities with various disciplines as needed. All surveying pertaining to utility related services such as Radar Tomography, utility surface mapping, utility excavations, etc. will also be overseen and certified by Mr. Keener. He has previously performed plat reviews for municipal clients.

Mr. Keener holds a Florida Surveyors and Mappers License and is a member of the Florida Surveying and Mapping Society of Florida.

### Selected Relative Experience:

**Seacoast Utility Authority: Northlake Boulevard/US-1 Water & Sewer Force Main Replacement – Town of Jupiter, Florida.** Mr. Keener Served as Principal Surveyor for Route survey along Northlake Boulevard and US-1 (approximately 2.8 miles), including identification of right-of-way, property lines, above ground improvements, utility easements, tree survey, cross sections and subsurface utility engineering (utility locates). Mr. Keener performed quality control and quality assurance for the project.

**Lowson Boulevard, City of Delray Beach, Florida -** CAS performed survey and subsurface utility engineering as a subconsultant to Kimley-Horn & Associates, Inc. for the City of Delray Beach. The scope of work included a survey of all above ground visible improvements and utilities within the right-of-way of Lowson Boulevard (SW 10<sup>th</sup> Street) and 10 feet beyond the right-of-way line from the east right-of-way of Congress Avenue to the intersection of SE 6<sup>th</sup> Avenue. In addition, rims, pipe invert elevations, sizes and pipe materials were acquired for all existing drainage structures within the project limits. CAS performed subsurface utility engineering including soft digs at fifty (50) designated locations to verify depths, sizes and materials of conflicting buried utilities as per client's direction.

**Golden Beach Drive & Collins Avenue – Town of Golden Beach, Florida.** Mr. Keener Served as Principal Surveyor for the route survey within the rights-of-ways of Golden Beach Drive, out to the three islands and along Collins Avenue (SR A1A) for drainage improvements due to major flooding issues; total roadway reconstruction, undergrounding of all utilities; water main replacement and miscellaneous surveys, as needed. Route spanned approximately three miles. Surveying also included all city parks and a beach pavilion.



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## 3F – KEY STAFF EXPERIENCE AND QUALIFICATIONS

### Areas of Expertise

- Land Surveying
- Boundary / Topo
- Control Surveys
- Utility Surveys
- 3D Radar Tomography
- GPS
- Route Surveys
- Legal Descriptions
- Laser Scanning
- Crew Supervision
- Construction layout Calculations
- AutoCAD, Civil 3D

### Education

- National Autonomous University Of Honduras
- Miami-Dade College
- ATI Career Training Center
- American Design & Drafting Association
- Autodesk Training
- Leica Cyclone & Cloudworx for AutoCAD

### Affiliations

- American Design & Drafting Association
- Autodesk User Group

### Sandro Elvir

Survey Coordination Manager  
Survey/ Geomatics Department



Mr. Elvir has 19 years of experience in the survey, engineering and utility construction fields.

Mr. Elvir began his surveying career as an instrument technician advancing to crew chief working for several years in the field. Mr. Elvir has been employed with CAS since July of 2004, starting as CAD Technician for the survey department and advancing to Survey Coordination Manager. Responsibilities include management of all survey data collected by survey crews, plans set up and production of calculations for construction layout, the creation of record surveys, etc. Mr. Elvir also operates the 3D Laser Scanner in both the field and office.

### Selected Relative Experience:

**595 Express Subsurface Utility Engineering and 3D Radar Tomography –Broward County, Florida.** Mr. Elvir was responsible for the creation of Specific Purpose Surveys showing underground utilities and soft-dig information. This information was used as reference in the design of the new roadway and subsurface facilities. Calculations were also performed for the layout of proposed soft digs and required utility investigations as mapped by the field crews.

**Motiva Site Spur Line - Port Everglades, Florida.** Mr. Elvir was responsible for the creation of a Map of Boundary and Topographic Survey for the Motiva Oil Site and surrounding streets for the proposed Railroad Spur line design servicing the Motiva Oil Site in Port Everglades.

**Brickell Citicentre Subsurface Utility Engineering and 3D Radar Tomography - Miami-Dade County, Florida.** Mr. Elvir was responsible for the creation of a Map of Specific Purpose Survey including utility surface markings and utility excavation boring locations and associated information for later use in 3D modeling of site utilities.

**Florida- Sanitary Force Main Improvements - Village of Bal Harbour, Miami-Dade County, Florida.** Mr. Elvir was responsible for the creation of the Route Survey along Collins Ave. which included topography, utility surface markings and utility excavation boring locations and associated information. Calculations were also performed for field staking of the new force main. Mr. Elvir created a Map of Record Survey including both plan and profile views at the completion of construction.

**Storm, Water and Roadway Master Plan Neighborhood Improvements - Town of Golden Beach, Miami-Dade County, Florida.** Mr. Elvir was responsible for the creation of Route Surveys including topography, utility surface markings and utility excavation boring locations and associated information. Mr. Elvir provided calculations for survey crews as needed. Mr. Elvir created a Map of Record Survey including both plan and profile views at the completion of construction for all improvements.



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## 3F – KEY STAFF EXPERIENCE AND QUALIFICATIONS

### Areas of Expertise

- Land Surveying
- Boundary / Topo
- Lot Surveys
- Control Surveys
- Utility Surveys
- 3D Radar Tomography
- GPS
- Route Surveys
- Crew Supervision
- Construction Layout
- Quantity Surveys and Calculations
- Utility Coordination
- Directional Drills

### Education

- MSI, Port Saint Lucie, Florida – 2011, A.S.
- Indian River Community College, Stuart, Florida – 2006, Survey Law
- Davidson County Community College, Lexington, NC – 1997, AutoCAD 1 & 2
- Guilford Technical Community College, Jamestown, NC – 1988, Civil Drafting and Civil Engineering CAD/CADD

### David Lookabill

Survey Crew Leader  
Survey/Geomatics Department



Mr. Lookabill has 35 years of experience in the survey, engineering and utility construction fields.

Mr. Lookabill began his surveying career as a Rod Man quickly advancing to Survey Crew Leader. He has varied experience in many facets of surveying. He also has vast experience in utility construction such as directional drilling and fuel pipe line staking and as built performed across the United States. Mr. Lookabill has been employed by CAS since 2014 as a Survey Crew Leader.

Responsibilities include field management, client field coordination, survey crew management and quality control in the field.

### Selected Relative Experience:

**Miami-Dade Water and Sewer Department Force Main 604 Replacement, Miami-Dade County, Florida.** Surveying within the Rights of Ways of NW SW 113<sup>th</sup> Place and SW 224<sup>th</sup> Street east to SW 109<sup>th</sup> Avenue for sewer force main replacement within heavily populated area. Primary and secondary horizontal control points were established utilizing RTK GPS methods. Vertical control was established by a differential level loop based on Miami-Dade County Benchmarks. Route spanned approximately ¾ miles.

**Florida Highway 92 Improvements, Lakeland, Florida.** Survey for engineering re-design along Highway 92 from North Galloway Road to North Wabash Avenue. Primary and secondary horizontal and vertical control points were established by "leap frogging" multiple base stations 1.5 to 2 hour sessions and then processed through the OPUS software routine. Boundary monumentation was located by (4) 1-minute observations done in pairs at intervals of at least 3 hours.

**Interstate 95 Improvements, Palm Beach County, Florida.** Survey for engineering re-design along Interstate 95 in Palm Beach County from Indiantown Road to PGA Boulevard. Primary and secondary horizontal and vertical control points were established by "leap frogging" multiple base stations 1.5 to 2 hour sessions and then processed through the OPUS software routine. Boundary monumentation was located by (4) 1-minute observations done in pairs at intervals of at least 3 hours.

**FDOT Weight Station, Martin County, Florida.** Survey for construction staking along Interstate 95 in Martin County, Florida, north of Indiantown Road. Horizontal and vertical control points were established by the design survey company contracted by the FDOT and confirmed in the field by tying to local NGS and FDOT monumentation for the purposes of construction layout. Laid out roads, ramps, tapers, swales, ditches, etc.

**SFWM Benchmark Recovery, Clewiston, Florida.** Project to establish or re-establish vertical control from Clewiston, Florida to the Big Cypress Indian Reservation. First order bench loops were run utilizing differential digital leveling through benchmarks as researched and either verified or re-set. NGS monumentation was utilized for the project.



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## 3F – KEY STAFF EXPERIENCE AND QUALIFICATIONS

### Areas of Expertise

- Land Surveying
- Boundary / Topo
- Lot Surveys
- Control Surveys
- Utility Surveys
- 3D Radar Tomography
- GPS
- Route Surveys
- Crew Supervision
- Construction Layout
- Quantity Surveys and Calculations

### Education

- Bachelor of Science, Colorado State University, CO - 1987
- Associate of Science, Paul Smith's College, Paul Smith's, NY - 1985

### Donald Drake

Survey Crew Leader  
Survey/Geomatics Department



Mr. Drake has 35 years of experience in the survey, engineering and utility construction fields.

Mr. Drake began his surveying career as a Rod Man quickly advancing to Survey Crew Leader. He has varied experience in many facets of surveying. He has extensive experience in construction layout, landfill surveys and hydrographic surveys. Mr. Drake has been employed by CAS since February 2018 as a Survey Crew Leader.

Responsibilities include field management, client field coordination, survey crew management and quality control in the field.

### Selected Relative Experience:

**SW 2<sup>nd</sup> Street Neighborhood Drainage Improvements, Pompano Beach, Florida.** Route survey including all above ground features within existing right-of-way and off-site surveying of critical drainage structures. Scope of work includes 2D GPR utility locates within the project corridor (SW 2<sup>nd</sup> Street between Dixie Highway and Cypress Road, SW 1<sup>st</sup> Avenue between SW 2<sup>nd</sup> Street and Atlantic Boulevard, and SW 1<sup>st</sup> Terrace & Court between SW 2<sup>nd</sup> Street and South Cypress Road).

**East Central Regional (ECR) Water Reclamation Facility, West Palm Beach, Florida.** Surveying including establishing benchmarks, horizontal control and baselines relative to well defined land lines or physical features. Scope of work also includes utility locates using 2D GPR and 3D radar tomography scanning along with ten (10) excavated test boring holes for identification of onsite buried utilities for updating existing facility record drawings.

**Seacoast Utility Authority, Northlake Boulevard/US-1 Water & Sewer Force Main Replacement, Jupiter, Florida.** Route survey along Northlake Boulevard and US-1 (approximately 2.8 miles) including identification of right-of-way, property lines, above ground improvements, utility easements, tree survey, cross sections and subsurface utility engineering (utility locates).

**Lake Osborne Estates Neighborhood Water Main Replacement – Phase I, Lake Worth, Florida.** Route survey along residential streets throughout community, including all visible improvements, above and below ground utilities, drainage structures as well as trees and landscaped areas 10 feet outside right-of-way, property lines, utility easements and subsurface utility engineering (utility locates).

**Avenue N, O, S and 4<sup>th</sup> Neighborhood Sanitary Sewer Expansion, Moore Haven, Florida.** Survey/engineering for the latest phase of construction for the sanitary sewer expansion in the City of Moore Haven. The project included approximately 0.8 miles of route survey. Survey was tasked with providing the map of topographic survey/route surveys within the corridors specified. All visible improvements, as well as above and below ground utilities and drainage were identified. Additionally, all trees (3" or greater) and landscaped areas to 10 feet outside each right-of-way line were located and shown. Additional roadway legal descriptions and easements were required.



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## 3F – KEY STAFF EXPERIENCE AND QUALIFICATIONS

### Areas of Expertise

- 3D Radar Tomography
- Subsurface Utility Engineering
- Utility Locating
- Ground Penetrating Radar
- Utility Coordination
- Project Logistics
- Complex Field Survey
- Quality Assurance

### Education

- Broward Community College
- US Army
- Route Surveying
- Survey & Engineering
- MOT Training
- OSHA Training
- OQ Training

### Certifications

- Certified Utility Locator
- Certified GPR Technician
- OQ Training Certification

### Affiliations

- National Utility Locating Contractors Association (NULCA)

### James F. Driscoll

Director

Subsurface Utility Engineering



Mr. Driscoll has 28 years of experience in the engineering, survey and utility location fields.

Mr. Driscoll serves as the operator and field manager of Radar Tomography projects throughout the United States. Mr. Driscoll coordinates Sunshine State One Call ticket management and locating services for numerous Florida municipalities and privately owned utility companies. He also provides assistance in the performance of electronic designating, layout, and completion of vital soft dig information for vacuum excavation projects. He performs ground penetrating radar surveys for various clients to locate and identify underground facilities. Mr. Driscoll also serves as Division Training Manager and QC Auditor.

Mr. Driscoll has performed over 6,000 G.P.R. surveys and over 12,000 miles of utility surface designating throughout the United States. Additionally, Mr. Driscoll has performed in excess of five million square feet of 3D Radar Tomography scanning projects at various locations throughout the United States. He is proficient with state-of-the-art, traditional, and GPS surveying equipment and is substantially proficient with EM designating equipment, vacuum excavation equipment and various GPR systems with special emphasis on 3D Radar Tomography systems.

### Selected Relative Experience:

**City of Hollywood Public Utilities, Utility Location and Ticket Management Services - Hollywood, Florida.** Mr. Driscoll served as the field manager and coordinator overseeing One Call Locates and Ticket Management for one of the largest city-owned utilities in South Florida. The system includes water, sewer, reclaimed water, raw water, effluent, street lighting, minor power and networked communications for parking systems. Currently, Mr. Driscoll oversees ticket management of 17,000 locates annually for the City of Hollywood.

**Town of Davie Public Utilities, Utility Location and Ticket Management Services - Town of Davie, Florida.** Mr. Driscoll served as the coordinator overseeing One Call Locates and Ticket Management for one of the largest town-owned utilities in South Florida. Facilities include water, sewer, reclaim, raw water and effluent pipelines. Currently, Mr. Driscoll oversees ticket management and day to day coordination for the Town of Davie.

**Town of Jupiter, Utility Location and Ticket Management Services - Jupiter Florida.** Mr. Driscoll served as coordinator overseeing One Call Locates and Ticket Management for city-owned utilities Palm Beach County. The system includes water, sewer, reclaimed water, raw water, minor power and networked communications. Currently, Mr. Driscoll oversees ticket management of 7,200 locates annually for the Town of Jupiter.



## 3F – KEY STAFF EXPERIENCE AND QUALIFICATIONS

### Areas of Expertise

- Subsurface Utility Engineering
- Utility Locating
- Ground Penetrating Radar
- 3D Radar Tomography
- Utility Coordination
- Utility Construction

### Education

- Staking U
- Mala GPR Tech
- EM Theory & Application
- MOT Training
- OSHA Training
- Confined Space Entry

### Affiliations

- National Utility Locating Contractors Association (NULCA)

### Alan Lopez

Senior Utility Locator Technician/  
 SUE Manager  
 SUE / Utility Locates



Mr. Lopez has 18 years of experience in the utility locating, SUE, survey and utility construction fields.

Mr. Lopez has been employed with CAS since February 2004, starting as a soft dig crew member, and through experience, advanced from utility locator to Senior Locator and recently Field Manager overseeing all locating field operations. Mr. Lopez has performed or overseen in excess of 5,000 vacuum soft digs, as well as thousands of ground penetrating radar surveys and utility mapping efforts.

Mr. Lopez is a Certified Underground Utility Locator and GPR Technician. Mr. Lopez is also MOT certified, confined space entry certified and OSHA 10hr Certified.

### Selected Relative Experience:

**City of Hollywood Public Utilities, Utility Location and Ticket Management Services - City of Hollywood, Florida.** Mr. Lopez has served as a utility locator, Senior Locator and Field Manager overseeing One Call Locates and ticket management for one of the largest city-owned utilities in South Florida. The system includes water, sewer, reclaimed water, raw water, effluent, street lighting, minor power and networked communications for parking systems. Recently, Mr. Lopez is overseeing the City of Hollywood Water Main Replacement Program coordinating utility locates for multiple construction crews and city engineering staff.

**Town of Davie Public Utilities, Utility Location and Ticket Management Services - Town of Davie, Florida.** Mr. Lopez has served as utility locator and Field/Client Manager for this sprawling utility system. Davie is the largest municipality in Broward County by land area and serves a significant population. Facilities include water, sewer, reclaim, raw water and effluent pipelines. Currently Mr. Lopez oversees ticket management and day-to-day coordination for the Town of Davie.

**City of Coconut Creek Utility Location and Ticket Management Services – Coconut Creek, Florida.** Mr. Lopez has served Field Manager for this large city-owned utility system. Facilities include water, sewer, reclaim, and city owned networked communications. Currently Mr. Lopez oversees ticket management and day to day coordination for the City of Coconut Creek.



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## 3G – PROPOSED PROJECT TEAM & ORGANIZATIONAL CHART

**CAS KEY STAFF MEMBERS PROJECTED HOURS OF AVAILABILITY PER WEEK FOR WORK UNDER THIS CONTRACT BASED ON CURRENT AND FUTURE EXPECTED WORKLOAD.**

Name of Staff	Estimated Hours/Week	Years of Experience
Stephen C. Smith	4	35
Robert Keener	8	41
Sandro Elvir	20	19
David Lookabill	20	35
Donald Drake	20	35
James Driscoll	10	28
Alan Lopez	20	18

### CAS KEY PERSONNEL TO PERFORM SERVICES

#### CONTRACT MANAGEMENT

**CAS Staff: Stephen C. Smith, P.E.**

- Contract Negotiation & Administration
- Allocate Staff & Resources for Work Orders
- Initial Project Planning & Scheduling
- Project Cost Control
- Project Quality Assurance & Control
- Project Management Support
- Presentations to CRA Board (as required)

#### PROJECT MANAGEMENT

**CAS Staff: Robert Keener, PSM, Sandro Elvir**

- CAS Liaison to CRA Staff
- Develop Fee Proposal for Project
- Preliminary Project Planning
- Allocate Survey Crews
- Develop Survey Base Maps
- Oversee Survey through Project Close-Out
- Attend Project Progress Meetings with CRA Staff (as required)
- Legal description & easement preparation
- Survey Technical Support as Required throughout Contract duration

#### SURVEY

**CAS Staff: David Lookabill, Donald Drake**

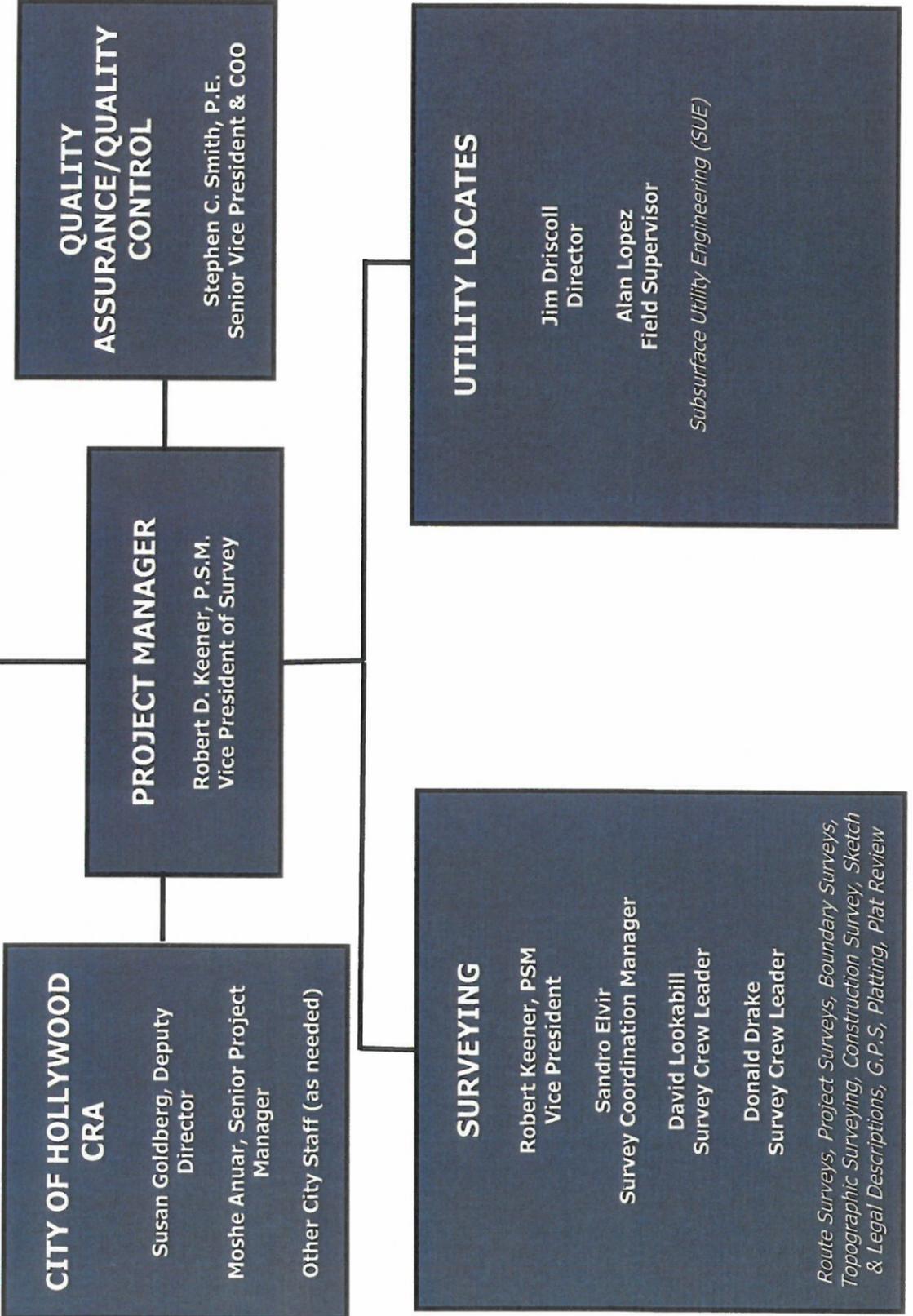
- Establish Vertical and Horizontal Control
- Conduct Survey/Direct Survey Crews
- Perform Topographic/Boundary, Right-of-Way, Utility Survey as required
- Coordinate with Utility Locating Crews
- Coordinate with Survey Management
- Assist with QA/QC process

#### SUBSURFACE UTILITY ENGINEERING (UTILITY LOCATES)

**CAS Staff: James F. Driscoll, Alan Lopez**

- Vacuum Soft Digs
- Electromagnetic Induction (EM) for tonable utilities
- 2-D Ground Penetrating Radar (GPR)
- 3-D Radar Tomography Scanning

**CRAIG A. SMITH & ASSOCIATES**  
**ENGINEERS \* SURVEYORS \* UTILITY LOCATORS**





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## 3H – MUNICIPAL STAFF SUPPORT

### ANTICIPATED MUNICIPAL STAFF SUPPORT

It is anticipated that Craig A. Smith & Associates will require the support of various municipal departments as follows:

- **City Legal Department**  
The involvement by the City's Legal Department may be required for supplying property title information, legal right of way data and various legal descriptions and title issues, as needed.
- **Public Works Department**  
The City's Public Works Department may be called upon for supplying available information such as city utility atlas's and as-builts, right of way maps for city street, etc.
- **Public Outreach**  
The City's Public Outreach Department or Consultant will be very helpful in notifying City residents in the CRA area that survey work will be performed. This will assure that the residents are well informed of the project and know why we are there.
- **CRA Staff**  
CRA Staff will be instrumental in the overall coordination of the City Departments. Additionally, project particulars such as Phasing, scheduling, and general conditions will be coordinated between the Surveyor and CRA Staff. Additional information or revised scope of services will be related to the Surveyor by the Project Manager appointed by the CRA Staff.





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## 3I – APPROACH TO PERFORMING WORK

Craig A. Smith & Associates' (CAS) approach to projects of this type is generally undertaken in the following manner:

- An initial meeting will be held with the City's CRA staff to determine the scope of services required to be provided by CAS. This would include the data required to accomplish the goals of the CRA.
- Data gathering and analysis would then commence. The Surveyor will acquire various instruments, such as Plat Maps, FDOT right of way maps (if applicable) and recorded data shown on the Broward County Property Appraisers website. At this time, City right of way maps will be provided by the Public Works Department as well as As-builts (Record Drawings) and Utility Atlas information. If information for recorded documents cannot be located, the City's legal department may be called upon for minor searches of the public records.
- Simultaneously, a survey crew (normally made up of a one-man GPS crew) will commence work locating any sectional, right-of-way or street survey control points to facilitate the creation of a base map to be utilized for future survey work.
- Geo-referenced survey control points will be established in the horizontal plane relative to the Florida State Plane Coordinate Grid System and vertical plane relative to North American Vertical Datum of 1988 unless an alternate datum is preferred by the City.
- Two-man survey field crews will then commence with field data collection utilizing traditional surveying equipment such as digital theodolites, auto levels, etc. together with non-traditional instruments, such as a 3-D laser scanner. At this time, the CAS Utility Locates Department will commence with marking below ground utilities with 2-D ground penetrating radar (GPR) and electromagnetic (EM) instruments on the surface, if required.
- Elevation cross sections at 50-foot intervals shall be provided for the topographic work. Right-of-way cross-sections will include back of sidewalk, type and top of curb, gutter line, edge of pavement, centerline/median and intersection centerline.
- Elevations shall be accurate to 1/100 of a foot at all building entrances, driveways, sidewalk, top of curb, edge of pavement, and 1/10 of a foot at natural ground.
- As the survey data is collected, the files created will be downloaded by the Survey Technician and uploaded into a survey base map. This base map will be used to create a Map of Specific Purpose Survey. The field data will also



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## 3I –APPROACH TO PERFORMING WORK

checked for quality assurance and quality control. At this point, the Professional Surveyor and Mapper (PSM) will begin his review of the survey.

- All work shall be produced in AUTOCAD 2019 and compliant with CRA latest CAD standards.
- A draft survey will be completed and submitted to the CRA staff for comments.
- A final signed and sealed survey will be submitted to the CRA staff after all comments have been addressed and any final revisions have been made.

### PROJECT SCHEDULING

An estimated time schedule for completion of the proposed project is 15 months, but actual duration of the survey may depend on conditions in the field, scope changes and the ability to provide the survey in phases in lieu of providing the survey for the entire project at once. A project schedule will be provided to the City's CRA staff upon project award.

### QUALITY ASSURANCE/QUALITY CONTROL

Quality control throughout the Project Duration is handled by means of a check and balance system and through the team's client relationships we form during the project by providing continuous open, often face-to-face and honest lines of communication. CAS conducts weekly QA/QC meetings in-house every Monday to ensure projects are on schedule and within budget. The CAS process will be methodical and timely in approach. The established goals identified in the project initiation will be implemented through project completion.







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## 4 - INNOVATIVE TECHNOLOGY - SUB-SURFACE UTILITY ENGINEERING

### SUBSURFACE UTILITY ENGINEERING (SUE) – 3-D Radar Tomography

#### General Summary

With over 35 years in business, our staff of 40+ professional and technical personnel specializes in providing quality professional services to our clients. CAS has extensive experience in subsurface utility engineering (SUE) and employs the **latest state-of-the-art technologies**. In addition to traditional methods of utility locating such as vacuum excavation (potholing), electromagnetic (EM) induction for tonable utilities, and 2-D Ground Penetrating Radar (GPR), CAS can utilize a **proprietary patented scanning technology known as 3-D Radar Tomography for subsurface utility investigations**. 3-D Radar Tomography is a powerful scanning technology which provides for a continuous 3-dimensional scan of subsurface utilities with high levels of accuracy. CAS has utilized this technology in effectively locating subsurface utilities in South Florida with proven results for over 10 years. In today's congested utility corridors accurate and comprehensive utility locates is essential to sound utility engineering design. A FHWA/Purdue University Study documented a **\$4.62 return** on every \$1 invested in traditional SUE and an FDOT documented a **\$12.00 return** on every \$1 invested in 3-D Radar Tomography.



Typical 3-D Radar Tomography Scanning Unit

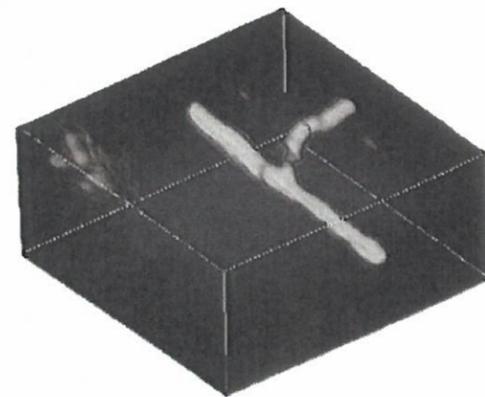
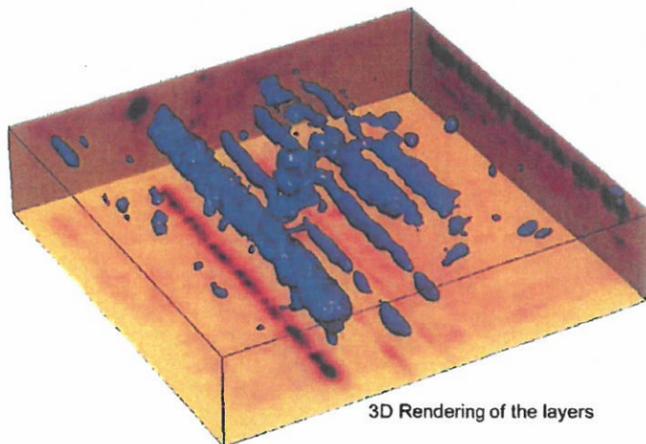


## 4 - INNOVATIVE TECHNOLOGY - SUB-SURFACE UTILITY ENGINEERING

### The “CAS Advantage” – Benefits of a Unified Design Process and the Use of 3-D Radar Tomography

CAS has the unique capability of providing clients with survey and advanced utility locates for utility design projects. CAS' highly experienced survey crews and utility locating staff with the use of all the latest technology, coordinate closely with project engineers and collect field data with engineering principles and guidelines in mind. The fact that CAS provides such a unified process to design allows for fast tracking of design projects.

CAS' unique capability in providing 3-D Radar Tomography scanning provides continuous x,y,z positioning of buried utilities with great accuracy (+/- 2 inches horizontally and +/- 6 inches vertically) along with the associated topographic profile (ground surface elevations). The 3-D Radar Tomography unit is equipped with an array of 17 antennas that “cross communicate” thus allowing for the level of accuracy stated above. Generally, utilities to a buried depth of up to 15 feet can be identified by this technology and all pipe material type can be located, including bends/fittings and offsets. Also abandoned facilities and non-utility anomalies can be identified that could potentially interfere with design elements. The use of this technology can be especially beneficial for aged utility areas where record drawings are poor or non-existent. The implementation of 3-D RT to water main relocation projects as proposed under this contract offers a practical solution to this critical issue. This allows for the generation of very accurate and complete base maps, which in turn accelerates the design process delivering 60% design plans at a typical 30% design plan submittal. In addition, this translates to superior final construction plans, greatly reducing the potential for changes orders and delays during construction due to unforeseen conflicts. Each 3-D Radar Tomography (3-D RT) unit scans a 6-foot wide pass. Under ideal conditions (unobstructed clear areas) 5 acres per day can be scanned with a single 3-D Radar Tomography scanning unit. The use of 3-D RT can reduce the need of vacuum excavation by 90% for locating subsurface utilities, thus reducing surface impacts and restoration. 3-D RT is very cost competitive when compared to traditional SUE methods, due to the speed of data acquisition, accuracy and processing time.





## 4 - INNOVATIVE TECHNOLOGY - SUB-SURFACE UTILITY ENGINEERING

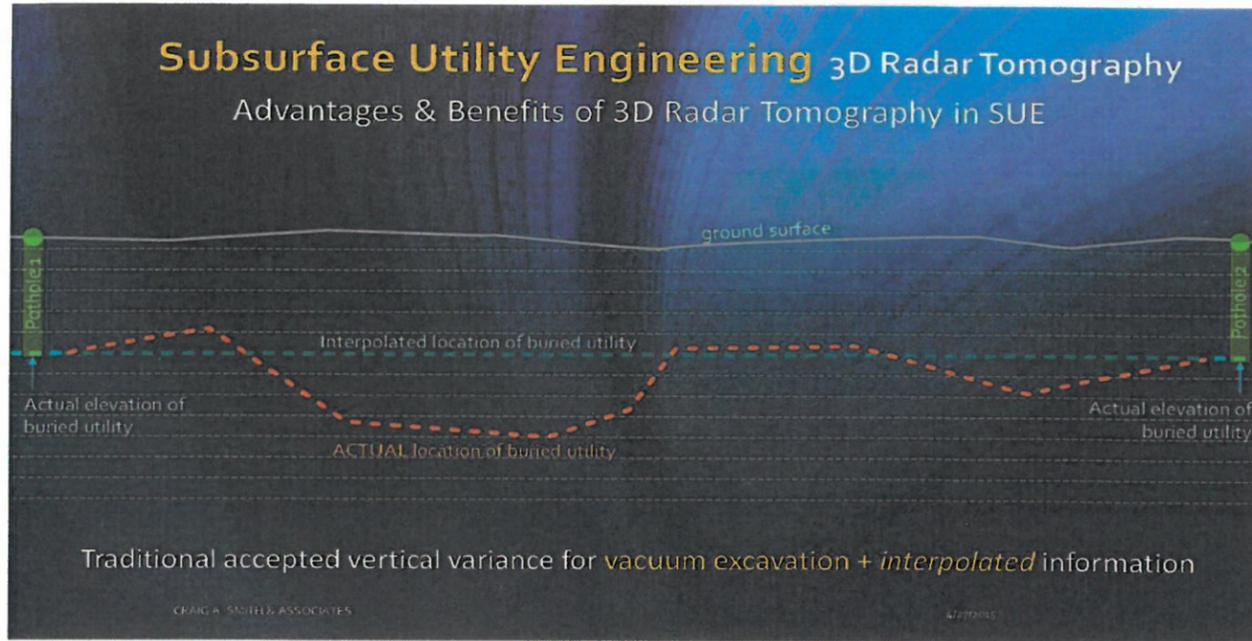
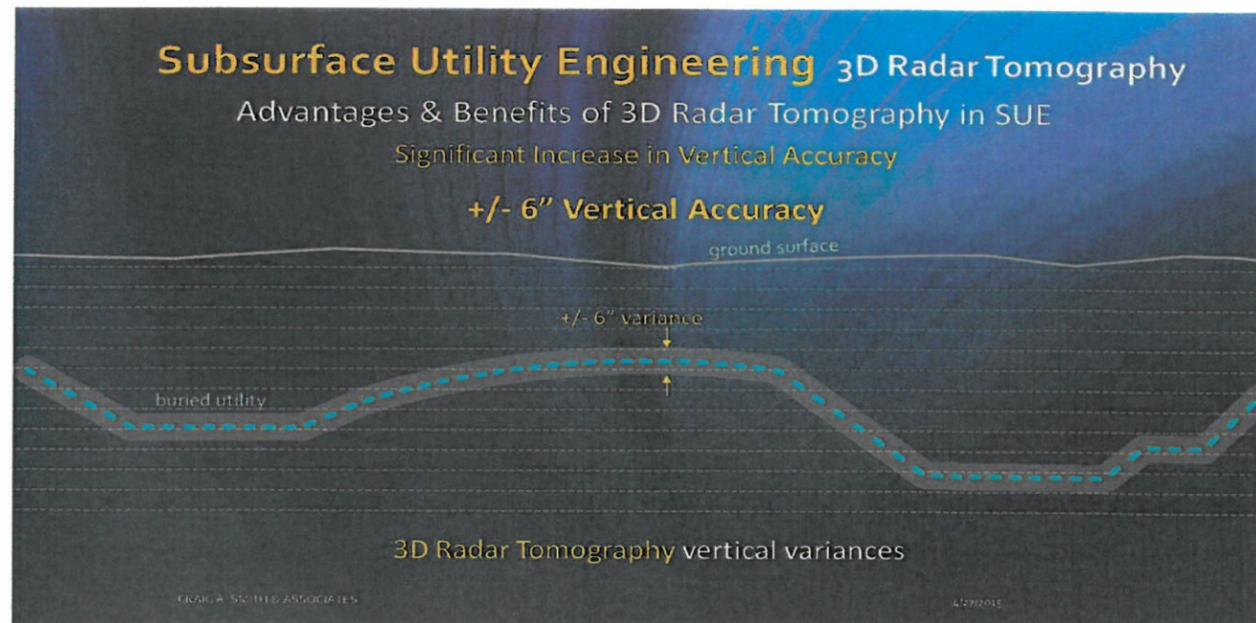


Diagram 1

The traditional vacuum excavation method of utility locating only provides accurate utility locations at the points of excavation, thus requiring estimation or interpolation of the utility location between the points of excavation as shown above in Diagram 1. Often though there may be considerable variability in utility alignment between points of excavation. The use of 3-D RT scanning eliminates such uncertainties in utility locates by providing a continuous scan of the utility alignment as show below in Diagram 2.





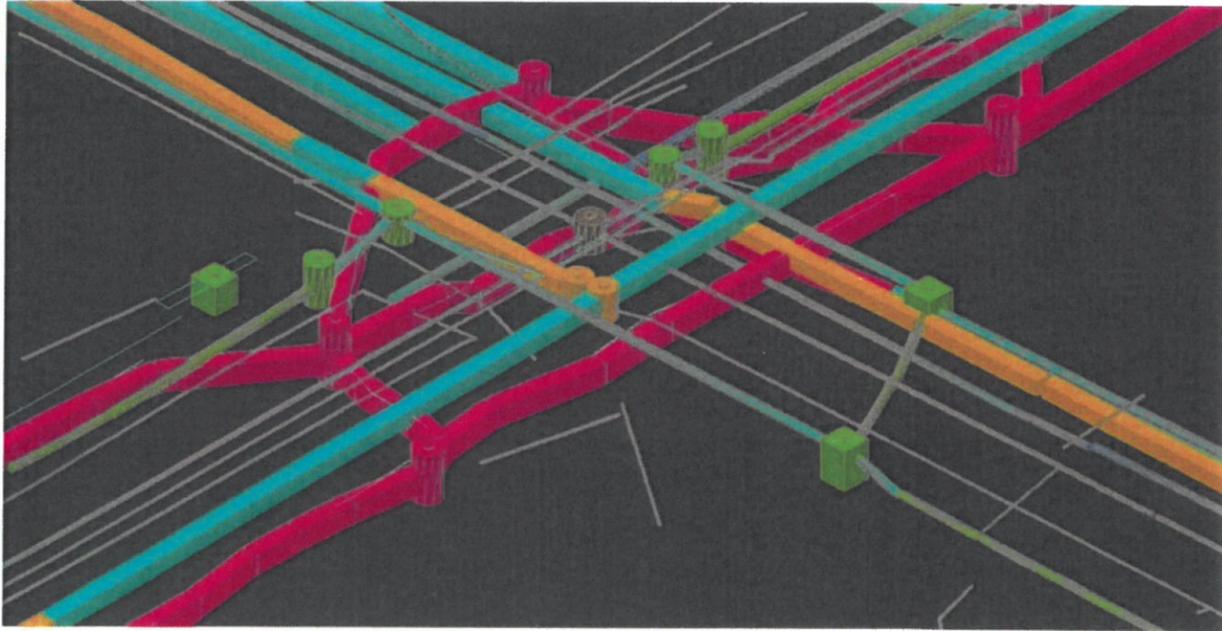
Craig A. Smith & Associates, Inc.

Engineers • Surveyors • Subsurface Utility Engineering

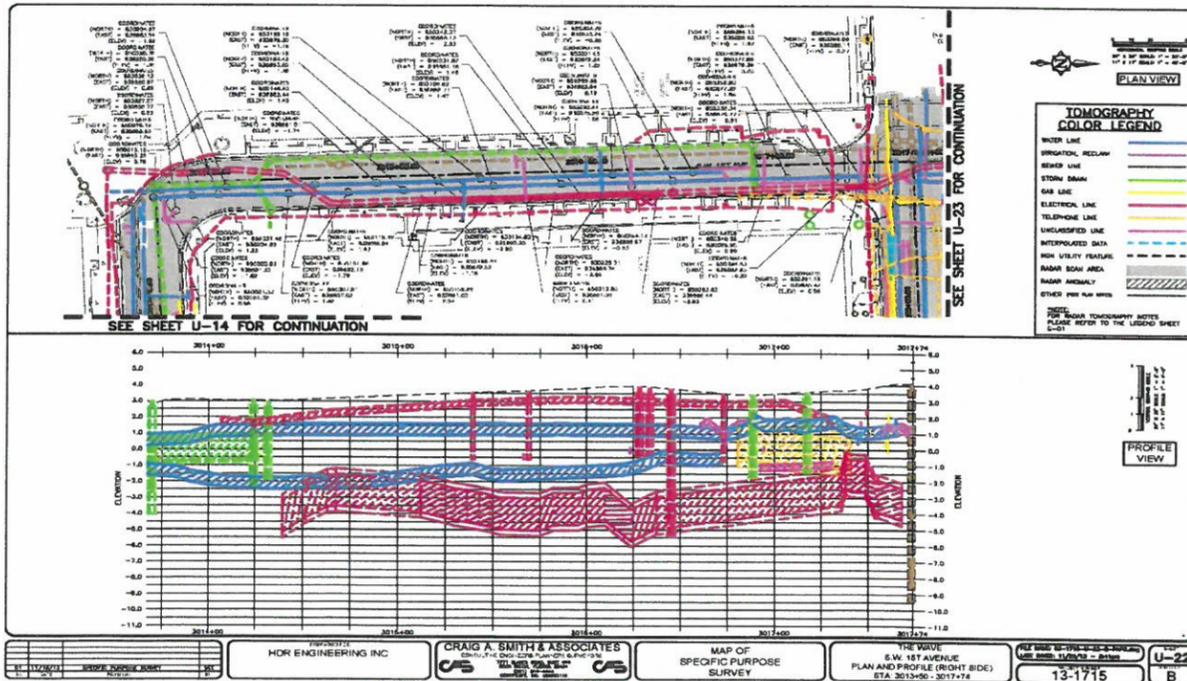
# 4 - INNOVATIVE TECHNOLOGY - SUB-SURFACE UTILITY ENGINEERING

Diagram 2

Once the data is processed and downloaded in Civil 3-D CADD, a 3-D model of the subsurface conditions can be generated along with the traditional plan and profile drawings as base maps for design.



Typical 3-D Model Deliverable of Subsurface Utilities





## 4 - INNOVATIVE TECHNOLOGY - SUB-SURFACE UTILITY ENGINEERING

### Typical Civil 3-D CADD Plan & Profile Deliverable

#### 3-D Radar Tomography – Limiting Factors

3-D RT is generally very successful in scanning through sandy soils, gravel, limestone, granite, asphalt, concrete and shale, but readings can be inhibited by dense organic soil material such as much, clay or peat. Also flowable fill may limit the radar's penetrating ability. In addition, narrow corridors (less than 6 feet wide) with numerous above ground obstructions, such as utility poles, cable boxes, bollards, FPL transformers may limit the 3-D RT unit's accessibility. The use of 2-D GPR may be preferred in such areas.

#### Subsurface Utility Engineering Services for Clients

Our current and past clients for subsurface utility engineering services include Federal, State, County, City Government Facilities, U.S. Naval facilities, NASA Facilities, Port Authorities, design engineers and contractors.

CAS maintains unlimited qualification with FDOT in categories 3.1, 7.1, 8.1 & 8.2. CAS is also licensed by the State of Florida, Department of Business and Professional Regulation, Board of Surveyors as an Engineering Survey firm, Land Bureau number 03110 (LB 03110).

CAS performs Subsurface Utility Engineering & Coordination services for numerous municipal clients and is licensed and capable of performing proprietary and patented **3D Radar Tomography** services throughout the United States.

CAS performs comprehensive subsurface utility engineering for many municipalities on a contractual basis, serving as the municipalities' One Call respondent. In this capacity, CAS staff members perform hundreds of utility line designations every week. CAS also performs 2D Ground Penetrating Radar locates and Vacuum excavations for our municipal and private clients. In addition to providing One Call locates, CAS serves as the municipality's or client's "clearing house" for design related utility services, providing plan mark-up, level D through A utility marking services and coordination response in accordance with Utility Accommodation Manual requirements.

CAS is currently providing utility locating services for the following:

- City of Cooper City
- City of Hollywood
- City of Coconut Creek
- Town of Pembroke Park
- Town of Davie
- City of Miami Gardens
- Village of Bal Harbour
- US Navy, NAS Key West
- Marathon Oil Corp
- TECO Peoples Gas
- Citgo Petroleum
- City of North Miami
- City of Miami Beach
- City of Pembroke Pines
- Tampa Electric
- City of Weston
- Town of Jupiter
- Martin County
- FDOT



Craig A. Smith & Associates, Inc.

Engineers • Surveyors • Subsurface Utility Engineering

## 4 - INNOVATIVE TECHNOLOGY – SUB-SURFACE UTILITY ENGINEERING

Additionally, in the past CAS has performed various locating services for the following:

- Town of Golden Beach
- City of Sweetwater
- City of Tampa
- City of Lauderhill
- City of Aventura
- City of North Miami
- City of North Miami Beach
- Broward County
- Pasco County
- Miami-Dade County
- Palm Beach County
- Sarasota County
- Collier County
- NASA Kennedy Space Center
- Hardee County
- FPL
- AT&T / BellSouth
- US Military Facilities
- Colonial Pipeline
- Marathon Pipeline
- Valero Energy
- Armada Hess
- Motiva (Shell) Enterprises
- Port Everglades
- Port of Tampa
- Port of Jacksonville
- Koch Pipeline
- Buckeye Partners
- Progress Energy
- Orange County
- JEA
- US Park Service
- Central Intelligence Agency
- US Air Force
- US Army
- Balfour Beatty / Parsons Brinkerhoff

CAS performs all utility related surveys in accordance with Minimum technical Standards for Surveying & Mapping, ASCE 38/02. All survey work is performed under the direct supervision of a Licensed Professional Surveyor.

CAS is fully compliant with major CADD software platforms (AutoCAD Civil 3D & AutoDesk Civil Design).

**Quality Assurance / Quality Control** – CAS maintains a comprehensive Quality Control and Assurance program including, independent reviews by Principal members of the firm. The Principals maintain a vested financial interest in the operation of the firm and output of quality deliverables. CAS performs quality reviews through each phase of the project, up and through to deliverables. Quality reviews are performed at the Staff, Project Engineer, Project Manager and Principal levels. Records of all deficiencies found are noted and recorded. Corrections to deficiencies are checked against previously noted items and confirmed for correction and compliance. This process is repeated through each project phase, through final delivery.

### **Above Ground 3-D Scanning**

Additionally, the CAS surveying department utilizes above ground 3-D High Definition Scanning (HDS). With this instrument, dense areas can be scanned and saved in a “point cloud” which then can be processed and uploaded into the Civil 3-D environment. The scan data can be captured relative to assumed datum and translated to project datum or captured utilizing known control point values to within 0.02' accuracy horizontally and vertically.

# *State of Florida*

## *Department of State*

I certify from the records of this office that CRAIG A. SMITH & ASSOCIATES, INC. is a corporation organized under the laws of the State of Florida, filed on August 7, 1980.

The document number of this corporation is 681464.

I further certify that said corporation has paid all fees due this office through December 31, 2019, that its most recent annual report/uniform business report was filed on April 8, 2019, and that its status is active.

I further certify that said corporation has not filed Articles of Dissolution.

*Given under my hand and the  
Great Seal of the State of Florida  
at Tallahassee, the Capital, this  
the Eighth day of April, 2019*



*Randy R. Lee*  
Secretary of State

Tracking Number: 7253482479CC

To authenticate this certificate, visit the following site, enter this number, and then follow the instructions displayed.

<https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication>

# State of Florida Business Licenses

## ENGINEERING

 Ron DeSantis, Governor

STATE OF FLORIDA

 **FBPE**  
FLORIDA BOARD OF  
PROFESSIONAL ENGINEERS

BOARD OF PROFESSIONAL ENGINEERS  
THE ENGINEERING BUSINESS HEREIN IS AUTHORIZED UNDER THE  
PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

**CRAIG A. SMITH & ASSOCIATES, INC.**  
21045 COMMERCIAL TRAIL  
BOCA RATON FL 33486

LICENSE NUMBER: CA3110  
EXPIRATION DATE: FEBRUARY 28, 2021  
Always verify licenses online at MyFloridaLicense.com



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## SURVEYING

 Florida Department of Agriculture and Consumer Services  
Division of Consumer Services  
Board of Professional Surveyors and Mappers  
2005 Apalachee Pkwy Tallahassee, Florida 32399-6500

License No.: LB3110  
Expiration Date February 28, 2021

**Professional Surveyor and Mapper Business License**  
Under the provisions of Chapter 472, Florida Statutes

CRAIG A SMITH & ASSOCIATES, INC.  
21045 COMMERCIAL TRL  
BOCA RATON, FL 33486-1006

*Nicole Fried*  
NICOLE "NIKKI" FRIED  
COMMISSIONER OF AGRICULTURE

This is to certify that the professional surveyor and mapper whose name and address are shown above is licensed as required by Chapter 472, Florida Statutes.

# State of Florida Professional Licenses

## ENGINEERING

Ron DeSantis, Governor  
Halsey Beshears, Secretary



STATE OF FLORIDA  
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION  
BOARD OF PROFESSIONAL ENGINEERS  
THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE  
PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

**SMITH, STEPHEN CRAIG**  
9960 MAJORCA PLACE  
BOCA RATON FL 334340000

LICENSE NUMBER: PE48914  
EXPIRATION DATE: FEBRUARY 28, 2021  
Always verify licenses online at MyFloridaLicense.com



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## SURVEYING



Florida Department of Agriculture and Consumer Services  
Division of Consumer Services  
Board of Professional Surveyors and Mappers  
2005 Apalachee Pkwy Tallahassee, Florida 32399-6500

License No.: LS4846  
Expiration Date February 28, 2021

**Professional Surveyor and Mapper License**  
Under the provisions of Chapter 472, Florida Statutes

ROBERT D KEENER  
950 SE ATLANTUS AVE  
FORT PIERCE, FL 34983-3906

*Nicole Fried*  
NICOLE "NIKKI" FRIED  
COMMISSIONER OF AGRICULTURE

This is to certify that the professional surveyor and mapper whose name and address are shown above is licensed as required by Chapter 472, Florida Statutes.



# CERTIFICATE OF LIABILITY INSURANCE

Acct#: 2706687

DATE (MM/DD/YYYY)  
04/12/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Lockton Affinity, LLC P. O. Box 879610 Kansas City, MO 64187-9610	<b>CONTACT NAME:</b> Lockton Affinity
	<b>PHONE</b> (A/C, NO Ext): 877-320-9393
<b>E-MAIL ADDRESS:</b> EFM@locktonaffinity.com	
<b>INSURER(S) AFFORDING COVERAGE</b>	
<b>INSURER A:</b> Old Republic Insurance Company	<b>NAIC #</b> 24147
<b>INSURER B:</b>	
<b>INSURER C:</b>	
<b>INSURER D:</b>	
<b>INSURER E:</b>	
<b>INSURER F:</b>	

**INSURED**  
**CRAIG A. SMITH & ASSOCIATES, INC.**  
 21045 Commercial Tail  
 Boca Raton, FL 33486

**COVERAGES**      **CERTIFICATE NUMBER**      **REVISION NUMBER**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	<b>COMMERCIAL GENERAL LIABILITY</b> Claims Made    Occur						EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG
	GEN'L AGGREGATE LIMIT APPLIES PER:						
	POLICY	PROJEC	LOC				
	OTHER						
A	<b>AUTOMOBILE LIABILITY</b> ANY AUTO OWNED AUTOS ONLY <input checked="" type="checkbox"/> SCHEDULED AUTOS HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS			L106034-19	04/27/2019	04/27/2020	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	<b>UMBRELLA LIAB</b> <b>EXCESS LIAB</b>						EACH OCCURRENCE \$ AGGREGATE \$ \$
	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below						PER STATUTE    OTH-ER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$

**DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES** (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) GPBR: 2QL2  
 Policy provides protection for any and all operations/jobs performed by the named insured where required by written contract. Certificate holder is an Additional Insured where required by written contract. Waiver of Subrogation included by written contract. Insurance is primary and non-contributory.

<b>CERTIFICATE HOLDER</b>	<b>CANCELLATION</b>
<b>PROOF OF INSURANCE</b>	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	<b>AUTHORIZED REPRESENTATIVE</b>  



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)  
04/02/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER <b>Sena &amp; Whitney LLC</b> 190 Glades Rd Suite C Boca Raton, FL 33432	CONTACT NAME: <b>Debbie Adametz</b>	PHONE (A/C, No, Ext): <b>561-210-8715</b>	FAX (A/C, No): <b>561-210-8716</b>
	E-MAIL ADDRESS: <b>dadametz@thesenagroup.com</b>		
INSURED <b>CRAIG A. SMITH &amp; ASSOCIATES</b> 21045 COMMERCIAL TRAIL BOCA RATON, FL 33486	INSURER(S) AFFORDING COVERAGE		NAIC #
	INSURER A:	<b>Gemini Insurance Company</b>	
	INSURER B:	<b>AIG Specialty Insurance Company</b>	
	INSURER C:	<b>Hiscox Insurance Company, Inc.</b>	
	INSURER D:	<b>Evanston Insurance Company, 35378</b>	
	INSURER E:		

COVERAGES      CERTIFICATE NUMBER: 00000000-1949893      REVISION NUMBER: 93

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSD WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER:		VGGP003730	12/01/2018	12/01/2019	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMPI/OP AGG \$ 2,000,000
	AUTOMOBILE LIABILITY ANY AUTO OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY					COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
B	<input type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$		BE022504441	12/01/2018	12/01/2019	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input type="checkbox"/> N/A				PER STATUTE OTHER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
C	PROFESSIONAL E&O		ANE1201537-19	04/01/2019	04/01/2020	PER CLAIM/AGGR \$1M/\$2M
D	POLLUTION LIABILITY		CPLMOL100329	03/20/2019	03/20/2020	PER CLAIM/AGGR \$1M/\$3M

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER  <b>PROOF OF INSURANCE</b>	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE  (DEA)

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# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)  
12/20/2018

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IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy (ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER  FrankCrum Insurance Agency, Inc. 100 South Missouri Avenue Clearwater, FL 33756	CONTACT NAME:	
	PHONE: (800) 277-1620 X 4800	FAX: (727) 797-0704
INSURED  FRANKCRUM L/C/F CRAIG A. SMITH & ASSOCIATES, INC. 100 SOUTH MISSOURI AVENUE CLEARWATER, FL 33756	E-MAIL ADDRESS:	
	INSURERS(S) AFFORDING COVERAGE	
	INSURER A: Frank Winston Crum Insurance Company	NAIC# 11600
	INSURER B:	
	INSURER C:	
	INSURER D:	

COVERAGES CERTIFICATE NUMBER: 528908 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSRD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER						EACH OCCURENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS-COMP/OP AGG \$ \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS ONLY						COMBINED SINGLE UNIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$ \$
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS MADE DED RETENTION \$						EACH OCCURENCE \$ AGGREGATE \$ \$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input type="checkbox"/> (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		WC201900000	01/01/2019	01/01/2020	X PER STATUE OTHER E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE-EA EMPLOYEE \$1,000,000 E.L. DISEASE-POLICY LIMIT \$1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)  
EFFECTIVE 12/01/2011, COVERAGE IS FOR 100% OF THE EMPLOYEES OF FRANKCRUM LEASED TO CRAIG A. SMITH & ASSOCIATES, INC. (CLIENT) FOR WHOM THE CLIENT IS REPORTING HOURS TO FRANKCRUM. COVERAGE IS NOT EXTENDED TO STATUTORY EMPLOYEES. RE: ALL PROJECTS

CERTIFICATE HOLDER	CANCELLATION
	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 

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**Craig A. Smith & Associates, Inc.**  
Engineers • Surveyors • Subsurface Utility Engineering  
3D Subsurface Imaging • Utility Coordination

## 7 – ACKNOWLEDGEMENT OF ADDENDA

No addenda issued for this solicitation

