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December 26, 2019

**VIA E-MAIL BBILLINGSLEY@BROWARD.ORG**

Brenda J. Billingsley  
Director  
Broward County Purchasing Division  
115 S. Andrews Ave., Room 212  
Ft. Lauderdale, FL 33301-4804

**Re: Objection regarding Recommendation of Ranking re Consulting Services  
for Port Everglades (PNC2119212P1)**

Dear Ms. Billingsley:

We represent Bermello Ajamil & Partners, Inc. (BA), and submit this letter, pursuant to Broward County Administrative Code, § 21.84.f., because the proposed recommendation of ranking for the above-referenced solicitation is unfair and incorrect, and the Selection Committee failed to consider this new information identified below.

**I. Summary**

**CMA is unfairly and incorrectly getting to have its cake and eat it too.**

Chen Moore and Associates, Inc. (CMA) sought to have its cake and eat it to, and the Selection/Evaluation Committee unfairly and incorrectly let them do so. Specifically, CMA improperly received all of the benefits of teaming with Jacobs Engineering Group, Inc. and its seaport experience, contrary to the terms of the solicitation, yet avoided bidding as a joint venture with Jacobs so that CMA could obtain the full amount of points for Evaluation Factor 5, Location. As further described below, CMA should not have received any evaluation credit for the Past Performance (Evaluation Factor 3) of Jacobs. Further, if the County was to permit such consideration, then CMA should have been treated as de facto joint venture with Jacobs, and its score should be adjusted accordingly for the Location Evaluation Factor 3. Either way, when these two issues are corrected, BA would become the highest scored Vendor.

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## **II. Introduction**

### **A. The Solicitation only permitted consideration of the prime vendor's past performance, specifically relating to seaports.**

The solicitation sought a firm to provide professional consulting services for Port Everglades to include architectural, engineering, and related services on a continuing basis for remodeling, renovation, and new construction projects with construction costs of each individual project does not to exceed \$2,000,000.00. Solicitation, at 2 & 4 of 52 (attached as Exhibit 1). The procurement is subject to Section 287.055, Florida Statutes, and the Consultants' Competitive Negotiation Act (CCNA). The CCNA requires a qualifications' based selection, without consideration to price until vendors are ranked based on their qualifications. *See generally* Fla. Stat. § 287.055(4) (2019); Broward County Administrative Code, § 21.85 (11-8-11).

To determine the best qualified firm to commence negotiations with, the Solicitation specified seven evaluation criteria worth a total of one-hundred points. Evaluation criterion three, Past Performance, was worth thirty points. In assigning point scores for Past Performance, only the "prime Vendor's" past performance as to similar work at seaports was to be considered. Specifically, the Solicitation stated as follows:

[remainder of page blank – continues on next page]

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<b>3.</b>	<p><b>Past Performance: Maximum 30 points</b></p> <p>Describe prime Vendor's experience on projects of similar nature, scope and duration, along with evidence of satisfactory completion, both on time and within budget, for the past five years. Provide a minimum of three projects with references.</p> <p>Vendor should provide references for similar work performed to show evidence of qualifications and previous experience. Refer to <b>Vendor Reference Verification Form</b> and submit as instructed. Only provide references for non-Broward County Board of County Commissioners contracts. For Broward County contracts, the County will review performance evaluations in its database for vendors with previous or current contracts with the County. The County considers references and performance evaluations in the evaluation of Vendor's past performance.</p> <p><b>a:</b> Include active and completed projects related to cruise and/or cargo terminal expansion/construction and any other seaport transportation projects.</p> <p><b>Points Value:</b> 15</p> <p><b>b:</b> Include active and completed projects related to marine infrastructure and dredging.</p> <p><b>Points Value:</b> 10</p> <p><b>c:</b> Include active and completed projects related to roadway and utility construction within a seaport environment.</p> <p><b>Points Value:</b> 5</p>
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Solicitation, at 48 (emphasis added).

**B. The most points that a locally-headquartered joint venture could receive for the location evaluation criterion was three.**

The solicitation provide for a local preference of five points for “a Vendor” whose principal place of business is located in Broward County. Solicitation, at 49. If a locally headquartered Vendor teamed with a non-locally headquartered company, then at most it could receive three points if it had 51% or more of the equity. Solicitation, at 48-49. Otherwise, regardless of a firm’s location and connection with Broward County, no points were available for this evaluation criterion. Indeed, even if a company was headquartered next-door in Miami-Dade and had a long-standing, significant presence in Broward County, then it could not receive any points for this evaluation criterion.

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### **III. Argument**

#### **A. Chen Moore unfairly and incorrectly received credit for Jacobs' seaport experience.**

##### **1. CMA only had one relevant project.**

CMA is a well-respected firm with much experience in projects involving civil engineering, water resources, water and sewer, transportation, and landscape architecture, but no such depth of experience related to seaports. Indeed, it has not one directly relevant project that it has performed in the United States similar to what is sought in this solicitation. Knowing of its lack of experience on projects of similar nature of those in this solicitation, CMA teamed with Jacobs in a de facto joint venture.

As noted above, the Past Performance evaluation criterion was only to be judged on the "**prime Vendor's experience on projects of similar nature,**" specifically three types:

- a. cruise and/or cargo terminal expansion/construction and any other seaport transportation projects (worth 15 points);
- b. marine infrastructure and dredging (worth 10 points); and
- c. roadway and utility construction within a seaport environment (worth 5 points).

Solicitation, at 48.

Only one of the fourteen projects (relating to a greenfield port in Central America) that CMA submitted for its past performance was related to the solicitation's three designated types of similar projects. *See* CMA Proposal, at 208-210 and 218- 233 (attached as Exhibit 2). Instead, CMA's identified projects are primarily for water and sewer projects and not even in a seaport environment as required by this solicitation.

Realizing its lack of relevant experience in the context as required by the solicitation, CMA relied on the experience of Jacobs, and sought to make it appear that the companies were submitting as a joint venture, which would have allowed the Selection Committee to properly consider the relevant experience of Jacobs. For example, nearly every page of CMA's proposal is branded as if being submitted by both companies as a joint venture:

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and



CMA Proposal, at *passim*.

CMA’s narrative also adopts this de facto joint venture theme. In the first sentence of text in the submission, CMA states that it is submitting “in association with **Jacobs.**” CMA Proposal, at 8 (emphasis in original); see also *id.* at 59. (“Chen Moore and Associates, Inc. (CMA), in association with Jacobs, is pleased to submit. . .”). Looking at the organizational chart and the key personnel identified in the proposal, it is even more apparent that CMA was bidding this project as a de facto joint venture with Jacobs, who is supplying more of the key personnel than CMA. For key personnel, CMA identifies and provides resumes for approximately thirty-eight persons. Of that thirty-eight, sixteen are from Jacobs, thirteen are from CMA, six are from Cummings Cederberg, two are from Stoner & Associates, Inc., and one is from PanGeo Consultants.<sup>1</sup> See CMA Proposal, at 59-77 and 83-185. Of the eleven primary disciplines of work, CMA lacks any key personnel in seven. CMA Proposal, at 63.

Within the Past Performance section of CMA’s proposal, CMA seeks to adopt Jacobs’ seaport experience as its own:

<sup>1</sup> It is surprising that only 1 key personnel is identified from PanGeo, when CMA intends to subcontract 20% of the work to PanGeo as its Community Business Enterprise (CBE) Contractor. Based on BA’s experience at Port Everglades for the work to be performed under this Solicitation, it is highly unlikely that there is sufficient scope to reach the 25% CBE subcontracting to subcontract 20% for geotechnical engineering and 5% for surveying as CMA intends to accomplish.

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**Port General Consultant and Civil Contracts**

The experience we have gained across ports throughout the country will be used in tackling your day to day engineering needs. We understand the nuances and the types of services required. Our goal is to develop long lasting relationships with the client and to bring the technologies to help meet their needs. We have multi-decade relationships with port authorities throughout the southeast.

Our subconsultant Jacobs has performed these services at both cruise heavy and cargo heavy ports and understands the specifics required of each. From traffic studies for cruise and cargo vehicles, to paving for cargo storage, to gate operations for cargo interchange, Jacobs has done it and done it well.

CMA Proposal, at 207. The “we” referenced to experience “gained across ports throughout the country” refers to Jacobs not CMA as CMA admittedly has no experience in ports in the United States.

CMA continued this de facto joint venture language in its presentation. Again, the cover page of its presentation is an implied joint proposal:



In its oral presentation, CMA noted only one of its contracts related to seaports, the Punta Limon Panama project. CMA Presentation, at 9 (the CMA Presentation is attached as Exhibit 3 and the audio and video files for the meeting are incorporated by reference). To demonstrate its Past Performance, CMA relied nearly exclusively on Jacob’s seaport experience, citing numerous projects and contending that Jacobs is the “No. 1 ENR Port Firm in the World.” *Id.* at 11-15 and 25-27.

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In response to questions during the oral presentations, CMA candidly admitted that it had not completed any domestic port project (and only one in its history in Central America), but emphasized that it offered a “true partnership with Jacobs.” Thus, on one hand CMA is seeking to have the Jacobs’ seaport experience count as if it were its own as if a de facto joint venture partnership, but on the other hand, as explained below, it does not want the County to consider CMA and Jacobs as a “true partnership” because then CMA would not have received enough points to outscore BA because such “true partnership” would have jeopardized CMA’s Location points.

**2. All of BA’s submitted past performance was similar in nature to that of the Solicitation.**

Compared to CMA, BA has objectively greater experience in the three types of projects of similar nature as those required by the solicitation, specifically relating to (a) cruise and/or cargo terminal expansion/construction and any other seaport transportation projects (worth 15 points); (b) marine infrastructure and dredging (worth 10 points); and (c) roadway and utility construction within a seaport environment (worth 5 points).

All of BA’s submitted past performance relates to these required similar projects, including such work at Port Everglades, Port Miami, Port Canaveral, Port of Seattle, New York City Piers and Cruise Terminal, Cape Liberty Cruise Terminal in New Jersey, Port of San Francisco, Port of San Diego, and Singapore Marina Bay Cruise Centre. *See* BA Proposal, at 131- 159 (BA’s Proposal is attached as Exhibit 4) (BA’s oral presentation is attached as Exhibit 4(a)).

**3. CMA must have improperly received credit for Jacob’s experience.**

Despite the objective greater experience of BA over CMA projects of similar nature, the Selection Committee scored the two Vendors similarly, with only a slight advantage to BA, indicating that they must have unfairly and incorrectly considered the past performance of Jacobs, which is not permitted by the Solicitation. BA received 112 out of 120 points, and CMA received 107 points. *See* Scoring Sheet (attached as Exhibit 5).

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Evaluation Criteria	Maximum Points	Ms. Khater		Mr. Gambriel		Mr. Hamid		Mr. Cohen	
		BA	CMA	BA	CMA	BA	CMA	BA	CMA
<b>Past Performance</b>									
3.a (cruise/cargo terminal or other seaport transportation projects)	15	15	14	15	14	15	14	13	13
3.b (marine infrastructure projects)	10	10	09	09	09	10	09	08	08
3.c (roadway and utility construction within a seaport environment)	05	05	04	04	04	04	04	04	04
Subtotal	30	30	28	28	27	29	27	25	25
<b>Total BA</b>	<b>112</b>								
<b>Total CMA</b>	<b>107</b>								

Where the Solicitation permitted the Vendor submitting a proposal to obtain evaluation credit, i.e., points, for the qualifications for subcontractors, such as Jacobs, the Solicitation used terms such as “Project Manager,” “key staff,” and “project team” without restricting the evaluation to the Vendor. Solicitation, at 47, Evaluation Criterion 1, Ability of Professional Personnel.<sup>2</sup> As to Evaluation Criterion 3, Past Performance, however, the Solicitation specifically called for the “**prime Vendor’s experience on projects of similar nature,**” and then gave three examples of what the solicitation meant by “similar nature.” Consideration of the past performance of Jacobs as to Evaluation Criterion 3, is in violation of the Solicitation, and thus unfair and incorrect. *See, e.g., Emerald Corr. Mgmt. v. Bay Cnty. Bd. of Cnty. Comm’rs*, 955 So. 2d 647, 652-53 (Fla. 1st DCA 2007) (“Whether the Board acted arbitrarily is generally controlled by a determination of whether the Board complied with its own proposal criteria as outlined in the RFP”); *All Seasons Air Conditioning v. Fla. Dep’t of Transp.*, DOAH

<sup>2</sup> Half of the points for Evaluation Criterion 1.b., relating to “**your firm’s** [as opposed to your team or something more generic indicating it was appropriate to consider subcontractors] GIS/CAD/BIM capabilities,” should also be restricted to the Vendor submitting the proposal, and like Past Performance, CMA relied on Jacob’s qualifications here also, and such is unfair and incorrect.

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No. 17-3184BID ¶¶ 3-9, 15-27, 49-59, 2017 WL 5958620, at \*2-5, 9-10 (Fla. Div. Admin. Hrgs. Aug. 28, 2017) (although bidders had to demonstrate their ability to perform by providing references for recently performed work that was similar in type, scope and volume to that called for in the solicitation the awardee's references consisted entirely of jobs that were significantly less complex than and for a very small fraction of the work called for in the solicitation); *Phil's Expert Tree Service, Inc. v. Broward County School Board*, DOAH Case No. 06-4499BID (March 19, 2007) (agency improperly considered experience of key personnel where solicitation specifically called for experience of then vendor).

If Broward County had intended the solicitation to permit the consideration of a subcontractor's experience to evaluate the Past Performance of the prime Vendor, then the solicitation should have clearly stated so. Instead, the Solicitation clearly stated for Past Performance, only the experience of the "prime Vendor" was to be considered.

**4. If CMA bid with Jacobs as prime or as a joint venture, BA would have been the most qualified vendor.**

Without the twenty points CMA received under Evaluation Criterion 5 relating to Location, to the zero points that BA received, BA would have been rated the highest 342 to 327.<sup>3</sup> Knowing that CMA had to make up for its lack of seaport experience, CMA had two appropriate choices to ensure that it received credit for Jacobs' seaport experience under the Past Performance evaluation criterion – either have Jacobs bid as the prime or form a joint venture. Under either scenario, however, based on the existing scores, BA would have been the highest scored Vendor.

If Jacobs served as the prime contractor, with CMA as the subcontractor, then it would have not received any points for the local headquarters preference evaluation criterion. Jacobs Engineering Group, Inc. is a foreign corporation with its principal place of business in Dallas, Texas. *See* 2019 Foreign Profit Corporation Annual Report of Jacobs (attached as Exhibit 6). Thus, with Jacobs as the prime contractor, CMA would not have been entitled to any points for the local headquartered preference Evaluation Criterion 5, and the total point scores would be 342 for BA and 327 for CMA.

If CMA and Jacobs had bid as a joint venture, assuming that CMA had 51% or more of the equity, then at most, CMA would have received 3 points for Evaluation Criterion 5, leading to 12 points rather than the 20 it received. Thus, with CMA and Jacobs bidding as a joint

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<sup>3</sup> BA has had a significant office presence in Broward County since 1995 and has approximately 25 employees in the office servicing Port Everglades directly: living, working, and paying taxes – both personal and corporate. Thus, for purposes of assessing the qualifications of a vendor under CCNA to give 5 points to CMA and 0 points to BA is illogical. Such points, however, is not the primary basis of this letter.

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venture, the total point scores would be 342 for BA for 339 for CMA.<sup>4</sup>

### III.

#### **Conclusion: BA should be the highest scored Vendor**

The County must follow the requirements of its solicitation. For Evaluation Criterion 3, Past Performance, it was only to evaluate the past performance of the prime Vendor on projects of a similar nature, which was essentially defined as those at a seaport environment. It is obvious from the scores that the Selection Committee considered the experience of CMA's de facto joint venture partner because they awarded essentially the same score to BA and CMA despite the objective differences in their relevant experience. CMA has at most one foreign project that is of a similar nature. On the other hand, BA included at least twenty projects of a similar nature performed at ten different seaports in the United States and abroad, including at least seven projects at Port Everglades and two at the Port of Miami. If the Selection Committee had properly scored Past Performance based only on the prime Vendor's experience, then in total they would have awarded BA enough points to offset the local preference given to CMA.

Even if such consideration of Jacobs' experience was not prohibited by the solicitation, which it was, then CMA cannot have its cake and eat it too. If the County wrongly interprets the solicitation to permit the Selection Committee to consider Jacobs' experience, then for purposes of scoring the Evaluation Criterion for Location, the County should consider CMA and Jacobs as a de facto joint venture, and accordingly CMA should earn no more than three points per evaluator for this criterion, and with such adjustment, BA would be the highest scored Vendor.

Accordingly, consistent with Administrative Code § 21.84.f. and 21.84.g., you should take the following action. Based on the new information, unfairness, or incorrectness, as identified above, you should instruct the Selection Committee that as to the thirty points available for Past Performance that they shall not consider the experience of any of the prime Vendors' subcontractors, specifically Jacobs for CMA, and such experience must be of a similar nature (as defined in Evaluation Criterion 3(a), 3(b), and 3(c), because the solicitation calls for only consideration of the "prime Vendor's experience on projects of similar nature." Further, even if you believe that the Selection Committee may consider the experience of the prime Vendor's subcontractors for the Past Performance Evaluation Criterion, then you should re-score

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<sup>4</sup> By only awarding points for Evaluation Criterion 3 for Location as an all or nothing based on where a company has its principal place of business, the County is violating its Code of Ordinances and Florida Statutes, Section 287.055(4)(b). First, the County's Code prohibits the use of the local preference in CCNA procurements. Code § 1-74(g) (excluding CCNA procurements from the term "professional services" for purposes of the application of Broward County's Local Preference Ordinance.) Second, while the CCNA requires the location to be considered in determining the qualifications of a potential vendor in a CCNA procurement, to presume that a vendor whose principal office is located in Broward County deserves all of the evaluation credit, and a vendor whose principal office is located in Miami-Dade County that also has an existing Broward County Office providing the exact same services is entitled to zero points is an arbitrary and overly restrictive interpretation of a firm's location and its qualifications.

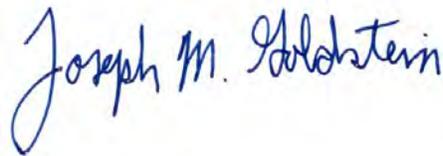
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the Evaluation Criterion 3, Location, as if CMA bid as a joint venture with Jacobs.

Thank you for your thoughtful consideration of the above.

Sincerely,

Shutts & Bowen LLP



Joseph M. Goldstein

cc: Tricia D. Brissett, Assistant County Attorney, [tbrissett@broward.org](mailto:tbrissett@broward.org)  
Bermello Ajamil & Partners, Inc.

All statements made in support of this letter are accurate, true, and correct. BA acknowledges that the determination of inaccurate, untruthful, or incorrect statements made in support of this submission may serve as a basis for debarment of the vendor regardless of whether the submission is directly provided by the vendor or a representative on behalf of the vendor.



Mark H. Ittel  
Partner, Sr. Vice President, Ports & Maritime  
Bermello Ajamil & Partners, Inc.

# **EXHIBIT 1**

Broward County Board of  
County Commissioners

Bid PNC2119212P1

## **Solicitation PNC2119212P1**

### **Consulting Services for Port Everglades**

**Bid Designation: Public**



**Broward County Board of County Commissioners**

Broward County Board of  
County Commissioners

Bid PNC2119212P1

## Bid PNC2119212P1 Consulting Services for Port Everglades

Bid Number PNC2119212P1  
Bid Title Consulting Services for Port Everglades

Bid Start Date Aug 9, 2019 4:51:43 PM EDT  
Bid End Date Sep 9, 2019 2:00:00 PM EDT  
Question &  
Answer End Date Aug 21, 2019 5:00:00 PM EDT

Bid Contact Michelle Lemire  
Purchasing Agent  
Purchasing Division  
mlemire@broward.org

Bid Contact Mark Roberts  
maroberts@broward.org

Contract Duration **3 years**  
Contract Renewal **2 annual renewals**  
Prices Good for **Not Applicable**

**Bid Comments** **Scope of Work:** The Broward County Seaport Engineering and Facilities Maintenance Division is seeking a qualified firm to provide professional **Consulting Services for Port Everglades** as outlined in the attached detailed Scope of Work. The overall purpose of the this project is to provide professional architectural, engineering, and related services on a continuing basis for remodeling, renovation and new construction projects with construction costs not to exceed two million (\$2,000,000).

**Florida Statute:** Pursuant to Florida Statutes, Section 287.055, the Consultants' Competitive Negotiation Act (CCNA) applies to this solicitation. In a CCNA solicitation, price will not be considered in the final evaluation and ranking of the qualified firm.

**Goal Participation:** This Solicitation includes a Broward County certified County Business Enterprises (CBE) goal. Refer to the Special Instructions and the Office of Economic and Small Business Development Requirements section for additional information.

**County/State License Requirements:** In order to be considered a responsive and responsible Vendor for the scope of work set forth in this solicitation, the Vendor must possess a specified license at the time of submittal (refer to Special Instructions for requirements).

**Questions and Answers:** The County provides a specified time for vendors to ask questions and seek clarification regarding the requirements of the solicitation. All questions or clarification inquiries must be submitted through BidSync by the date and time referenced in the solicitation document (including any addenda). The County will respond to all questions via BidSync.

**Submittals:** Vendor **must** submit its solicitation response electronically and **must** confirm its submittal in BidSync in order for the County to receive a valid response through BidSync. It is the Vendor's sole responsibility to assure its response is submitted and received through BidSync by the date and time specified in the solicitation. The County will not consider solicitation responses received by other means. Vendor are encouraged to submit their responses in advance of the due date and time specified in the solicitation document. In the event that the Vendor is having difficulty submitting the solicitation document through Bid Sync, immediately notify the Purchasing Agent and then contact BidSync for technical assistance.

**Added on Aug 26, 2019:**

**Addendum No. 1**

**To all prospective bidders, please note the following changes and clarifications: Words in strikethrough type**

Broward County Board of  
County Commissioners

Bid PNC2119212P1

are deletions from existing text. Words in **bold underlined** type are additions to existing text.  
The Evaluation Criteria Response Form, Item No.3: Past Performance, is revised as follows:

c. ~~Include active and completed projects related to marine infrastructure and dredging~~ **Include active and completed projects related to roadway and utility construction within a seaport environment.**

A revised Word format Evaluation Criteria Response Form has been added to the solicitation documents.

Addendum # 1

Item Response Form

Item PNC2119212P1-01-01 - Consulting Services for Port Everglades

Quantity 1 fee

Prices are not requested for this item.

Delivery Location Broward County Board of County Commissioners

No Location Specified

Qty 1

Description

Pursuant to Florida Statutes, Section 287.055, Consultants' Competitive Negotiation Act, price will not be considered in the final evaluation and rating of the qualified firms.

**SCOPE OF SERVICES**  
**Consulting Services for Port Everglades**

**A. Background**

The Broward County Seaport Engineering and Facilities Maintenance Division is seeking a professional Consultant to provide professional architectural, engineering, and related services for projects in which the estimated construction cost of each individual project does not exceed Two Million Dollars (\$2,000,000). Services shall include all architectural and engineering services necessary and related to the design, construction, and construction management of these projects. Consultant shall comply with all Federal, State, and local laws, ordinances, rules and building standards.

**B. General Description of Services**

Consultant may be tasked to provide comprehensive architectural and/or engineering services on a project specific basis. Consultant shall provide all professional services, including specialty consultant support, where project specific requires it, through either in-house or sub-consultant firm needed to complete an assigned project. Services for specific projects may include, but are not limited to:

- a) Development of full design and construction contract documents.
- b) Specification and bid document development.
- c) Supporting calculations; code analysis; jurisdictional review and permitting assistance and procurement.
- d) Bid/award support and concurrence.
- e) Negotiation support services.
- f) Inspection, construction observation and progress documentation.
- g) Post construction surveys and related services.
- h) Construction cost analysis, subaqueous inspections, damage assessment and remediation construction documents; project-related claims analysis and support.
- i) Surveying; materials and contract compliance and quality control testing services
- j) Computer-aided and manually generated graphics support, preparation of narratives and other textural project support.

- k) Photographic and video-graphic project support.
- l) Building information modeling (BIM) project support.
- m) Geographic information systems (GIS) project support.
- n) Leadership in Energy and Environmental Design (LEED) certification, LEED consulting services and associated assistance with the LEED process.
- o) Consultant may also be tasked with providing assistance in collecting existing and new as-built utility information for the Port Everglades Geographical Information System (GIS) application. All data shall be provided in a compatible format for Environmental Systems Research Institute (ESRI) software in NAD 1983 HARN State Plane Florida East FIPS 0901 Feet.
- p) Material testing and inspections including soil reports & recommendations, concrete testing, weld inspections, soil density, and other related testing.
- q) Waterproofing specialist who can assist in the prevention of water intrusion during the design and construction phases, as well as, determine the source of water intrusion in existing facilities.

**C. Contract Award**

In response to this RFP, proposing firms (consultants) shall identify the following specialty sub-consultants, who will comprise the consultant's team: surveyor; geotechnical engineering; plumbing; civil; mechanical, structural and electrical engineering; transportation and traffic engineering; telecommunications and data engineering; environmental engineering; fire protection; materials testing; Leadership in Energy and Environmental Design (LEED) accredited professional (AP). Consultant may be required to provide additional specialty consultants for specific assigned projects.

Work authorizations may be issued for various facility types located within the Port Everglades Jurisdictional area. Work authorizations will be issued through and managed by the Seaport Engineering and Facilities Maintenance Division of Port Everglades Department.

Consultant will be commissioned on an "as-needed" basis. This continuing contract will have an initial duration of one (1) 3-year period with two (2) additional one-year options for renewal by the Purchasing Director. Award of a contract does not guarantee that work will be issued. A Work Authorization and Purchase Order will be issued for every project or task assignment made during the duration of the continuing contract. Total annual cumulative fees for the continuing contract shall not exceed \$1,000,000.00.

Broward County Board of  
County Commissioners

Bid PNC2119212P1

Award of a contract does not limit the County's options to procure listed services above from other vendors or consultants or from completing all or part of the described services by the County's own forces. Award of a contract does not guarantee assignment of work or of particular projects during the term of the contract. Documents and other Consultant-provided products produced under this contract may be used in the future by the County.

**Standard Instructions to Vendors**  
**Request for Proposals, Request for Qualifications, or Request for Letters of Interest**

Vendors are instructed to read and follow the instructions carefully, as any misinterpretation or failure to comply with instructions may lead to a Vendor's submittal being rejected.

**Vendor MUST submit its solicitation response electronically and MUST confirm its submittal in order for the County to receive a valid response through BidSync. Refer to the [Purchasing Division website](#) or contact BidSync for submittal instructions.**

**A. Responsiveness Criteria:**

In accordance with Broward County Procurement Code Section 21.8.b.65, a Responsive Bidder [Vendor] means a person who has submitted a proposal which conforms in all material respects to a solicitation. The solicitation submittal of a responsive Vendor must be submitted on the required forms, which contain all required information, signatures, notarizations, insurance, bonding, security, or other mandated requirements required by the solicitation documents to be submitted at the time of proposal opening.

Failure to provide the information required below at the time of submittal opening may result in a recommendation Vendor is non-responsive by the Director of Purchasing. The Selection or Evaluation Committee will determine whether the firm is responsive to the requirements specified herein. The County reserves the right to waive minor technicalities or irregularities as is in the best interest of the County in accordance with Section 21.30.f.1(c) of the Broward County Procurement Code.

Below are standard responsiveness criteria; refer to **Special Instructions to Vendors**, for Additional Responsiveness Criteria requirement(s).

**1. Lobbyist Registration Requirement Certification**

Refer to **Lobbyist Registration Requirement Certification**. The completed form should be submitted with the solicitation response but must be submitted within three business days of County's request. Vendor may be deemed non-responsive for failure to fully comply within stated timeframes.

**2. Addenda**

The County reserves the right to amend this solicitation prior to the due date. Any change(s) to this solicitation will be conveyed through the written addenda process. Only written addenda will be binding. If a "must" addendum is issued, Vendor must follow instructions and submit required information, forms, or acknowledge addendum, as instructed therein. It is the responsibility of all potential Vendors to monitor the solicitation for any changing information, prior to submitting their response.

**B. Responsibility Criteria:**

Definition of a Responsible Vendor: In accordance with Section 21.8.b.64 of the Broward County Procurement Code, a Responsible Vendor means a Vendor who has the capability in all respects to perform the contract requirements, and the integrity and reliability which will assure good faith performance.

The Selection or Evaluation Committee will recommend to the awarding authority a determination of a Vendor's responsibility. At any time prior to award, the awarding authority may find that a Vendor is

not responsible to receive a particular award.

Failure to provide any of this required information and in the manner required may result in a recommendation by the Director of Purchasing that the Vendor is non-responsive.

Below are standard responsibility criteria; refer to **Special Instructions to Vendors**, for Additional Responsibility Criteria requirement(s).

#### 1. **Litigation History**

- a. All Vendors are required to disclose to the County all "material" cases filed, pending, or resolved during the last three (3) years prior to the solicitation response due date, whether such cases were brought by or against the Vendor, any parent or subsidiary of the Vendor, or any predecessor organization. Additionally, all Vendors are required to disclose to the County all "material" cases filed, pending, or resolved against any principal of Vendor, regardless of whether the principal was associated with Vendor at the time of the "material" cases against the principal, during the last three (3) years prior to the solicitation response. A case is considered to be "material" if it relates, in whole or in part, to any of the following:
  - i. A similar type of work that the vendor is seeking to perform for the County under the current solicitation;
  - ii. An allegation of fraud, negligence, error or omissions, or malpractice against the vendor or any of its principals or agents who would be performing work under the current solicitation;
  - iii. A vendor's default, termination, suspension, failure to perform, or improper performance in connection with any contract;
  - iv. The financial condition of the vendor, including any bankruptcy petition (voluntary and involuntary) or receivership; or
  - v. A criminal proceeding or hearing concerning business-related offenses in which the vendor or its principals (including officers) were/are defendants.
- b. For each material case, the Vendor is required to provide all information identified in the **Litigation History Form**. Additionally, the Vendor shall provide a copy of any judgment or settlement of any material case during the last three (3) years prior to the solicitation response. Redactions of any confidential portions of the settlement agreement are only permitted upon a certification by Vendor that all redactions are required under the express terms of a pre-existing confidentiality agreement or provision.
- c. The County will consider a Vendor's litigation history information in its review and determination of responsibility.
- d. If the Vendor is a joint venture, the information provided should encompass the joint venture and each of the entities forming the joint venture.
- e. A vendor is required to disclose to the County any and all cases(s) that exist between the County and any of the Vendor's subcontractors/subconsultants proposed to work on this project during the last five (5) years prior to the solicitation response.
- f. Failure to disclose any material case, including all requested information in connection with each such case, as well as failure to disclose the Vendor's subcontractors/subconsultants litigation history against the County, may result in the Vendor being deemed non-responsive.

#### 2. **Financial Information**

- a. All Vendors are required to provide the Vendor's financial statements at the time of submittal in order to demonstrate the Vendor's financial capabilities.

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- b. Each Vendor shall submit its most recent two years of financial statements for review. The financial statements are not required to be audited financial statements. The annual financial statements will be in the form of:
- i. Balance sheets, income statements and annual reports; or
  - ii. Tax returns; or
  - iii. SEC filings.

If tax returns are submitted, ensure it does not include any personal information (as defined under Florida Statutes Section 501.171, Florida Statutes), such as social security numbers, bank account or credit card numbers, or any personal pin numbers. If any personal information data is part of financial statements, redact information prior to submitting a response to the County.

- c. If a Vendor has been in business for less than the number of years of required financial statements, then the Vendor must disclose all years that the Vendor has been in business, including any partial year-to-date financial statements.
- d. The County may consider the unavailability of the most recent year's financial statements and whether the Vendor acted in good faith in disclosing the financial documents in its evaluation.
- e. Any claim of confidentiality on financial statements should be asserted at the time of submittal. Refer to **Standard Instructions to Vendors**, Confidential Material/ Public Records and Exemptions for instructions on submitting confidential financial statements. The Vendor's failure to provide the information as instructed may lead to the information becoming public.
- f. Although the review of a Vendor's financial information is an issue of responsibility, the failure to either provide the financial documentation or correctly assert a confidentiality claim pursuant to the Florida Public Records Law and the solicitation requirements (Confidential Material/ Public Records and Exemptions section) may result in a recommendation of non-responsiveness by the Director of Purchasing.

**3. Authority to Conduct Business in Florida**

- a. A Vendor must have the authority to transact business in the State of Florida and be in good standing with the Florida Secretary of State. For further information, contact the Florida Department of State, Division of Corporations.
- b. The County will review the Vendor's business status based on the information provided in response to this solicitation.
- c. It is the Vendor's responsibility to comply with all state and local business requirements.
- d. Vendor should list its active Florida Department of State Division of Corporations Document Number (or Registration No. for fictitious names) in the **Vendor Questionnaire**, Question No. 10.
- e. If a Vendor is an out-of-state or foreign corporation or partnership, the Vendor must obtain the authority to transact business in the State of Florida or show evidence of application for the authority to transact business in the State of Florida, upon request of the County.
- f. A Vendor that is not in good standing with the Florida Secretary of State at the time of a submission to this solicitation may be deemed non-responsible.

- g. If successful in obtaining a contract award under this solicitation, the Vendor must remain in good standing throughout the contractual period of performance.

#### 4. Affiliated Entities of the Principal(s)

- a. All Vendors are required to disclose the names and addresses of "affiliated entities" of the Vendor's principal(s) over the last five (5) years (from the solicitation opening deadline) that have acted as a prime Vendor with the County. The Vendor is required to provide all information required on the **Affiliated Entities of the Principal(s) Certification Form**.
- b. The County will review all affiliated entities of the Vendor's principal(s) for contract performance evaluations and the compliance history with the County's Small Business Program, including CBE, DBE and SBE goal attainment requirements. "Affiliated entities" of the principal(s) are those entities related to the Vendor by the sharing of stock or other means of control, including but not limited to a subsidiary, parent or sibling entity.
- c. The County will consider the contract performance evaluations and the compliance history of the affiliated entities of the Vendor's principals in its review and determination of responsibility.

#### 5. Insurance Requirements

The **Insurance Requirement Form** reflects the insurance requirements deemed necessary for this project. It is not necessary to have this level of insurance in effect at the time of submittal, but it is necessary to submit certificates indicating that the Vendor currently carries the insurance or to submit a letter from the carrier indicating it can provide insurance coverages.

#### C. Additional Information and Certifications

The following forms and supporting information (if applicable) should be returned with Vendor's submittal. If not provided with submittal, the Vendor must submit within three business days of County's request. Failure to timely submit may affect Vendor's evaluation.

##### 1. Vendor Questionnaire

Vendor is required to submit detailed information on their firm. Refer to the **Vendor Questionnaire** and submit as instructed.

##### 2. Standard Certifications

Vendor is required to certify to the below requirements. Refer to the **Standard Certifications** and submit as instructed.

- a. **Cone of Silence Requirement Certification**
- b. **Drug-Free Workplace Certification**
- c. **Non-Collusion Certification**
- d. **Public Entities Crimes Certification**
- e. **Scrutinized Companies List Certification**

##### 3. Subcontractors/Subconsultants/Suppliers Requirement

The Vendor shall submit a listing of all subcontractors, subconsultants, and major material suppliers, if any, and the portion of the contract they will perform. Vendors must follow the instructions included on the **Subcontractors/Subconsultants/Suppliers Information Form** and submit as instructed.

#### D. Standard Agreement Language Requirements

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1. The acceptance of or any exceptions taken to the terms and conditions of the County's Agreement shall be considered a part of a Vendor's submittal and will be considered by the Selection or Evaluation Committee.
2. The applicable Agreement terms and conditions for this solicitation are indicated in the **Special Instructions to Vendors**.
3. Vendors are required to review the applicable terms and conditions and submit the **Agreement Exception Form**. If the **Agreement Exception Form** is not provided with the submittal, it shall be deemed an affirmation by the Vendor that it accepts the Agreement terms and conditions as disclosed in the solicitation.
4. If exceptions are taken, the Vendor must specifically identify each term and condition with which it is taking an exception. Any exception not specifically listed is deemed waived. Simply identifying a section or article number is not sufficient to state an exception. Provide either a redlined version of the specific change(s) or specific proposed alternative language. Additionally, a brief justification specifically addressing each provision to which an exception is taken should be provided.
5. Submission of any exceptions to the Agreement does not denote acceptance by the County. Furthermore, taking exceptions to the County's terms and conditions may be viewed unfavorably by the Selection or Evaluation Committee and ultimately may impact the overall evaluation of a Vendor's submittal.

**E. Evaluation Criteria**

1. The Selection or Evaluation Committee will evaluate Vendors as per the **Evaluation Criteria**. The County reserves the right to obtain additional information from a Vendor.
2. Vendor has a continuing obligation to inform the County in writing of any material changes to the information it has previously submitted. The County reserves the right to request additional information from Vendor at any time.
3. For Request for Proposals, the following shall apply:
  - a. The Director of Purchasing may recommend to the Evaluation Committee to short list the most qualified firms prior to the Final Evaluation.
  - b. The Evaluation Criteria identifies points available; a total of 100 points is available.
  - c. If the Evaluation Criteria includes a request for pricing, the total points awarded for price is determined by applying the following formula:
$$\frac{\text{(Lowest Proposed Price/Vendor's Price)}}{\text{= Price Score}} \times \text{(Maximum Number of Points for Price)}$$
  - d. After completion of scoring, the County may negotiate pricing as in its best interest.
4. For Requests for Letters of Interest or Request for Qualifications, the following shall apply:
  - a. The Selection or Evaluation Committee will create a short list of the most qualified firms.
  - b. The Selection or Evaluation Committee will either:
    - i. Rank shortlisted firms; or

- ii. If the solicitation is part of a two-step procurement, shortlisted firms will be requested to submit a response to the Step Two procurement.

#### **F. Demonstrations**

If applicable, as indicated in Special Instructions to Vendors, Vendors will be required to demonstrate the nature of their offered solution. After receipt of submittals, all Vendors will receive a description of, and arrangements for, the desired demonstration. In accordance with Section 286.0113 of the Florida Statutes and pursuant to the direction of the Broward County Board of Commissioners, demonstrations are closed to only the vendor team and County staff.

#### **G. Presentations**

Vendors that are found to be both responsive and responsible to the requirements of the solicitation and/or shortlisted (if applicable) will have an opportunity to make an oral presentation to the Selection or Evaluation Committee on the Vendor's approach to this project and the Vendor's ability to perform. The committee may provide a list of subject matter for the discussion. All Vendor's will have equal time to present but the question-and-answer time may vary. In accordance with Section 286.0113 of the Florida Statutes and the direction of the Broward County Board of Commissioners, presentations during Selection or Evaluation Committee Meetings are closed. Only the Selection or Evaluation Committee members, County staff and the vendor and their team scheduled for that presentation will be present in the Meeting Room during the presentation and subsequent question and answer period.

#### **H. Public Art and Design Program**

If indicated in **Special Instructions to Vendors**, Public Art and Design Program, Section 1-88, Broward County Code of Ordinances, applies to this project. It is the intent of the County to functionally integrate art, when applicable, into capital projects and integrate artists' design concepts into this improvement project. The Vendor may be required to collaborate with the artist(s) on design development within the scope of this request. Artist(s) shall be selected by Broward County through an independent process. For additional information, contact the Broward County Cultural Division.

#### **I. Committee Appointment**

The Cone of Silence shall be in effect for County staff at the time of the Selection or Evaluation Committee appointment and for County Commissioners and Commission staff at the time of the Shortlist Meeting of the Selection Committee or the Initial Evaluation Meeting of the Evaluation Committee. The committee members appointed for this solicitation are available on the Purchasing Division's website under [Committee Appointment](#).

#### **J. Committee Questions, Request for Clarifications, Additional Information**

At any committee meeting, the Selection or Evaluation Committee members may ask questions, request clarification, or require additional information of any Vendor's submittal or proposal. It is highly recommended Vendors attend to answer any committee questions (if requested), including a Vendor representative that has the authority to bind.

Vendor's answers may impact evaluation (and scoring, if applicable). Upon written request to the Purchasing Agent prior to the meeting, a conference call number will be made available for Vendor participation via teleconference. Only Vendors that are found to be both responsive and responsible to the requirements of the solicitation and/or shortlisted (if applicable) are requested to participate in a final (or presentation) Selection or Evaluation committee meeting.

#### **K. Vendor Questions**

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The County provides a specified time for Vendors to ask questions and seek clarification regarding solicitation requirements. All questions or clarification inquiries must be submitted through BidSync by the date and time referenced in the solicitation document (including any addenda). The County will respond to questions via Bid Sync.

**L. Confidential Material/ Public Records and Exemptions**

1. Broward County is a public agency subject to Chapter 119, Florida Statutes. Upon receipt, all submittals become "public records" and shall be subject to public disclosure consistent with Chapter 119, Florida Statutes. Submittals may be posted on the County's public website or included in a public records request response, unless there is a declaration of "confidentiality" pursuant to the public records law and in accordance with the procedures in this section.
2. Any confidential material(s) the Vendor asserts is exempt from public disclosure under Florida Statutes must be labeled as "Confidential", and marked with the specific statute and subsection asserting exemption from Public Records.
3. To submit confidential material, three hardcopies must be submitted in a sealed envelope, labeled with the solicitation number, title, date and the time of solicitation opening to:

Broward County Purchasing Division  
115 South Andrews Avenue, Room 212  
Fort Lauderdale, FL 33301

4. Material will not be treated as confidential if the Vendor does not cite the applicable Florida Statute (s) allowing the document to be treated as confidential.
5. Any materials that the Vendor claims to be confidential and exempt from public records must be marked and separated from the submittal. If the Vendor does not comply with these instructions, the Vendor's claim for confidentiality will be deemed as waived.
6. Submitting confidential material may impact full discussion of your submittal by the Selection or Evaluation Committee because the Committee will be unable to discuss the details contained in the documents cloaked as confidential at the publicly noticed Committee meeting.

**M. Copyrighted Materials**

Copyrighted material is not exempt from the Public Records Law, Chapter 119, Florida Statutes. Submission of copyrighted material in response to any solicitation will constitute a license and permission for the County to make copies (including electronic copies) as reasonably necessary for the use by County staff and agents, as well as to make the materials available for inspection or production pursuant to Public Records Law, Chapter 119, Florida Statutes.

**N. State and Local Preferences**

If the solicitation involves a federally funded project where the fund requirements prohibit the use of state and/or local preferences, such preferences contained in the Local Preference Ordinance and Broward County Procurement Code will not be applied in the procurement process.

**O. Local Preference**

Except where otherwise prohibited by federal or state law or other funding source restrictions, a local Vendor whose submittal is within 5% of the highest total ranked Vendor outside of the preference area will become the Vendor with whom the County will proceed with negotiations for a final contract. Refer to **Local Vendor Certification Form (Preference and Tiebreaker)** for further information.

#### **P. Tiebreaker Criteria**

In accordance with Section 21.31.d of the Broward County Procurement Code, the tiebreaker criteria shall be applied based upon the information provided in the Vendor's response to the solicitation. In order to receive credit for any tiebreaker criterion, complete and accurate information must be contained in the Vendor's submittal.

1. **Local Vendor Certification Form (Preference and Tiebreaker);**
2. **Domestic Partnership Act Certification (Requirement and Tiebreaker);**
3. **Tiebreaker Criteria Form: Volume of Work Over Five Years**

#### **Q. Posting of Solicitation Results and Recommendations**

The Broward County Purchasing Division's [website](#) is the location for the County's posting of all solicitations and contract award results. It is the obligation of each Vendor to monitor the website in order to obtain complete and timely information.

#### **R. Review and Evaluation of Responses**

A Selection or Evaluation Committee is responsible for recommending the most qualified Vendor(s). The process for this procurement may proceed in the following manner:

1. The Purchasing Division delivers the solicitation submittals to agency staff for summarization for the committee members. Agency staff prepares a report, including a matrix of responses submitted by the Vendors. This may include a technical review, if applicable.
2. Staff identifies any incomplete responses. The Director of Purchasing reviews the information and makes a recommendation to the Selection or Evaluation Committee as to each Vendor's responsiveness to the requirements of the solicitation. The final determination of responsiveness rests solely on the decision of the committee.
3. At any time prior to award, the awarding authority may find that a Vendor is not responsible to receive a particular award. The awarding authority may consider the following factors, without limitation: debarment or removal from the authorized Vendors list or a final decree, declaration or order by a court or administrative hearing officer or tribunal of competent jurisdiction that the Vendor has breached or failed to perform a contract, claims history of the Vendor, performance history on a County contract(s), an unresolved concern, or any other cause under this code and Florida law for evaluating the responsibility of a Vendor.

#### **S. Vendor Protest**

Sections 21.118 and 21.120 of the Broward County Procurement Code set forth procedural requirements that apply if a Vendor intends to protest a solicitation or proposed award of a contract and state in part the following:

1. Any protest concerning the solicitation or other solicitation specifications or requirements must be made and received by the County within seven business days from the posting of the solicitation or addendum on the Purchasing Division's website. Such protest must be made in writing to the Director of Purchasing. Failure to timely protest solicitation specifications or requirements is a waiver of the ability to protest the specifications or requirements.
2. Any protest concerning a solicitation or proposed award above the award authority of the

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Director of Purchasing, after the RLI or RFP opening, shall be submitted in writing and received by the Director of Purchasing within five business days from the posting of the recommendation of award for Invitation to Bids or the final recommendation of ranking for Request for Letters of Interest and Request for Proposals on the Purchasing Division's website.

3. Any actual or prospective Vendor who has a substantial interest in and is aggrieved in connection with the proposed award of a contract that does not exceed the amount of the award authority of the Director of Purchasing, may protest to the Director of Purchasing. The protest shall be submitted in writing and received within three (3) business days from the posting of the recommendation of award for Invitation to Bids or the final recommendation of ranking for Request for Letters of Interest and Request for Proposals on the Purchasing Division's website.
4. For purposes of this section, a business day is defined as Monday through Friday between 8:30 a.m. and 5:00 p.m. Failure to timely file a protest within the time prescribed for a proposed contract award shall be a waiver of the Vendor's right to protest.
5. As a condition of initiating any protest, the protestor shall present the Director of Purchasing a nonrefundable filing fee in accordance with the table below.

<u>Estimated Contract Amount</u>	<u>Filing Fee</u>
\$30,000 - \$250,000	\$ 500
\$250,001 - \$500,000	\$1,000
\$500,001 - \$5 million	\$3,000
Over \$5 million	5,000

If no contract proposal amount was submitted, the estimated contract amount shall be the County's estimated contract price for the project. The County may accept cash, money order, certified check, or cashier's check, payable to Broward County Board of Commissioners.

#### **T. Right of Appeal**

Pursuant to Section 21.83.d of the Broward County Procurement Code, any Vendor that has a substantial interest in the matter and is dissatisfied or aggrieved in connection with the Selection or Evaluation Committee's determination of responsiveness may appeal the determination pursuant to Section 21.120 of the Broward County Procurement Code.

1. The appeal must be in writing and sent to the Director of Purchasing within ten (10) calendar days of the determination by the Selection or Evaluation Committee to be deemed timely.
2. As required by Section 21.120, the appeal must be accompanied by an appeal bond by a Vendor having standing to protest and must comply with all other requirements of this section.
3. The institution and filing of an appeal is an administrative remedy to be employed prior to the institution and filing of any civil action against the County concerning the subject matter of the appeal.

#### **U. Rejection of Responses**

The Selection or Evaluation Committee may recommend rejecting all submittals as in the best interests of the County. The rejection shall be made by the Director of Purchasing, except when a

solicitation was approved by the Board, in which case the rejection shall be made by the Board.

#### V. Negotiations

The County intends to conduct the first negotiation meeting no later than two weeks after approval of the final ranking as recommended by the Selection or Evaluation Committee. At least one of the representatives for the Vendor participating in negotiations with the County must be authorized to bind the Vendor. In the event that the negotiations are not successful within a reasonable timeframe (notification will be provided to the Vendor) an impasse will be declared and negotiations with the first-ranked Vendor will cease. Negotiations will begin with the next ranked Vendor, etc. until such time that all requirements of Broward County Procurement Code have been met. In accordance with Section 286.0113 of the Florida Statutes and the direction of the Broward County Board of Commissioners, negotiations resulting from Selection or Evaluation Committee Meetings are closed. Only County staff and the selected vendor and their team will be present during negotiations.

#### W. Submittal Instructions:

1. Broward County does not require any personal information (as defined under Section 501.171, Florida Statutes), such as social security numbers, driver license numbers, passport, military ID, bank account or credit card numbers, or any personal pin numbers, in order to submit a response for ANY Broward County solicitation. DO NOT INCLUDE any personal information data in any document submitted to the County. If any personal information data is part of a submittal, this information must be redacted prior to submitting a response to the County.
2. **Vendor MUST submit its solicitation response electronically and MUST confirm its submittal in order for the County to receive a valid response through BidSync.** It is the Vendor's sole responsibility to assure its response is submitted and received through BidSync by the date and time specified in the solicitation.
3. The County will not consider solicitation responses received by other means. Vendors are encouraged to submit their responses in advance of the due date and time specified in the solicitation document. In the event that the Vendor is having difficulty submitting the solicitation document through Bid Sync, immediately notify the Purchasing Agent and then contact BidSync for technical assistance.
4. Vendor must view, submit, and/or accept each of the documents in BidSync. Web-fillable forms can be filled out and submitted through BidSync.
5. After all documents are viewed, submitted, and/or accepted in BidSync, the Vendor must upload additional information requested by the solicitation (i.e. Evaluation Criteria and Financials Statements) in the Item Response Form in BidSync, under line one (regardless if pricing requested).
6. Vendor should upload responses to Evaluation Criteria in Microsoft Word or Excel format.
7. If the Vendor is declaring any material confidential and exempt from Public Records, refer to Confidential Material/ Public Records and Exemptions for instructions on submitting confidential material.
8. After all files are uploaded, Vendor must submit and **CONFIRM** its offer (by entering password) for offer to be received through BidSync.
9. If a solicitation requires an original Proposal Bond (per Special Instructions to Vendors), Vendor must submit in a sealed envelope, labeled with the solicitation number, title, date and

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the time of solicitation opening to:

Broward County Purchasing Division  
115 South Andrews Avenue, Room 212  
Fort Lauderdale, FL 33301

A copy of the Proposal Bond should also be uploaded into Bid Sync; this does not replace the requirement to have an original proposal bond. Vendors must submit the original Proposal Bond, by the solicitation due date and time.

**Special Instructions to Vendors**  
**Solicitation Name: Consulting Services for Port Everglades**

Vendors are instructed to read and follow the instructions carefully, as any misinterpretation or failure to comply with instructions may lead to a Vendor's submittal being rejected.

**A. Additional Responsibility Criteria:**

In addition to the requirements set forth in the **Standard Instructions to Vendors**, the following criteria shall also be evaluated in making a determination of responsibility:

1. Office of Economic and Small Business Development Program

This solicitation has the following County Business Enterprise Goals: 25 % CBE Goals. Vendors must follow the instructions included in the **Office of Economic and Small Business Development Requirements** section and submit all required forms and information as instructed.

2. Licensing – in order to be considered a responsible Vendor for the scope of work, the Vendor shall possess one of the following licenses (including any specified State registration, if applicable) at the time of submittal:

State of Florida Registered Professional Engineer (pursuant to Section 471 and 472, F.S.)  
or

State of Florida Registered Architect (pursuant to Section 472 and 481, F.S.)

Proposer should provide evidence of licensing in its initial submittal. In the event proposer fails to provide evidence of licensing at the time of its submittal, proposer shall provide the requested documentation within the time specified by County's Purchasing Division in any follow up communication or request. Any certificate of competency that meets or exceeds those specified or can legally perform the scope of work specified will be considered responsible and responsive to the solicitation.

A Joint Venture is required to provide evidence with its response that the Joint Venture, or at least one of the Joint Venture partners, holds the specified license, if applicable, as per Special Instructions to Vendors, issued either by the State of Florida or Broward County. If not submitted with its response, the Joint Venture is required to provide evidence prior to contract execution that the Joint Venture holds the specified license issued either by the State of Florida or Broward County.

The applicable Agreement terms and conditions for this solicitation can be located at:

<http://www.broward.org/Purchasing/Documents/bcf202.pdf>

Refer to **Standard Instructions for Vendors** and the requirements to review the applicable terms and conditions (and submission of the **Agreement Exception Form**).

**B. Demonstrations:**

Not applicable to this solicitation.

**C. Presentations:**

Applies to this solicitation. Refer to Standard Instructions to Vendors for additional information and requirements.

**D. Public Art and Design Program:**

Not applicable to this solicitation.

**E. Procurement Authority:**

Continuing Contract: Professional services needed for projects in which construction costs do not to exceed \$2 million, in accordance with Florida Statutes, Chapter 287.055, Consultants' Competitive Negotiation Act (CCNA).

**F. Project Funding Source - this project is funded in whole or in part by:**

County Funds

**G. Projected Schedule:**

Initial Shortlisting or Evaluation Meeting (Sunshine Meeting): **TBD** .  
Final Evaluation Meeting (Sunshine Meeting): **TBD**.

Check this website for any changes to the above tentative schedule for Sunshine Meetings:  
<http://www.broward.org/Commission/Pages/SunshineMeetings.aspx>.

**H. Project Manager Information:**

Project Manager: Donald Ellis, Construction Project Manager  
Email: [doellis@broward.org](mailto:doellis@broward.org)

Vendors are requested to submit questions regarding this solicitation through the "Q&A" section on BidSync; answers are posted through BidSync.

<b>Evaluation Criteria</b>		
<b>Consulting Services for Port Everglades</b>		
<b>1.</b>	<b>Ability of Professional Personnel: Maximum 30 points</b>	<b>Vendor Response</b>
	<p>Describe the qualifications and relevant experience of the Project Manager and all key staff that are intended to be assigned to this project. Include resumes for the Project Manager and all key staff described. Include the qualifications and relevant experience of all subconsultants' key staff to be assigned to this project.</p> <p><b>a:</b> Provide a comprehensive organizational chart including all members of the proposed project team, i.e., Land Surveying, Geotechnical Engineering, Civil Engineering, Transportation and Traffic Engineering, Environmental Protection, Landscape Architecture, Structural Engineering, Materials Testing, Interior Design, Lighting Design, Fire Protection, Plumbing, Mechanical Engineering, Electrical Engineering, Telecommunications and Data Engineering, and Leadership in Energy and Environmental Design (LEED) accredited professional (AP) related services..</p> <p><b>Points Value: 15</b></p>	
	<p><b>b:</b> Describe your firm's GIS/CAD/BIM capabilities, provide a list of projects completed related to utility databases and atlas creation. Include experience with Environmental Research Institute Software (ESRI). Include a list of projects totaling \$2 million or less in construction cost, completed in the past 5 years. List all seaport environment projects completed during the past 5 year. List projects where construction requires continuity of port operations and how that was addressed and resolved.</p> <p><b>Points Value: 15</b></p>	
<b>2.</b>	<b>Project Approach: Maximum 25 points</b>	
	<p><b>a:</b> Describe how the Vendor will coordinate multi-disciplined projects working with multiple diverse stakeholders in developing an overall project plan including environmental design, engineering and construction which provide the ability to maintain continuity of operations during the implementation.</p> <p><b>Points Value: 15</b></p>	
	<p><b>b:</b> Describe the criteria Vendor will use to assign subconsultants in the project.</p> <p><b>Points Value: 10</b></p>	

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3.	<b>Past Performance: Maximum 30 points</b>	
	<p>Describe prime Vendor's experience on projects of similar nature, scope and duration, along with evidence of satisfactory completion, both on time and within budget, for the past five years. Provide a minimum of three projects with references.</p> <p>Vendor should provide references for similar work performed to show evidence of qualifications and previous experience. Refer to <b>Vendor Reference Verification Form</b> and submit as instructed. Only provide references for non-Broward County Board of County Commissioners contracts. For Broward County contracts, the County will review performance evaluations in its database for vendors with previous or current contracts with the County. The County considers references and performance evaluations in the evaluation of Vendor's past performance.</p> <p><b>a:</b> Include active and completed projects related to cruise and/or cargo terminal expansion/construction and any other seaport transportation projects.</p> <p><b>Points Value: 15</b></p>	
	<p><b>b:</b> Include active and completed projects related to marine infrastructure and dredging.</p> <p><b>Points Value: 10</b></p>	
	<p><b>c:</b> Include active and completed projects related to marine infrastructure and dredging.</p> <p><b>Points Value: 5</b></p>	
4.	<b>Workload of the Firm:</b>	
	<p>For the prime Vendor only, list all completed and active projects that Vendor has managed within the past five years. In addition, list all projected projects that Vendor will be working on in the near future. Projected projects will be defined as a project(s) that Vendor is awarded a contract but the Notice to Proceed has not been issued. Identify any projects that Vendor worked on concurrently. Describe Vendor's approach in managing these projects. Were there or will there be any challenges for any of the listed projects? If so, describe how Vendor dealt or will deal with the projects' challenges.</p> <p><b>Points Value: 5</b></p>	
5.	<b>Location:</b>	
	<p>Refer to <b>Vendor's Business Location Attestation Form</b> and submit as instructed.</p>	

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	<p>A Vendor with a principal place of business location (also known as the nerve center) within Broward County for the last six months, prior to the solicitation submittal, will receive five points; a Vendor not meeting all of the local business requirements will receive zero points. The following applies for a Vendor responding as a Joint Venture (JV): if a member of the JV has 51% or more of the equity and meets all of the local business requirements, the JV will receive three points; if a member of the JV has 30 to 50% of the equity and meets all of the local business requirements, the JV will receive two points; and if a member of the JV has 10% to 29% of the equity and meets all of the local business requirements, the JV will receive one point. <b>Points Value: 5</b></p>	
6.	<p><b>Willingness to Meet Time and Budget Requirements:</b></p>	
	<p>This solicitation is for the award of a continuing contract. The specific projects requiring professional services under the agreement have not yet been identified. However, in general, explain your firm's approach in meeting "project specific" time and budget requirements and indicate whether Vendor is committed to meet these requirements when identified under this agreement. <b>YES = 2 Points NO = 0 Points</b> <b>Points Value: 2</b></p>	
7.	<p><b>Volume of Previous Work:</b></p>	
	<p>Refer to <b>Volume of Previous Work Attestation Form</b> and the <b>Volume of Previous Work Attestation Joint Venture Form</b> and submit as instructed.</p> <p>Points assigned for Volume of Previous Work will be based on the amount paid-to-date by the County to a prime Vendor MINUS the Vendor's confirmed payments paid-to-date to approved certified County Business Enterprise (CBE) firms performing services as Vendor's subcontractor/subconsultant to obtain the CBE goal commitment as confirmed by County's Office of Economic and Small Business Development. Reporting must be within five (5) years of the current solicitation's opening date. If a Joint Venture, the payments paid-to-date by contract provided must encompass the Joint Venture and each of the entities forming the Joint Venture. Points assigned for Volume of Previous Work will be based on the amount paid-to-date by contract to the -Joint Venture firm MINUS all confirmed payments paid-to-date to approved certified CBE firms utilized to obtain the CBE goal commitment. Reporting must be within five (5) years of the current solicitation's opening date. Amount will then be multiplied by the member firm's equity percentage. Three points will be allocated to Vendors paid \$0 - \$3,000,000); 2 Points will be allocated to Vendors paid \$3,000,001 - \$7,500,000; 1 Point will be allocated to Vendors paid \$7,500,001 - \$10,000,000; 0 Points will be allocated to Vendors paid over \$10,000,000). Payments for prime Vendor will be verified by the Purchasing</p>	

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	<p>Division.</p> <p><b>Points Value: 3</b></p>	
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**VENDOR QUESTIONNAIRE AND STANDARD CERTIFICATIONS**  
**Request for Proposals, Request for Qualifications, or Request for Letters of Interest**

Vendor should complete questionnaire and complete and acknowledge the standard certifications and submit with the solicitation response. If not submitted with solicitation response, it must be submitted within three business days of County's request. Failure to timely submit may affect Vendor's evaluation.

**If a response requires additional information, the Vendor should upload a written detailed response with submittal; each response should be numbered to match the question number.** The completed questionnaire and attached responses will become part of the procurement record. It is imperative that the person completing the Vendor Questionnaire be knowledgeable about the proposing Vendor's business and operations.

1. Legal business name: \_\_\_\_\_
2. Doing Business As/ Fictitious Name (if applicable): \_\_\_\_\_
3. Federal Employer I.D. no. (FEIN): \_\_\_\_\_
4. Dun and Bradstreet No.: \_\_\_\_\_
5. Website address (if applicable): \_\_\_\_\_
6. Principal place of business address: \_\_\_\_\_
7. Office location responsible for this project: \_\_\_\_\_
8. Telephone no.: \_\_\_\_\_ Fax no.: \_\_\_\_\_
9. Type of business (check appropriate box):
  - Corporation (specify the state of incorporation): \_\_\_\_\_
  - Sole Proprietor
  - Limited Liability Company (LLC)
  - Limited Partnership
  - General Partnership (State and County Filed In) \_\_\_\_\_
  - Other - Specify \_\_\_\_\_
10. List Florida Department of State, Division of Corporations document number (or registration number if fictitious name): \_\_\_\_\_
11. List name and title of each principal, owner, officer, and major shareholder:
  - a) \_\_\_\_\_
  - b) \_\_\_\_\_
  - c) \_\_\_\_\_
  - d) \_\_\_\_\_

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12. AUTHORIZED CONTACT(S) FOR YOUR FIRM:

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
E-mail: \_\_\_\_\_  
Telephone No.: \_\_\_\_\_

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
E-mail: \_\_\_\_\_  
Telephone No.: \_\_\_\_\_

13. Has your firm, its principals, officers or predecessor organization(s) been debarred or suspended by any government entity within the last three years? If yes, specify details in an attached written response.  Yes  No
14. Has your firm, its principals, officers or predecessor organization(s) ever been debarred or suspended by any government entity? If yes, specify details in an attached written response, including the reinstatement date, if granted.  Yes  No
15. Has your firm ever failed to complete any services and/or delivery of products during the last three (3) years? If yes, specify details in an attached written response.  Yes  No
16. Is your firm or any of its principals or officers currently principals or officers of another organization? If yes, specify details in an attached written response.  Yes  No
17. Have any voluntary or involuntary bankruptcy petitions been filed by or against your firm, its parent or subsidiaries or predecessor organizations during the last three years? If yes, specify details in an attached written response.  Yes  No
18. Has your firm's surety ever intervened to assist in the completion of a contract or have Performance and/or Payment Bond claims been made to your firm or its predecessor's sureties during the last three years? If yes, specify details in an attached written response, including contact information for owner and surety.  Yes  No
19. Has your firm ever failed to complete any work awarded to you, services and/or delivery of products during the last three (3) years? If yes, specify details in an attached written response.  Yes  No
20. Has your firm ever been terminated from a contract within the last three years? If yes, specify details in an attached written response.  Yes  No
21. Living Wage solicitations only: In determining what, if any, fiscal impacts(s) are a result of the Ordinance for this solicitation, provide the following for informational purposes only. Response is not considered in determining the award of this contract.  
Living Wage had an effect on the pricing.  Yes  No  
 N/A
- If yes, Living Wage increased the pricing by \_\_\_\_\_ % or decreased the pricing by \_\_\_\_\_ %.

**Cone of Silence Requirement Certification:**

The Cone of Silence Ordinance, Section 1-266, Broward County Code of Ordinances prohibits certain communications among Vendors, Commissioners, County staff, and Selection or Evaluation Committee members. Identify on a separate sheet any violations of this Ordinance by any members of the responding firm or its joint ventures. After the application of the Cone of Silence, inquiries regarding this solicitation should be directed to the Director of Purchasing or designee. The Cone of Silence terminates when the County Commission or other awarding authority takes action which ends the solicitation.

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The Vendor hereby certifies that: (check each box)

- The Vendor has read Cone of Silence Ordinance, Section 1-266, Broward County Code of Ordinances; and
- The Vendor understands that the Cone of Silence for this competitive solicitation shall be in effect beginning upon the appointment of the Selection or Evaluation Committee, for communication regarding this solicitation with the County Administrator, Deputy County Administrator, Assistant County Administrators, and Assistants to the County Administrator and their respective support staff or any person, including Evaluation or Selection Committee members, appointed to evaluate or recommend selection in this RFP/RLI process. For Communication with County Commissioners and Commission staff, the Cone of Silence allows communication until the initial Evaluation or Selection Committee Meeting.
- The Vendor agrees to comply with the requirements of the Cone of Silence Ordinance.

**Drug-Free Workplace Requirements Certification:**

Section 21.31.a. of the Broward County Procurement Code requires awards of all competitive solicitations requiring Board award be made only to firms certifying the establishment of a drug free workplace program. The program must consist of:

1. Publishing a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the offeror's workplace, and specifying the actions that will be taken against employees for violations of such prohibition;
2. Establishing a continuing drug-free awareness program to inform its employees about:
  - a. The dangers of drug abuse in the workplace;
  - b. The offeror's policy of maintaining a drug-free workplace;
  - c. Any available drug counseling, rehabilitation, and employee assistance programs; and
  - d. The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
3. Giving all employees engaged in performance of the contract a copy of the statement required by subparagraph 1;
4. Notifying all employees, in writing, of the statement required by subparagraph 1, that as a condition of employment on a covered contract, the employee shall:
  - a. Abide by the terms of the statement; and
  - b. Notify the employer in writing of the employee's conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or of any state, for a violation occurring in the workplace NO later than five days after such conviction.
5. Notifying Broward County government in writing within 10 calendar days after receiving notice under subdivision 4.b above, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;
6. Within 30 calendar days after receiving notice under subparagraph 4 of a conviction, taking one of the following actions with respect to an employee who is convicted of a drug abuse violation occurring in the workplace:
  - a. Taking appropriate personnel action against such employee, up to and including termination; or
  - b. Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state, or local health, law enforcement, or other appropriate agency; and
7. Making a good faith effort to maintain a drug-free workplace program through implementation of subparagraphs 1 through 6.

The Vendor hereby certifies that: (check box)

- The Vendor certifies that it has established a drug free workplace program in accordance with the above

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requirements.

**Non-Collusion Certification:**

Vendor shall disclose, to their best knowledge, any Broward County officer or employee, or any relative of any such officer or employee as defined in Section 112.3135 (1) (c), Florida Statutes, who is an officer or director of, or has a material interest in, the Vendor's business, who is in a position to influence this procurement. Any Broward County officer or employee who has any input into the writing of specifications or requirements, solicitation of offers, decision to award, evaluation of offers, or any other activity pertinent to this procurement is presumed, for purposes hereof, to be in a position to influence this procurement. Failure of a Vendor to disclose any relationship described herein shall be reason for debarment in accordance with the provisions of the Broward County Procurement Code.

The Vendor hereby certifies that: (select one)

- The Vendor certifies that this offer is made independently and free from collusion; or
- The Vendor is disclosing names of officers or employees who have a material interest in this procurement and is in a position to influence this procurement. Vendor must include a list of name(s), and relationship(s) with its submittal.

**Public Entities Crimes Certification:**

In accordance with Public Entity Crimes, Section 287.133, Florida Statutes, a person or affiliate placed on the convicted vendor list following a conviction for a public entity crime may not submit on a contract: to provide any goods or services; for construction or repair of a public building or public work; for leases of real property to a public entity; and may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in s. 287.017 for Category Two for a period of 36 months following the date of being placed on the convicted vendor list.

The Vendor hereby certifies that: (check box)

- The Vendor certifies that no person or affiliates of the Vendor are currently on the convicted vendor list and/or has not been found to commit a public entity crime, as described in the statutes.

**Scrutinized Companies List Certification:**

Any company, principals, or owners on the Scrutinized Companies with Activities in Sudan List, the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or the Scrutinized Companies that Boycott Israel List is prohibited from submitting a response to a solicitation for goods or services in an amount equal to or greater than \$1 million.

The Vendor hereby certifies that: (check each box)

- The Vendor, owners, or principals are aware of the requirements of Sections 287.135, 215.473, and 215.4275, Florida Statutes, regarding Companies on the Scrutinized Companies with Activities in Sudan List the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or the Scrutinized Companies that Boycott Israel List; and
- The Vendor, owners, or principals, are eligible to participate in this solicitation and are not listed on either the Scrutinized Companies with Activities in Sudan List, the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or the Scrutinized Companies that Boycott Israel List; and
- If awarded the Contract, the Vendor, owners, or principals will immediately notify the County in writing if any of its principals are placed on the Scrutinized Companies with Activities in Sudan List, the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or the Scrutinized Companies that Boycott Israel List.

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I hereby certify the information provided in the Vendor Questionnaire and Standard Certifications:

*AUTHORIZED SIGNATURE/NAME	TITLE	DATE

Vendor Name: \_\_\_\_\_

\* I certify that I am authorized to sign this solicitation response on behalf of the Vendor as indicated in Certificate as to Corporate Principal, designation letter by Director/Corporate Officer, or other business authorization to bind on behalf of the Vendor. As the Vendor's authorized representative, I attest that any and all statements, oral, written or otherwise, made in support of the Vendor's response, are accurate, true and correct. I also acknowledge that inaccurate, untruthful, or incorrect statements made in support of the Vendor's response may be used by the County as a basis for rejection, rescission of the award, or termination of the contract and may also serve as the basis for debarment of Vendor pursuant to Section 21.119 of the Broward County Procurement Code. I certify that the Vendor's response is made without prior understanding, agreement, or connection with any corporation, firm or person submitting a response for the same items/services, and is in all respects fair and without collusion or fraud. I also certify that the Vendor agrees to abide by all terms and conditions of this solicitation, acknowledge and accept all of the solicitation pages as well as any special instructions sheet(s).

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### **Vendor Reference Verification Form**

Vendor is required to submit completed Reference Verification Forms for previous projects referenced in its submittal. Vendor should provide the **Vendor Reference Verification Form** to its reference organization/firm to complete and return to the Vendor's attention. Vendor should submit the completed Vendor Reference Form with its response by the solicitation's deadline. The County will verify references provided as part of the review process. Provide a minimum of three (3) non-Broward County Board of County Commissioners' references.

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**Vendor Reference Verification Form**

Broward County Solicitation No. and Title:

Reference for:

Organization/Firm Name providing reference:

Contact Name:

Title:

Reference date:

Contact Email:

Contact Phone:

Name of Referenced Project:

Contract No.

Date Services Provided:

Project Amount:

to

Vendor's role in Project:  Prime Vendor  Subconsultant/Subcontractor

Would you use this vendor again? Yes  No  If No, please specify in Additional Comments (below).

**Description of services provided by Vendor:**

**Please rate your experience with the referenced Vendor:**

	Needs Improvement	Satisfactory	Excellent	Not Applicable
1. Vendor's Quality of Service				
a. Responsive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Accuracy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Deliverables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Vendor's Organization:				
a. Staff expertise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Professionalism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Turnover	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Timeliness of:				
a. Project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Deliverables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Project completed within budget	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Cooperation with:				
a. Your Firm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Subcontractor(s)/Subconsultant(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Regulatory Agency(ies)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Additional Comments: (provide on additional sheet if needed)

THIS SECTION FOR COUNTY USE ONLY\*\*\*

Verified via:  EMAIL  VERBAL Verified by: \_\_\_\_\_ Division: \_\_\_\_\_ Date: \_\_\_\_\_

All information provided to Broward County is subject to verification. Vendor acknowledges that inaccurate, untruthful, or incorrect statements made in support of this response may be used by the County as a basis for rejection, rescission of the award, or termination of the contract and may also serve as the basis for debarment of Vendor pursuant to Section 21.119 of the Broward County Procurement Code.

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**LOBBYIST REGISTRATION REQUIREMENT CERTIFICATION FORM**

The completed form should be submitted with the solicitation response but must be submitted within three business days of County's request. Vendor may be deemed non-responsive for failure to fully comply within stated timeframes.

The Vendor certifies that it understands if it has retained a lobbyist(s) to lobby in connection with a competitive solicitation, it shall be deemed non-responsive unless the firm, in responding to the competitive solicitation, certifies that each lobbyist retained has timely filed the registration or amended registration required under Broward County Lobbyist Registration Act, Section 1-262, Broward County Code of Ordinances; and it understands that if, after awarding a contract in connection with the solicitation, the County learns that the certification was erroneous, and upon investigation determines that the error was willful or intentional on the part of the Vendor, the County may, on that basis, exercise any contractual right to terminate the contract for convenience.

The Vendor hereby certifies that: (select one)

- It has not retained a lobbyist(s) to lobby in connection with this competitive solicitation; however, if retained after the solicitation, the County will be notified.
- It has retained a lobbyist(s) to lobby in connection with this competitive solicitation and certified that each lobbyist retained has timely filed the registration or amended registration required under Broward County Lobbyist Registration Act, Section 1-262, Broward County Code of Ordinances.

It is a requirement of this solicitation that the names of any and all lobbyists retained to lobby in connection with this solicitation be listed below:

Name of Lobbyist: \_\_\_\_\_  
Lobbyist's Firm: \_\_\_\_\_  
Phone: \_\_\_\_\_  
E-mail: \_\_\_\_\_

Name of Lobbyist: \_\_\_\_\_  
Lobbyist's Firm: \_\_\_\_\_  
Phone: \_\_\_\_\_  
E-mail: \_\_\_\_\_

Authorized Signature/Name: \_\_\_\_\_ Date: \_\_\_\_\_  
\_\_\_\_\_

Title: \_\_\_\_\_  
Vendor Name: \_\_\_\_\_

**Office of Economic and Small Business Requirements: CBE Goal Participation**

- A. In accordance with the Broward County Business Opportunity Act of 2012, Section 1-81, Code of Ordinances, as amended (the "Business Opportunity Act"), the County Business Enterprise (CBE) Program is applicable to this contract. All Vendors responding to this solicitation are required to utilize CBE firms to perform the assigned participation goal for this contract.
- B. The CBE participation goal will be established based on the expected expenditure amount for the proposed scope of services for the project. The Office of Economic and Small Business Development (OESBD) will not include alternate items, optional services or allowances when establishing the CBE participation goal. If the County subsequently chooses to award any alternate items, optional services or allowances as determined by OESBD and the Contract Administrator to be related to the scope of services, OESBD may apply the established CBE participation goal. In such an instance, the County will issue a written notice to the successful Vendor that the CBE participation goal will also apply to the alternate items, optional services or allowances. Vendor shall submit all required forms pertaining to its compliance with the CBE participation goal, as applicable. Failure by Vendor to submit the required forms may result in the rejection of Vendor's solicitation submittal prior to the award or failure to comply with the contract requirements may have an impact on the vendor performance evaluation post award, as applicable.
- C. CBE Program Requirements: Compliance with CBE participation goal requirements is a matter of responsibility; Vendor should submit all required forms and information with its solicitation submittal. If the required forms and information are not provided with the Vendor's solicitation submittal, then Vendor must supply the required forms and information no later than three (3) business days after request by OESBD. Vendor may be deemed non-responsible for failure to fully comply with CBE Program Requirements within these stated timeframes.
1. Vendor should include in its solicitation submittal a **Letter Of Intent Between Bidder/Offeror and County Business Enterprise (CBE) Subcontractor/Supplier** for each CBE firm the Vendor intends to use to achieve the assigned CBE participation goal. The form is available at the following link:  
<http://www.broward.org/EconDev/Documents/CBELetterOfIntent.pdf>
  2. If Vendor is unable to attain the CBE participation goal, Vendor should include in its solicitation submittal an **Application for Evaluation of Good Faith Efforts** and all of the required supporting information. The form is available at the following link:  
<http://www.broward.org/EconDev/WhatWeDo/Documents/GoodFaithEffortEval.pdf>
- D. OESBD maintains an online directory of CBE firms. The online directory is available for use by Vendors at <https://webapps4.broward.org/smallbusiness/sbdirectory.aspx>.
- E. For detailed information regarding the CBE Program contact the OESBD at (954) 357-6400 or visit the website at: <http://www.broward.org/EconDev/SmallBusiness/>
- F. If awarded the contract, Vendor agrees to and shall comply with all applicable requirements of the Business Opportunity Act and the CBE Program in the award and administration of the contract.
1. No party to this contract may discriminate on the basis of race, color, sex, religion, national origin, disability, age, marital status, political affiliation, sexual orientation,

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pregnancy, or gender identity and expression in the performance of this contract.

2. All entities that seek to conduct business with the County, including Vendor or any Prime Contractors, Subcontractors, and Bidders, shall conduct such business activities in a fair and reasonable manner, free from fraud, coercion, collusion, intimidation, or bad faith. Failure to do so may result in the cancellation of this solicitation, cessation of contract negotiations, revocation of CBE certification, and suspension or debarment from future contracts.
3. If Vendor fails to meet or make Good Faith Efforts (as defined in the Business Opportunity Act) to meet the CBE participation commitment (the "Commitment"), then Vendor shall pay the County liquidated damages in an amount equal to fifty percent (50%) of the actual dollar amount by which Vendor failed to achieve the Commitment, up to a maximum amount of ten percent (10%) of the total contract amount, excluding costs and reimbursable expenses. An example of this calculation is stated in Section 1-81.7, Broward County Code of Ordinances.
4. Vendor shall comply with all applicable requirements of the Business Opportunity Act in the award of this contract. Failure by Vendor to carry out any of these requirements shall constitute a material breach of the contract, which shall permit the County to terminate this contract or to exercise any other remedy provided under this contract, the Broward County Code of Ordinances, the Broward County Administrative Code, or other applicable laws, with all such remedies being cumulative.
5. Vendor shall pay its CBE subcontractors and suppliers, within fifteen (15) days following receipt of payment from the County, for all completed subcontracted work and supplies. If Vendor withholds an amount from CBE subcontractors or suppliers as retainage, such retainage shall be released and paid within fifteen (15) days following receipt of payment of retained amounts from the County.
6. Vendor understands that the County will monitor Vendor's compliance with the CBE Program requirements. Vendor must provide OESBD with a Monthly Utilization Report (MUR) to confirm its compliance with the Commitment agreed to in the contract; timely submission of the MUR every month throughout the term of the contract, including amendment and extension terms, is a condition precedent to the County's payment of Vendor under the contract.

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**LITIGATION HISTORY FORM**

The completed form(s) should be returned with the Vendor's submittal. If not provided with submittal, the Vendor must submit within three business days of County's request. Vendor may be deemed non-responsive for failure to fully comply within stated timeframes.

- There are no material cases for this Vendor; or  
 Material Case(s) are disclosed below:

Is this for a: (check type) <input type="checkbox"/> Parent, <input type="checkbox"/> Subsidiary, or <input type="checkbox"/> Predecessor Firm?	If Yes, name of Parent/Subsidiary/Predecessor: _____ Or No <input type="checkbox"/>
<b>Party</b>	
Case Number, Name, and Date Filed	_____
Name of Court or other tribunal	_____
Type of Case	Bankruptcy <input type="checkbox"/> Civil <input type="checkbox"/> Criminal <input type="checkbox"/> Administrative/Regulatory <input type="checkbox"/>
Claim or Cause of Action and Brief description of each Count	_____
Brief description of the Subject Matter and Project Involved	_____
Disposition of Case  (Attach copy of any applicable Judgment, Settlement Agreement and Satisfaction of Judgment.)	Pending <input type="checkbox"/> Settled <input type="checkbox"/> Dismissed <input type="checkbox"/>  Judgment Vendor's Favor <input type="checkbox"/> Judgment Against Vendor <input type="checkbox"/>  If Judgment Against, is Judgment Satisfied? <input type="checkbox"/> Yes <input type="checkbox"/> No
Opposing Counsel	Name: _____ Email: _____ Telephone Number: _____

Vendor Name: \_\_\_\_\_

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**AFFILIATED ENTITIES OF THE PRINCIPAL(S) CERTIFICATION FORM**

The completed form should be submitted with the solicitation response but must be submitted within three business days of County's request. Vendor may be deemed non-responsive for failure to fully comply within stated timeframes.

- a. All Vendors are required to disclose the names and addresses of "affiliated entities" of the Vendor's principal(s) over the last five (5) years (from the solicitation opening deadline) that have acted as a prime Vendor with the County.
- b. The County will review all affiliated entities of the Vendor's principal(s) for contract performance evaluations and the compliance history with the County's Small Business Program, including CBE, DBE and SBE goal attainment requirements. "Affiliated entities" of the principal(s) are those entities related to the Vendor by the sharing of stock or other means of control, including but not limited to a subsidiary, parent or sibling entity.
- c. The County will consider the contract performance evaluations and the compliance history of the affiliated entities of the Vendor's principals in its review and determination of responsibility.

The Vendor hereby certifies that: (select one)

- No principal of the proposing Vendor has prior affiliations that meet the criteria defined as "Affiliated entities"
- Principal(s) listed below have prior affiliations that meet the criteria defined as "Affiliated entities"

Principal's Name: \_\_\_\_\_

Names of Affiliated Entities: \_\_\_\_\_

Principal's Name: \_\_\_\_\_

Names of Affiliated Entities: \_\_\_\_\_

Principal's Name: \_\_\_\_\_

Names of Affiliated Entities: \_\_\_\_\_

Authorized Signature Name: \_\_\_\_\_

Title: \_\_\_\_\_

Vendor Name: \_\_\_\_\_

Date: \_\_\_\_\_

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**DOMESTIC PARTNERSHIP ACT CERTIFICATION FORM (REQUIREMENT AND  
TIEBREAKER)**

Refer to Special Instructions to identify if Domestic Partnership Act is a requirement of the solicitation or acts only as a tiebreaker. If Domestic Partnership is a requirement of the solicitation, the completed and signed form should be returned with the Vendor's submittal. If the form is not provided with submittal, the Vendor must submit within three business days of County's request. Vendor may be deemed non-responsive for failure to fully comply within stated timeframes. To qualify for the Domestic Partnership tiebreaker criterion, the Vendor must currently offer the Domestic Partnership benefit and the completed and signed form must be returned at time of solicitation submittal.

The Domestic Partnership Act, Section 16 ½ -157, Broward County Code of Ordinances, requires all Vendors contracting with the County, in an amount over \$100,000 provide benefits to Domestic Partners of its employees, on the same basis as it provides benefits to employees' spouses, with certain exceptions as provided by the Ordinance.

For all submittals over \$100,000.00, the Vendor, by virtue of the signature below, certifies that it is aware of the requirements of Broward County's Domestic Partnership Act, Section 16-½ -157, Broward County Code of Ordinances; and certifies the following: (check only one below).

- 1. The Vendor currently complies with the requirements of the County's Domestic Partnership Act and provides benefits to Domestic Partners of its employees on the same basis as it provides benefits to employees' spouses
- 2. The Vendor will comply with the requirements of the County's Domestic Partnership Act at time of contract award and provide benefits to Domestic Partners of its employees on the same basis as it provides benefits to employees' spouses.
- 3. The Vendor will not comply with the requirements of the County's Domestic Partnership Act at time of award.
- 4. The Vendor does not need to comply with the requirements of the County's Domestic Partnership Act at time of award because the following exception(s) applies: **(check only one below)**.
  - The Vendor is a governmental entity, not-for-profit corporation, or charitable organization.
  - The Vendor is a religious organization, association, society, or non-profit charitable or educational institution.
  - The Vendor provides an employee the cash equivalent of benefits. (Attach an affidavit in compliance with the Act stating the efforts taken to provide such benefits and the amount of the cash equivalent).
  - The Vendor cannot comply with the provisions of the Domestic Partnership Act because it would violate the laws, rules or regulations of federal or state law or would violate or be inconsistent with the terms or conditions of a grant or contract with the United States or State of Florida. Indicate the law, statute or regulation (State the law, statute or regulation and attach explanation of its applicability).

<b>Authorized Signature/Name</b>	<b>Title</b>	<b>Vendor Name</b>	<b>Date</b>

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**AGREEMENT EXCEPTION FORM**

The completed form(s) should be returned with the Vendor's submittal. If not provided with submittal, it shall be deemed an affirmation by the Vendor that it accepts the terms and conditions of the County's Agreement as disclosed in the solicitation.

The Vendor must either provide specific proposed alternative language on the form below. Additionally, a brief justification specifically addressing each provision to which an exception is taken should be provided.

- There are no exceptions to the terms and conditions of the County Agreement as referenced in the solicitation; or
- The following exceptions are disclosed below: (use additional forms as needed; separate each Article/ Section number)

Term or Condition Article / Section	Insert version of exception or specific proposed alternative language	Provide brief justification for change
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Vendor Name: \_\_\_\_\_

### RFP-RFQ-RLI LOCATION ATTESTATION FORM (EVALUATION CRITERIA)

The completed and signed form and supporting information (if applicable, for Joint Ventures) should be returned with the Vendor's submittal. If not provided with submittal, the Vendor must submit within three business days of County's request. Failure to timely submit this form and supporting information may affect the Vendor's evaluation. Provided information is subject to verification by the County.

A Vendor's principal place of business location (also known as the nerve center) within Broward County is considered in accordance with Evaluation Criteria. The County's definition of a principal place of business is:

1. As defined by the Broward County Local Preference Ordinance, "Principal place of business means the nerve center or center of overall direction, control and coordination of the activities of the bidder [Vendor]. If the bidder has only one (1) business location, such business location shall be considered its principal place of business."
2. A principal place of business refers to the place where a corporation's officers direct, control, and coordinate the corporation's day-to-day activities. It is the corporation's 'nerve center' and in practice it should normally be the place where the corporation maintains its headquarters; provided that the headquarters is the actual center of direction, control, and coordination, i.e., the 'nerve center', and not simply an office where the corporation holds its board meetings (for example, attended by directors and officers who have traveled there for the occasion).

The Vendor's principal place of business in Broward County shall be the Vendor's "Principal Address", indicated with the Florida Department of State Division of Corporations, for at least six months prior to the solicitation's due date.

Check one of the following:

- The Vendor certifies that it has a principal place of business location (also known as the nerve center) within Broward County, as documented in Florida Department of State Division of Corporations (Sunbiz), and attests to the following statements:
1. Vendor's address listed in its submittal is its principal place of business as defined by Broward County;
  2. Vendor's "Principal Address" listed with the Florida Department of State Division of Corporations is the same as the address listed in its submittal and the address was listed for at least six months prior to the solicitation's opening date. A copy of Florida Department of State Division of Corporations (Sunbiz) is attached as verification.
  3. Vendor must be located at the listed "nerve center" address ("Principal Address") for at least six (6) months prior to the solicitation's opening date;
  4. Vendor has not merged with another firm within the last six months that is not headquartered in Broward County and is not a wholly owned subsidiary or a holding company of another firm that is not headquartered in Broward County;
  5. If awarded a contract, it is the intent of the Vendor to remain at the referenced address for the duration of the contract term, including any renewals, extensions or any approved interim contracts for the services provided under this contract; and
  6. The Vendor understands that if after contract award, the County learns that the attestation was erroneous, and upon investigation determines that the error was willful or intentional on

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the part of the Vendor, the County may, on that basis exercise any contractual right to terminate the contract. Further any misleading, inaccurate, false information or documentation submitted by any party affiliated with this procurement may lead to suspension and/or debarment from doing business with Broward County as outlined in the Procurement Code, Section 21.119.

If the Vendor is submitting a response as a Joint Venture, the following information is required to be submitted:

- a. Name of the Joint Venture Partnership
- b. Percentage of Equity for all Joint Venture Partners
- c. A copy of the executed Agreement(s) between the Joint Venture Partners

Vendor does not have a principal place of business location (also known as the nerve center) within Broward County.

**Vendor Information:**

Vendor Name: \_\_\_\_\_

Vendor's address listed in its submittal is:

The signature below must be by an individual authorized to bind the Vendor. The signature below is an attestation that all information listed above and provided to Broward County is true and accurate.

Authorized Signature/Name	Title	Vendor Name	Date

\_\_\_\_\_

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**RFP-RLI-RFQ LOCAL PREFERENCE AND TIE BREAKER CERTIFICATION FORM**

The completed and signed form should be returned with the Vendor's submittal to determine Local Preference eligibility, however it must be returned at time of solicitation submittal to qualify for the Tie Break criteria. If not provided with submittal, the Vendor must submit within three business days of County's request for evaluation of Local Preference. Proof of a local business tax should be submitted with this form. Failure to timely submit this form or local business tax receipt may render the business ineligible for application of the Local Preference or Tie Break Criteria.

In accordance with Section 21.31.d. of the Broward County Procurement Code, to qualify for the Tie Break Criteria, the undersigned Vendor hereby certifies that (check box if applicable):

- The Vendor is a local Vendor in Broward County and:
  - a. has a valid Broward County local business tax receipt;
  - b. has been in existence for at least six-months prior to the solicitation opening;
  - c. at a business address physically located within Broward County;
  - d. in an area zoned for such business;
  - e. provides services from this location on a day-to-day basis, and
  - f. services provided from this location are a substantial component of the services offered in the Vendor's proposal.

In accordance with Local Preference, Section 1-74, et. seq., Broward County Code of Ordinances, a local business meeting the below requirements is eligible for Local Preference. To qualify for the Local Preference, the undersigned Vendor hereby certifies that (check box if applicable):

- The Vendor is a local Vendor in Broward and:
  - a. has a valid Broward County local business tax receipt issued at least one year prior to solicitation opening;
  - b. has been in existence for at least one-year prior to the solicitation opening;
  - c. provides services on a day-to-day basis, at a business address physically located within the Broward County limits in an area zoned for such business; and
  - d. the services provided from this location are a substantial component of the services offered in the Vendor's proposal.

Local Business Address:

	-
	-

Vendor does not qualify for Tie Break Criteria or Local Preference, in accordance with the above requirements. The undersigned Vendor hereby certifies that (check box if applicable): The Vendor is not a local Vendor in Broward County.

<b>AUTHORIZED SIGNATURE/NAME</b>	<b>TITLE</b>	<b>COMPANY</b>	<b>DATE</b>

**SUBCONTRACTORS/SUBCONSULTANTS/SUPPLIERS REQUIREMENT FORM**  
**Request for Proposals, Request for Qualifications, or Request for Letters of Interest**

The following forms and supporting information (if applicable) should be returned with Vendor's submittal. If not provided with submittal, the Vendor must submit within three business days of County's request. Failure to timely submit may affect Vendor's evaluation.

- A. The Vendor shall submit a listing of all subcontractors, subconsultants and major material suppliers (firms), if any, and the portion of the contract they will perform. A major material supplier is considered any firm that provides construction material for construction contracts, or commodities for service contracts in excess of \$50,000, to the Vendor.
- B. If participation goals apply to the contract, only non-certified firms shall be identified on the form. A non-certified firm is a firm that is not listed as a firm for attainment of participation goals (ex. County Business Enterprise or Disadvantaged Business Enterprise), if applicable to the solicitation.
- C. This list shall be kept up-to-date for the duration of the contract. If subcontractors, subconsultants or suppliers are stated, this does not relieve the Vendor from the prime responsibility of full and complete satisfactory performance under any awarded contract.
- D. After completion of the contract/final payment, the Vendor shall certify the final list of non-certified subcontractors, subconsultants, and suppliers that performed or provided services to the County for the referenced contract.
- E. The Vendor has confirmed that none of the recommended subcontractors, subconsultants, or suppliers' principal(s), officer(s), affiliate(s) or any other related companies have been debarred from doing business with Broward County or any other governmental agency.

If none, state "none" on this form. Use additional sheets as needed. Vendor should scan and upload any additional form(s) in BidSync.

1. Subcontracted Firm's Name: \_\_\_\_\_

Subcontracted Firm's Address: \_\_\_\_\_

Subcontracted Firm's Telephone Number: \_\_\_\_\_

Contact Person's Name and Position: \_\_\_\_\_

Contact Person's E-Mail Address: \_\_\_\_\_

Estimated Subcontract/Supplies Contract Amount: \_\_\_\_\_

Type of Work/Supplies Provided: \_\_\_\_\_

2. Subcontracted Firm's Name: \_\_\_\_\_

Subcontracted Firm's Address: \_\_\_\_\_

Subcontracted Firm's Telephone Number: \_\_\_\_\_

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**VOLUME OF PREVIOUS WORK ATTESTATION FORM**

The completed and signed form should be returned with the Vendor's submittal. If not provided with submittal, the Vendor must submit within three business days of County's request. Failure to provide timely may affect the Vendor's evaluation.

**This completed form MUST be included with the Vendor's submittal at the time of the opening deadline to be considered for a Tie Breaker criterion (if applicable).**

Points assigned for Volume of Previous Work will be based on the amount paid-to-date by the County to a prime Vendor **MINUS** the Vendor confirmed payments paid-to-date to approved certified County Business Enterprise (CBE) firms performing services as Vendor subcontractor/subconsultant to obtain the CBE goal commitment as confirmed by County's Office of Economic and Small Business Development. Reporting must be within five (5) years of the current solicitation's opening date.

Vendor must list all received payments paid-to-date by contract as a prime vendor from Broward County Board of County Commissioners. Reporting must be within five (5) years of the current solicitation's opening date.

Vendor must also list all total confirmed payments paid-to-date by contract, to approved certified CBE firms utilized to obtain the contract's CBE goal commitment. Reporting must be within five (5) years of the current solicitation's opening date.

In accordance with Section 21.31.d. of the Broward County Procurement Code, the Vendor with the lowest dollar volume of work previously paid by the County over a five-year period from the date of the submittal opening will receive the Tie Breaker.

The Vendor attests to the following:

Item No.	Project Title	Contract No.	Department/ Division	Date Awarded	Prime: Paid to Date	CBE: Paid to Date
1.						
2.						
3.						
4.						
5.						
6.						
7.						

Grand Total

Has the Vendor been a member/partner of a Joint Venture firm that was awarded a contract by the County?

Yes  No

If Yes, Vendor must submit a **Joint Vendor Volume of Work Attestation Form**.

Vendor Name: \_\_\_\_\_

\_\_\_\_\_  
Authorized Signature/Name                      Title                      Date

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**VOLUME OF PREVIOUS WORK ATTESTATION JOINT VENTURE FORM**

If applicable, this form and additional required documentation should be submitted with the Vendor's submittal. If not provided with submittal, the Vendor must submit within three business days of County's request. Failure to timely submit this form and supporting documentation may affect the Vendor's evaluation.

If a Joint Venture, the payments paid-to-date by contract provided must encompass the Joint Venture and each of the entities forming the Joint Venture. Points assigned for Volume of Previous Work will be based on the amount paid-to-date by contract to the Joint Venture firm **MINUS** confirmed payments paid-to-date to approved certified CBE firms utilized to obtain the CBE goal commitment. Reporting must be within five (5) years of the current solicitation's opening date. Amount will then be multiplied by the member firm's equity percentage.

In accordance with Section 21.31.d. of the Broward County Procurement Code, the Vendor with the lowest dollar volume of work previously paid by the County over a five-year period from the date of the submittal opening will receive the Tie Breaker.

The Vendor attests to the following:

Item No.	Project Title	Contract No.	Department/ Division	Date Awarded	JV Equity Percent	Prime: Paid to Date	CBE: Paid to Date
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
Grand Total							

Vendor is required to submit an executed Joint Venture agreement(s) and any amendments for each project listed above. Each agreement must be executed prior to the opening date of this solicitation.

Vendor Name: \_\_\_\_\_

\_\_\_\_\_  
Authorized Signature/Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

### **Security Requirements – Port Everglades**

- A. The Port Everglades Department requires persons to present, at port entry, a valid driver's license, and valid reason for wishing to be granted port access in order to obtain a temporary/visitor ID badge. For persons who will visit the Port more than 15 times in a 90 day period, a permanent identification badge must be obtained and paid for by the contractor for all employees, subcontractors, agents and servants visiting or working on the port project. A restricted access badge application process will include fingerprints and a comprehensive background check. Badges must be renewed annually and the fees paid pursuant to Broward County Administrative Code, Section 42.6. For further information, please call 954-765-4225.
- B. All vehicles that are used regularly on the dock apron must have a Dockside Parking Permit. Only a limited number of permits will be issued per business entity. The fee is \$100.00 per permit/vehicle. Individuals requesting a permit must possess a valid Port-issued Restricted Access Area badge with a "Dock" destination. Requests for Dockside Parking Permits must be submitted in writing, on company letterhead, to the ID Badge Office. Applicants must demonstrate a need for access to the dock apron. Requests shall be investigated, and approved, if appropriate justification is provided. Supporting documentation must be supplied, if requested. Dock permits are not transferable and must be affixed to the lower left corner of the permitted vehicle's windshield. Should the permit holder wish to transfer the permit to another vehicle during the term of issuance, the permit will be removed and exchanged at no charge for a new permit. Only one business entity representative will be permitted on the dock at a time at the vessel location.
- C. The Federal Government has instituted requirements for a Transportation Worker Identification Credential (TWIC) for all personnel requiring unescorted access to designated secure areas within Port Everglades. The contractor will be responsible for complying with the applicable TWIC requirements. For further information, please call 1-855-347-8371, or go on line to <https://www.tsa.gov/for-industry/twic>.

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INSURANCE REQUIREMENTS

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Project: Architectural and/or Engineering Services  
Agency: Port Everglades – Seaport Engineering & Facilities Maintenance Division

TYPE OF INSURANCE	ADDL INSD	SUBR WVP	MINIMUM LIABILITY LIMITS		
				Each Occurrence	Aggregate
<b>GENERAL LIABILITY - Broad form</b> <input checked="" type="checkbox"/> Commercial General Liability <input checked="" type="checkbox"/> Premises-Operations <input type="checkbox"/> XCU Explosion/Collapse/Underground <input checked="" type="checkbox"/> Products/Completed Operations Hazard <input checked="" type="checkbox"/> Contractual Insurance <input checked="" type="checkbox"/> Broad Form Property Damage <input checked="" type="checkbox"/> Independent Contractors <input checked="" type="checkbox"/> Personal Injury <b>Per Occurrence or Claims-Made:</b> <input checked="" type="checkbox"/> Per Occurrence <input type="checkbox"/> Claims-Made <b>Gen'l Aggregate Limit Applies per:</b> <input type="checkbox"/> Project <input type="checkbox"/> Policy <input type="checkbox"/> Loc. <input type="checkbox"/> Other _____	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Bodily Injury		
			Property Damage		
			Combined Bodily Injury and Property Damage	\$ 1 mil	\$ 2 mil
			Personal Injury		
			Products & Completed Operations		
<b>AUTO LIABILITY</b> <input checked="" type="checkbox"/> Comprehensive Form <input checked="" type="checkbox"/> Owned <input checked="" type="checkbox"/> Hired <input checked="" type="checkbox"/> Non-owned <input checked="" type="checkbox"/> Any Auto, If applicable <i>Note: May be waived if no driving will be done in performance of services/project.</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Bodily Injury (each person)		
			Bodily Injury (each accident)		
			Property Damage		
			Combined Bodily Injury and Property Damage	\$ 500 k	
<input type="checkbox"/> <b>EXCESS LIABILITY / UMBRELLA</b> <b>Per Occurrence or Claims-Made:</b> <input type="checkbox"/> Per Occurrence <input type="checkbox"/> Claims-Made <i>Note: May be used to supplement minimum liability coverage requirements.</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/> <b>WORKER'S COMPENSATION</b> <i>Note: U.S. Longshoremen &amp; Harbor Workers' Act &amp; Jones Act is required for any activities on or about navigable water.</i>	N/A	<input checked="" type="checkbox"/>	Each Accident	STATUTORY LIMITS	
<input checked="" type="checkbox"/> <b>EMPLOYER'S LIABILITY</b>			Each Accident	\$500 k	
<input type="checkbox"/> <b>POLLUTION / ENVIRONMENTAL LIABILITY</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	If claims-made form:		
			Extended Reporting Period of:		
			*Maximum Deductible:		
<input checked="" type="checkbox"/> <b>PROFESSIONAL LIABILITY (ERRORS &amp; OMISSIONS)</b> All engineering, surveying and design professionals.	N/A	<input checked="" type="checkbox"/>	If claims-made form:	\$ 1 ml	
			Extended Reporting Period of:	2 years	
			*Maximum Deductible:	\$100 k	
<input type="checkbox"/> Installation floater is required if Builder's Risk or Property are not carried. <i>Note: Coverage must be "All Risk", Completed Value.</i>			*Maximum Deductible (Wind and/or Flood):		
			*Maximum Deductible:		
<b>Description of Operations:</b> "Broward County" shall be listed as Certificate Holder and endorsed as an additional insured for liability, except as to Professional Liability. County shall be provided 30 days written notice of cancellation, 10 days' notice of cancellation for non-payment. Vendor insurance shall provide primary coverage and shall not require contribution from the County, self-insurance or otherwise. Any self-insured retention (SIR) must be declared to and approved by County and may require proof of financial ability to meet losses. Vendor is responsible for all coverage deductibles unless otherwise specified in the agreement.					
<b>CERTIFICATE HOLDER:</b>  Broward County 1850 Eller Drive Fort Lauderdale, Florida 33316  Attention: Donald Ellis			Digitally signed by NORMAGENE DMYTRIW DN: dc=cty, dc=broward, dc=bc, ou=Organization, ou=PEV, ou=Users, cn=NORMAGENE DMYTRIW Date: 2019.07.16 17:20:03 -04'00'  Risk Management Division		

<b>Evaluation Criteria</b>		
<b>Consulting Services for Port Everglades</b>		
1.	<b>Ability of Professional Personnel: Maximum 30 points</b>	<b>Vendor Response</b>
	<p>Describe the qualifications and relevant experience of the Project Manager and all key staff that are intended to be assigned to this project. Include resumes for the Project Manager and all key staff described. Include the qualifications and relevant experience of all subconsultants' key staff to be assigned to this project.</p> <p><b>a:</b> Provide a comprehensive organizational chart including all members of the proposed project team, i.e., Land Surveying, Geotechnical Engineering, Civil Engineering, Transportation and Traffic Engineering, Environmental Protection, Landscape Architecture, Structural Engineering, Materials Testing, Interior Design, Lighting Design, Fire Protection, Plumbing, Mechanical Engineering, Electrical Engineering, Telecommunications and Data Engineering, and Leadership in Energy and Environmental Design (LEED) accredited professional (AP) related services..</p> <p><b>Points Value: 15</b></p>	
	<p><b>b:</b> Describe your firm's GIS/CAD/BIM capabilities, provide a list of projects completed related to utility databases and atlas creation. Include experience with Environmental Research Institute Software (ESRI). Include a list of projects totaling \$2 million or less in construction cost, completed in the past 5 years. List all seaport environment projects completed during the past 5 year. List projects where construction requires continuity of port operations and how that was addressed and resolved.</p> <p><b>Points Value: 15</b></p>	
2.	<b>Project Approach: Maximum 25 points</b>	
	<p><b>a:</b> Describe how the Vendor will coordinate multi-disciplined projects working with multiple diverse stakeholders in developing an overall project plan including environmental design, engineering and construction which provide the ability to maintain continuity of operations during the implementation.</p> <p><b>Points Value: 15</b></p>	
	<p><b>b:</b> Describe the criteria Vendor will use to assign subconsultants in the project.</p> <p><b>Points Value: 10</b></p>	

3.	<b>Past Performance: Maximum 30 points</b>	
	<p>Describe prime Vendor's experience on projects of similar nature, scope and duration, along with evidence of satisfactory completion, both on time and within budget, for the past five years. Provide a minimum of three projects with references.</p> <p>Vendor should provide references for similar work performed to show evidence of qualifications and previous experience. Refer to <b>Vendor Reference Verification Form</b> and submit as instructed. Only provide references for non-Broward County Board of County Commissioners contracts. For Broward County contracts, the County will review performance evaluations in its database for vendors with previous or current contracts with the County. The County considers references and performance evaluations in the evaluation of Vendor's past performance.</p> <p>a: Include active and completed projects related to cruise and/or cargo terminal expansion/construction and any other seaport transportation projects.</p> <p><b>Points Value: 15</b></p>	
	<p>b: Include active and completed projects related to marine infrastructure and dredging.</p> <p><b>Points Value: 10</b></p>	
	<p>c: Include active and completed projects related to roadway and utility construction within a seaport environment.</p> <p><b>Points Value: 5</b></p>	
4.	<b>Workload of the Firm:</b>	
	<p>For the prime Vendor only, list all completed and active projects that Vendor has managed within the past five years. In addition, list all projected projects that Vendor will be working on in the near future. Projected projects will be defined as a project(s) that Vendor is awarded a contract but the Notice to Proceed has not been issued. Identify any projects that Vendor worked on concurrently. Describe Vendor's approach in managing these projects. Were there or will there be any challenges for any of the listed projects? If so, describe how Vendor dealt or will deal with the projects' challenges.</p> <p><b>Points Value: 5</b></p>	
5.	<b>Location:</b>	
	Refer to <b>Vendor's Business Location Attestation Form</b> and submit as instructed.	

	<p>A Vendor with a principal place of business location (also known as the nerve center) within Broward County for the last six months, prior to the solicitation submittal, will receive five points; a Vendor not meeting all of the local business requirements will receive zero points. The following applies for a Vendor responding as a Joint Venture (JV): if a member of the JV has 51% or more of the equity and meets all of the local business requirements, the JV will receive three points; if a member of the JV has 30 to 50% of the equity and meets all of the local business requirements, the JV will receive two points; and if a member of the JV has 10% to 29% of the equity and meets all of the local business requirements, the JV will receive one point. <b>Points Value: 5</b></p>	
6.	<p><b>Willingness to Meet Time and Budget Requirements:</b></p>	
	<p>This solicitation is for the award of a continuing contract. The specific projects requiring professional services under the agreement have not yet been identified. However, in general, explain your firm's approach in meeting "project specific" time and budget requirements and indicate whether Vendor is committed to meet these requirements when identified under this agreement.  <b>YES = 2 Points NO = 0 Points</b> <b>Points Value: 2</b></p>	
7.	<p><b>Volume of Previous Work:</b></p>	
	<p>Refer to <b>Volume of Previous Work Attestation Form</b> and the <b>Volume of Previous Work Attestation Joint Venture Form</b> and submit as instructed.</p> <p>Points assigned for Volume of Previous Work will be based on the amount paid-to-date by the County to a prime Vendor MINUS the Vendor's confirmed payments paid-to-date to approved certified County Business Enterprise (CBE) firms performing services as Vendor's subcontractor/subconsultant to obtain the CBE goal commitment as confirmed by County's Office of Economic and Small Business Development. Reporting must be within five (5) years of the current solicitation's opening date. If a Joint Venture, the payments paid-to-date by contract provided must encompass the Joint Venture and each of the entities forming the Joint Venture. Points assigned for Volume of Previous Work will be based on the amount paid-to-date by contract to the -Joint Venture firm MINUS all confirmed payments paid-to-date to approved certified CBE firms utilized to obtain the CBE goal commitment. Reporting must be within five (5) years of the current solicitation's opening date. Amount will then be multiplied by the member firm's equity percentage. Three points will be allocated to Vendors paid \$0 - \$3,000,000); 2 Points will be allocated to Vendors paid \$3,000,001 - \$7,500,000; 1 Point will be allocated to Vendors paid \$7,500,001 - \$10,000,000; 0 Points will be allocated to Vendors paid over \$10,000,000). Payments for prime Vendor will be verified by the Purchasing</p>	

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	<p>Division.</p> <p><b>Points Value: 3</b></p>	
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## Question and Answers for Bid #PNC2119212P1 - Consulting Services for Port Everglades

Overall Bid Questions
<p><b>Question 1</b> Is there a clause on potential conflict of interest for the current program manager to submit a proposal? (Submitted: Aug 13, 2019 8:08:51 AM EDT)</p>
<p><b>Answer</b> - Conflicts cannot be identified without a specific contract reference. However, any consultant/subconsultant would need to adhere to any conflict provision as defined by Florida law, administrative code, and/or professional code of ethics. Please e-mail the Project Manager (stated in the Special Instructions) with a copy to the Purchasing Agent if there are inquiries regarding any specific contract. (Answered: Aug 26, 2019 10:53:20 AM EDT)</p>
<p><b>Question 2</b> Is there an estimated budget? (Submitted: Aug 20, 2019 7:54:07 AM EDT)</p>
<p><b>Answer</b> - The estimated budget is \$1,000,000/year. Please refer for Section "C" of Scope of Work. (Answered: Aug 26, 2019 10:53:20 AM EDT)</p>
<p><b>Question 3</b> It seems the RFQ is geared toward Engineering services rather than Architectural services. Would Broward County prefer an Engineering firm be the prime for the Team? (Submitted: Aug 21, 2019 8:04:35 AM EDT)</p>
<p><b>Answer</b> - The County does not have a "preference". The Scope of Services for this solicitation do not preclude award to an architectural firm as the Prime Consultant. Refer to Special Instructions to Vendors for required licensing. (Answered: Aug 26, 2019 10:53:20 AM EDT)</p>
<p><b>Question 4</b> Within the Standard Instructions to Vendors, the Submittal Instructions state: "Vendor should upload responses to Evaluation Criteria in Microsoft Word or Excel format." Neither word or excel format was provided and in the past a PDF format has been accepted. Will you accept a PDF format? (Submitted: Aug 21, 2019 1:01:26 PM EDT)</p>
<p><b>Answer</b> - An Evaluation Criteria Form in Word format will be provided/uploaded to this solicitation in Bid Addendum No. 1. In addition, the County will also allow PDFs to be downloaded. The PDF documents must not be locked or secured. Please submit as required in Standard Instructions to Vendors. (Answered: Aug 26, 2019 10:53:20 AM EDT)</p>
<p><b>Question 5</b> Can you confirm the Vendor Reference Verification Form is only to be completed for the Prime Vendor? (Submitted: Aug 21, 2019 1:01:51 PM EDT)</p>
<p><b>Answer</b> - Yes, the reference verification form is for the Prime consultant only. (Answered: Aug 26, 2019 10:53:20 AM EDT)</p>
<p><b>Question 6</b> The Evaluation Criteria Form Item 3 (Past Performance) b. c. are identical and state to "include active and completed projects related to marine infrastructure and dredging" which will affect point structure. Will you be providing an updated Evaluation Criteria form deleting and/or updating the duplicated request? (Submitted: Aug 21, 2019 1:04:22 PM EDT)</p>
<p><b>Answer</b> - Please refer to Addendum No. 1 and the updated Evaluation Criteria, Section 3.c. (Answered: Aug 26, 2019 10:53:20 AM EDT)</p>

Broward County Board of  
County Commissioners

Bid PNC2119212P1

10:53:20 AM EDT)

Question Deadline: Aug 21, 2019 5:00:00 PM EDT

# **EXHIBIT 2**

**CMA Proposal Excerpts: Pages 8, 59-77, 83-185, 207-20, and 218-233**



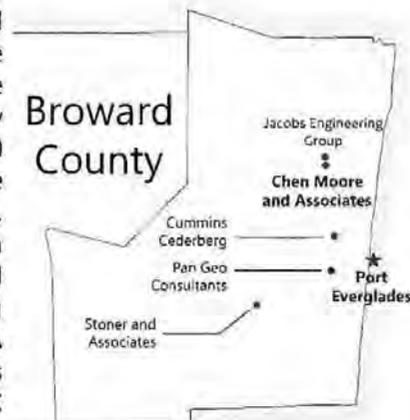
## LETTER OF INTEREST

September 9, 2019

Broward County Purchasing Division  
115 South Andrews Avenue, Room 212  
Fort Lauderdale, FL 33301

### Re: Broward County Bid #PNC2119212P1 - Consulting Services for Port Everglades

**Chen Moore and Associates, Inc.** (CMA), in association with **Jacobs**, is pleased to submit this response to requests for professional services. CMA has been a respected and Broward based firm for over 33 years, completing numerous projects as a prime consultant for various Broward County agencies, most notably for Broward County Water and Wastewater Services (BCWWS) and the Broward County Aviation Department (BCAD). Jacobs is the world's largest consulting firm, with the ability to provide any required service and a Ports & Maritime Group with over 150 years of proven experience. Together, our team offers the combination of a successful Broward County headquartered firm, who has led on significant infrastructure planning and design work for Broward County along with the state, national and international ports/maritime experience of Jacobs. Complementing our team combining a strong local firm and global leader, CMA has included **Stoner and Associates, Inc.** (surveying); **Cummins Cederberg** (coastal engineering); and **Pan Geo Consultants, LLC** (geotechnical engineering and materials testing, building envelope consulting and landscape architecture support). Each firm has offices in Broward County set to serve Port Everglades. This blend of local consultants was carefully combined to provide you with the most experienced local team for Port Everglades and to provide the flexibility in our ability to deliver multiple on call service task orders simultaneously.



We understand the space limitations facing the Port, and that the future civil infrastructure will need to be effectively integrated with any solutions to cope with these limitations. Projects such as: container yard densifications; cargo gates and automation; implementation of the latest Transportation Systems Management and Operation solutions (TSMO); cruise terminal operations and equipment; and berth upgrades need to consider project constraints and opportunities to provide the most efficient use of capital, while allowing daily port operations to function during construction. We bring firsthand knowledge and experience with global best practices and solutions experience. The value we provide Port Everglades isn't just efficiency in design, lower capital costs, and lower life-cycle costs; but in





## EVALUATION CRITERIA

### A. ABILITY OF PROFESSIONAL PERSONNEL

**Chen Moore and Associates, Inc. (CMA)**, in association with **Jacobs**, is pleased to submit this response to requests for professional services. CMA has been a respected and Broward based firm for over 33 years, completing numerous projects as a prime consultant for various Broward County agencies, most notably for Broward County Water and Wastewater Services (BCWWS) and the Broward County Aviation Department (BCAD). CMA key staff worked on the master planning efforts of a proposed port in the Republic of Panama (Punta Limon), that prepared this firm to want to bring the Broward County experience along with recent port experience to Port Everglades with our key partner Jacobs. Jacobs is the world's largest consulting firm,



with the ability to provide any required service and a Ports & Maritime Group with over 150 years of proven experience. Together, our team offers the combination of a successful Broward County headquartered firm, who has led on significant infrastructure planning and design work for Broward County along with the state, national and international ports/maritime experience of Jacobs. Complementing our team combining a strong local firm and global leader, CMA has included **Stoner and Associates, Inc.** (surveying); **Cummins Cederberg** (coastal engineering); and **Pan Geo Consultants, LLC** (geotechnical engineering and materials testing, building envelope consulting and landscape architecture support). Each firm has offices in Broward County set to serve Port Everglades. This blend of local consultants was carefully combined to provide you with the most experienced local team for Port Everglades and to provide the flexibility in our ability to deliver multiple on call service task orders simultaneously.

We believe in the importance of selecting a strong and knowledgeable team that can show the selection committee that level of commitment to BCWWS and stakeholders that CMA has been delivering to the County for over 33 years on numerous projects. Leading our team is the Principal-in-Charge, **Peter Moore, P.E., F. ASCE, ENV SP, LEED AP**. Mr. Moore was selected to lead this team to both demonstrate the project's importance to our firm and because of his long history with Broward County as a whole. As a lifelong Broward County resident, Mr. Moore will combine his experience, engineering expertise and key relationships to bring maximum value to Broward County. Supplementing Mr. Moore as a second Ports Principal is **Todd Stockberger, P.E.**, who serves as Jacobs Vice President and their Ports & Maritime Leader for the Southeastern US and the Caribbean.



Joining the Principals as Project Manager is **Greg Mendez, P.E.**, Mr. Mendez was selected for this role based on his past experience at Ports, Airports and other secure facilities for both Port Everglades and the Broward County Aviation Department, as well as his experience in managing general engineering contracts with multiple simultaneous assignments.

Assisting the project management team are an array of professional engineers and technicians that have spent most of their careers involved with some aspect of work for Port Everglades and they'll bring focus to this project with consistent on-time, on-budget delivery to past projects. These professionals combine for extensive experience with Port Projects and On Call contracts, and they are bolstered by **Jim Van Ness, P.E.**, and **Jose L. Acosta, P.E., F. ASCE**, both serving as the QA/QC Officers for the diverse needs of such a contract.



#### Jacobs

**Role: Maritime Civil, Container Terminals, Cruise Terminals, Intermodal & Rail, Maritime Structural and Mechanical, Electrical and Plumbing**

Jacobs has been a global leader in delivering successful engineering and construction projects since 1946. With \$13 billion in combined revenue and a talent force of more than 50,000 strong, Jacobs provides a comprehensive list of building and infrastructure services worldwide. Projects expected under this on-call contract include general civil, civil utilities, roadway, rail, security, pavements, drainage, permitting, and other multidisciplinary projects related to maintaining and improving facilities within an operating port.

Jacobs' Ports & Maritime Group started more than 150 years ago and today is one of the largest specialized port practices in the world. Their Ports & Maritime staff consists of nearly 600 specialists working only on port and maritime projects. This depth of resources and long history of solving port infrastructure problems brings significant value to Port Everglades. Jacobs' Ports & Maritime group works as a global team, not only bringing the experience of working with Port Everglades for decades and with all the major ports in Florida, but bringing global experience and best practices, which will benefit Port Everglades.

Because their Ports & Maritime Group works exclusively on marine projects, they have a keen understanding of port operations. This is one of several major factors that sets them apart from others. By understanding not only the engineering needs but also the operational challenges, Jacobs is able to develop solutions that minimize operational impacts during construction. It's often the case that operational impacts can be a higher cost than the construction itself. One such example is JAXPORT's Toyota Berth 3 where Jacobs developed a solution that enabled the berth to remain operational while the entire berth was replaced. This project won the 6th Annual Facilities Engineering Awards competition for rehabilitating the port's storm-damaged Talleyrand Marine Terminal Berth 3 without unduly disrupting busy automobile import operations. Their deep understanding of port operations includes all terminal types from cruise to containers, and dry and liquid bulk to Ro/Ro terminals. This understanding provides Jacobs with a better understanding of



how best to develop civil engineering solutions to problems that their port clients frequently experience. These can range from internal and external traffic circulation, to cargo interchanges, to cruise passenger and provisioning flow, to utilities and stormwater systems. Because Jacobs understands how to minimize operational impacts, they often exceed their client's expectations.

Jacobs' deep understanding of port operations includes all terminal types from cruise to containers, oil and gas terminals, and dry bulk to Ro/Ro terminals. This expertise provides them with a better understanding of how best to develop civil engineering solutions to problems that port clients frequently experience. These can range from internal and external traffic circulation, to cargo interchanges, to cruise passenger and provisioning flow, to utilities and stormwater systems. Because Jacobs understands how to minimize operational impacts, they often exceed our client's expectations.

**Cummins Cederberg**

**Role: Container Terminals, Coastal Resilience, Maritime Structural, Environmental Compliance and Permitting**



Cummins Cederberg is a southeast Florida headquartered coastal and marine engineering firm. The firm was founded by principal engineers Jason Cummins, P.E., and Jannek Cederberg, P.E. The foundation of the firm was built upon an expertise in the marine and coastal environments, and remains at the forefront of science, research, and application in this constantly evolving industry. The firm has thrived with an exclusive focus on the coastal and marine environment without diluting knowledge or resources amongst other disciplines. Over the years, the firm has built a team of professionals, licensed engineers and marine scientists, and a reputation for success by providing quality work in a transparent manner, resulting in sustainable working relationships with many repeat clients.

**Stoner and Associates, Inc.**

**Role: Land Surveying and Subsurface Utility Engineering**



Stoner and Associates, Inc. is a land surveying firm with extensive experience at Port Everglades and the Fort Lauderdale Hollywood International Airport, serving Broward County since 1988. The firm has its headquarters in Davie, FL and is a Broward CBE. The firm has over 25 employees including four licensed professional surveyors and mappers supervising six survey field crews. Stoner and Associates has developed a reputation as a professional, reliable company that provides accurate surveys, legal documentation and associated services combined with dependable service for over a decade. CMA and Stoner have been working together on Broward County projects for over two decades.



Broward County Board of  
County Commissioners

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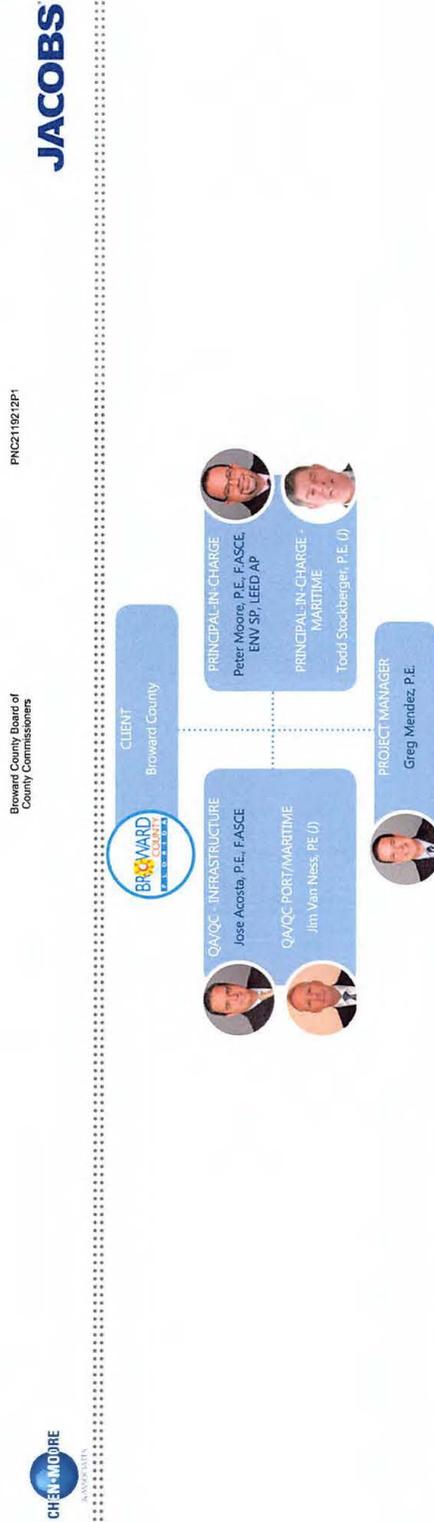
**PanGeo Consultants, LLC**

**Role: Geotechnical Engineering**

PanGeo Consultants, LLC is a geotechnical engineering, structural engineering and landscape architecture, PanGeo Consultants is a Ft. Lauderdale based Broward CBE consulting firm founded by Paul C. Catledge, P.E. and Angelina López Catledge, BLA, M.S. with a commitment to providing responsive, innovative, and cost effective solutions. PanGeo Consultants specializes in the field of geotechnical engineering with a focus on the South Florida region. Their vast experience allows them to more effectively prescribe field studies from which their clients may anticipate and mitigate potential subsurface issues early in the project timeline, thereby avoiding time and cost overruns.



Broward County Bid #PNC2119212P1  
Consulting Services for Port Everglades



PNC2119212P1

Broward County Board of County Commissioners

DISCIPLINES	SUPPORTING DISCIPLINES
<b>MARITIME CIVIL</b> Dan Davila, PE Linda Batiz, PE (I) Karen Falkenberg, PE (I) Alstair Hart, (I) Jason Cummings, M.Sc., P.E. (CC) <b>CRUISE TERMINAL</b> Michael J. Ledford, PE (I) <b>TRANSPORTATION AND TRAFFIC ENGINEERING</b> Anna Elias, PhD, P.E., PTOE (I) Joseph Martin, PE (I) Sallya Brea, P.E., LEED AP Jennifer Smith, P.E. Suzanne Dambrowski, P.E., ENV SP	<b>LAND SURVEYING AND SUBSURFACE UTILITY ENGINEERING</b> Janis Stoner, PSM (Stoner) Rick Crawford, PSM (Stoner) <b>GEO TECHNICAL ENGINEERING/MATERIALS TESTING</b> Paul Culledge, P.E. (Port Geo) Sam Natus, PE (I) <b>TELECOMMUNICATIONS</b> Pete Halvors (I) <b>LANDSCAPE ARCHITECTURE</b> Cristobal Beaucourt, RLA Eric Harrison, RLA <b>GIS &amp; BIM</b> Sean Murphy (I) Rebecca Honey, GISP (I) Patrick Danielli, PE (I)
<b>STORMWATER</b> Jason McGee, PE, CFM, LEED AP Brent Whitfield, P.E., ENV SP Teresa Lewis, E.I. <b>COASTAL RESILIENCE</b> Jameek Cederberg, M.Sc., PE (CC) Mike Albert, P.E. <b>INTERMODAL AND RAIL</b> Danielle Iwim, M.Sc., CFM, PWS, LEED AP (CC) <b>MARITIME STRUCTURAL</b> Paul Jaramila, PE, CE, LEED (I) Michael Stosiek, PE (I) Jason Taylor, M.Sc., P.E. (CC)	<b>COST ESTIMATING</b> Jorge Aluisanera, PE (I) Derrick Smith, CFM, LEED AP <b>CONSTRUCTION ADMINISTRATION</b> Matt O'Rourke Jose McGray Manuel Coaraino Jon Cunningham, EI (CC)
<b>ENVIRONMENTAL COMPLIANCE AND PERMITTING</b> Jim Moore (I) Mike Buck, PE <b>MECHANICAL/ELECTRICAL/PLUMBING &amp; FIRE PROTECTION</b> Carl Ogilvie, PE, CFP (I) John Jones, PE (I)	<b>ENVIRONMENTAL COMPLIANCE AND PERMITTING</b> Jim Moore (I) Mike Buck, PE <b>MECHANICAL/ELECTRICAL/PLUMBING &amp; FIRE PROTECTION</b> Carl Ogilvie, PE, CFP (I) John Jones, PE (I)

**SUBCONSULTANTS**  
Stoner and Associates, Inc.  
Cummins Engineering  
Pan Geo Consultants, LLC  
Jacobs

1. Broward CBE firm - 2 State of FL WBE  
Note: Text in purple denotes CMA employees

Broward County Bkt #PNC2119212P1  
Consulting Services for Port Everglades

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9/11/2019



**Key Personnel**

We have assembled a strong and knowledgeable team of key personnel to meet the needs of Port Everglades. Chen Moore and Associates makes the commitment that all key personnel on the project team will be dedicated as necessary to meet the workload needs of the County. The key personnel assigned to this contract all have extensive prior experience with the County. The key personnel assigned to this project team is summarized below. The detailed information on the relevant experience of our key personnel are included in the resumes in this section.

**CHEN MOORE AND ASSOCIATES**

**Peter Moore, P.E., LEED AP, ENV SP, F.ASCE** is the president of CMA with more than 22 years of experience with a wide variety of utility, stormwater, transportation and other infrastructure projects. Since joining CMA in 1999, Mr. Moore has focused on the management, planning, design, permitting, and construction of various utility infrastructure projects for public clients throughout South Florida. A lifelong Broward County resident, Mr. Moore has worked on dozens of unique projects for Broward County valued at over \$100M in his career, literally serving in every role in a project team. His earliest projects with BCWWS date back to 1998 which gives him a unique understanding of the County's needs. Of particular note is Mr. Moore's experience in value engineering, including projects for Broward County WWS, Miami-Dade Water and Sewer Department and a development client in Saudi Arabia. Including his assistance as a reviewer and design guideline developer for the firm's work in the Republic of Panama, Mr. Moore has an additional \$500M of international project exposure to give him the full arsenal of tools to serve Broward County.



**Jose L. Acosta, P.E., F.ASCE** is a vice president for the firm and has over 20 years of design and project management experience in various markets including municipal continuing service contracts, utility engineering, coastal developments, higher education, healthcare, transportation, transit oriented development, and commercial/residential/industrial private development. His background includes neighborhood improvement projects, streetscape enhancements, utility master planning, transportation planning, on- and off-site infrastructure design, bidding assistance and construction administration services for throughout Monroe, Miami-Dade, Broward and Palm Beach Counties. Mr. Acosta served as the firm's principal for the Punta Limon - Panama port master planning and preliminary engineering projects (Phases I and II) in Panama. Mr. Acosta will provide QA/QC for infrastructure.

**Gregory Mendez, P.E.** is a senior engineer for the firm and has more than 20 years of civil engineering experience in site and infrastructural development type projects for public and private facilities throughout South Florida. Greg has substantial experience working for port and airports in South Florida. He was chosen to serve as the project manager, due to his extensive experience both previously running projects for BCAD at his previous employer, specific to related projects to the runway expansion. He also served





as a senior engineer and project manager at Port Everglades in the past. He knows the expectations and requirements of the Client. He also has extensive utilities design experience and is also very experienced with fast track projects. His experience includes water, drainage and sewer designs, design reviews, managing designs and construction budgets, managing field inspection staff and managing client relations. Greg will serve as project manager.

**Jason McClair, P.E., CFM, LEED AP** is a senior civil engineer with more than 22 years of experience in utility infrastructure design, regulatory permitting, stormwater modeling, stormwater collection systems design, water distribution, and sanitary transmission systems. Since joining CMA in 2001, Mr. McClair has focused on the management, planning, design, permitting, and construction of various utility infrastructure projects for public clients throughout South Florida. He has extensive experience with hydraulic and hydrologic modeling for the analysis of stormwater, water, and wastewater systems. Mr. McClair has over 10 years of experience working directly for BCAD. He was the project manager for the Fort Lauderdale-Hollywood International Airport Stormwater Master Plan Update Project from 2008 through 2013. Those efforts led to CMA being recently selected to lead the overall infrastructure master planning for BCAD's airports. He is currently responsible for the stormwater design and permitting on the FLL North Airfield Pavement Rehabilitation Project. He also is currently working on the stormwater design and permitting on various projects at Fort Lauderdale Executive Airport. Mr. McClair will be the project manager on this contract. In addition to managing their entire project team, Mr. McClair will be responsible for stormwater.

**Daniel Davila, P.E.** has over 19 years of civil engineering experience. His experience includes planning, design and permitting of utility infrastructure, water and wastewater facilities, utilities master planning, infrastructure rehabilitation and renewal, transportation, roadway and drainage design and construction management. Mr. Davila has assisted numerous clients that range from municipalities, counties, federal agencies, healthcare districts, commercial developers to educational institutions. He has been the contract manager for small projects as well as large complex projects managing millions of dollars in design fees. In addition, he has worked in numerous water and wastewater trenchless technology projects in the State of Florida. Mr. Davila is the Engineer of Record for BCWWS potable water storage tanks and pumping facilities 3A in Dania Beach, 1B1 in Fort Lauderdale and 2A in Pompano Beach. He oversaw Chen Moore's Latin America office managing millions of dollars in design fees in Panama designing hundreds of miles of complex water and sewer projects, pump stations and potable water tanks. His international experience includes projects in Panama, Peru and Saudi Arabia. He served as project manager for the Punta Limon - Panama port master planning and preliminary engineering projects (Phases I and II) in Panama. Mr. Davila will provide Maritime Civil.



**Brent Whitfield, P.E., ENV SP** is the Director of Water Resources at Chen Moore and Associates. Mr. Whitfield has significant professional experience performing watershed, airport and municipal master planning studies in addition to preparing construction plans and specifications and providing construction administration





services. Over the past 18 years, Mr. Whitfield has been responsible for the design and management of dozens of utility infrastructure projects. He is currently the project manager on the South County Reclaimed Water Pipeline Phase 1A WUD 18-022 for Palm Beach County. This project includes master planning, design and implementation of a reclaimed main with many challenges to coordinate with various stakeholders including FPL for Palm Beach County Utilities and addresses many of the areas and experience needed in this RFP. He will oversee stormwater design efforts.

**Teresa Lewis, E.I.** is an associate engineer in our Fort Lauderdale office. Her previous experience includes serving as a construction engineering and inspection intern where she conducted hands-on field inspection of multi-strand, post-tensioning and grouting, segmental bridge erection, complex concrete segment casting and all aspect of major bridge construction project management; and performing oversight of various construction activities including coordination with contractor personnel, reviewing contract documents and resolving field issues on the project site. Over the past few years, she has become one of the firm's most talented stormwater and water system master planning modelers, specific to municipalities throughout Broward County, working with many local officials addressing future infrastructure improvements proposed within capital improvement projects. She will assist with stormwater design.

**Michael Albert, P.E.** is a Senior Engineer for Chen Moore and Associates. He has more than 17 years of professional experience including an 8-year career at the SFWMD. His key experience includes project management of design and construction management activities for Everglades Restoration projects, water impoundments, water control structures, water and wastewater conveyance systems, and infrastructure master planning. In addition, his technical skills include project management, design, permitting, planning and construction management of water resource related projects. His expertise includes extensive work with the USACE specific to environmental compliance for large projects involving coastal resilience. He will provide Coastal Resilience engineering.

**Safiya Brea, P.E., LEED AP** has over 17 years of experience with neighborhood improvement projects, including the design of roadways, sidewalks, drainage, water and wastewater infrastructure. As a senior civil engineer, she has managed projects ranging from smaller design build utility projects to large-scale neighborhood improvement programs from a BODR (Basis of Design Report) through design, permitting, construction management, and closeout with projects with hundreds of thousands of linear feet of water main, force main and gravity sewer, along with regional pump stations. Ms. Brea has managed and designed streetscape improvements, roundabouts, lift station, stormwater improvements and master plans, and BODRs. Her duties include construction management, managing staff addressing construction efforts updating the County's GIS data, design work, water modeling, sewer modeling, and report preparation for municipalities throughout South Florida. She will provide water and wastewater engineering.





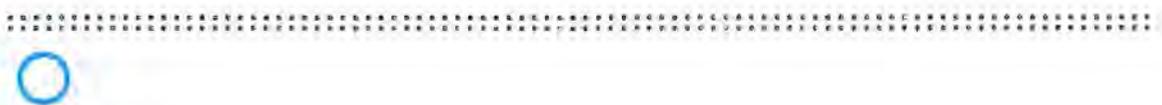
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**Jennifer Smith, P.E.** is currently serving as a senior engineer with Chen Moore and Associates. Her 13 years of experience in the civil engineering field includes project management and detailed design work on several of the Broward County UAZ Water and Sewer Improvement Projects. Mrs. Smith has been part of some of the largest neighborhood utility infrastructure projects ever to be designed and constructed for BCWWS. Her duties include water main, sanitary sewer, lift station design and permitting, as well as stormwater modeling, design and permitting. Ms. Smith is the most recent ASCE Broward Branch Past President and recently won the Young Engineer of the Year from the Florida Section of ASCE. She will provide water and wastewater engineering.

**Suzanne Dombrowski, P.E., ENV SP** is a senior engineer with Chen Moore and Associates. She holds a bachelor's degree in civil engineering and a master's degree in engineering with a specialization in civil engineering from the University of Florida. Ms. Dombrowski has managed a wide range of municipal utility, drainage and roadway projects from the planning stages throughout construction. She also designs the site civil improvements for both public and municipal facilities. Her extensive experience with water and sewer designs for various large utility Clients in South Florida, specifically in coastal communities makes her a good match for projects at Port Everglades. She will provide water and wastewater engineering.

**Patrick Kaimrajh, P.E.** serves as a senior engineer for CMA and specializes in civil engineering design, drafting, permitting, and construction inspection. His 10 years of design experience includes paving, drainage and stormwater management, sanitary sewer and stormwater pump stations, water main, site development, and neighborhood improvement projects. He has prepared engineering drawings, cost evaluations, design reports and various permit applications. In addition, Mr. Kaimrajh has performed construction inspections for drainage, watermain, sanitary sewer, and pavement. He has worked on various significant transportation roadway projects in Broward and Miami-Dade Counties. He has been the lead civil engineer for CMA on the Brightline/Virgin Train Stations and Transit Oriented Development in Fort Lauderdale and West Palm Beach. He will assist with transportation and traffic engineering.

**Mike Buick, P.E.** is a senior engineer and has over 16 years of experience in site development. His experience includes planning, design, permitting and construction administration of site infrastructure including site paving, grading and drainage and site utility plans for many municipal and land development projects. Many of Mr. Buick's projects have been in on-sites with complex environmental remediation and mitigation requirements. Mr. Buick has been able to maneuver civil design efforts along with collaborating with environmental consultants and regulators to meet required specifications in an efficient and concise way. Mr. Buick will assist with environmental compliance and permitting.





**Cris Betancourt, RLA** is Chen Moore and Associates' Director of Landscape Architecture and Planning. He has over 23 years of experience providing planning and landscape architecture design solutions for public and private sector clients. Mr. Betancourt provides a full range of services starting with due diligence and master planning culminating in detailed site design. He is well versed in the use of low-impact development techniques applied to site planning. He is currently working on the Broward County UAZ Water and Sewer Improvement project that addresses many of the areas and experience needed in this RFP. Mr. Betancourt and his team have landscape architecture contracts with most FDOT districts in Florida, including District 4. He has worked on airports and ports in Florida and in the Caribbean. Mr. Betancourt will lead landscape architecture efforts and can assist in master planning needs.



**Eric Harrison, RLA** has over 16 years of landscape architecture experience with several municipalities throughout South Florida. He has provided design services and site planning for parks and recreation, university campuses, including the three most recent BCWWS tank and pump station projects which include facilities 3A, 1B1 and 2A. He also has significant experience working on the Broward County UAZ Water and Sewer Improvement project that addresses many of the areas and experience needed in this RFP. He has extensive experience working for projects for BCAD, Broward County and FDOT District 4 projects over the last decade. Mr. Harrison will assist with landscape architecture and irrigation design needs.

**Jose McCray** is a senior inspector for Chen Moore and Associates. Mr. McCray has over 35 years of construction experience, from surveying through project management. His present responsibilities include coordination and monitoring of construction activities including governmental projects and site development for residential, commercial and industrial use projects. He serves as liaison to owners, contractors, subcontractors, residents and governmental agencies. Additional responsibilities include overseeing the review/processing of change orders, progress payments and reports, and representation of owners and engineers at pre-construction meetings and other related conferences. His responsibilities included managing staff and construction administration services for several neighborhood improvement projects for Broward County Water and Wastewater Services and several private residential/commercial land development clients. These projects included the construction of roadway, water distribution, sewer, wastewater lift stations, drainage and paving. Mr. McCray has also served as a project manager and superintendent for large South Florida contracting companies. He will assist with construction administration.

**Derrick Smith, CFM, LEED AP** has over 14 years of experience as a construction project administrator and engineering inspector. He has assisted municipal clients in the role of construction project administrator and



owner's representative on several projects, including Broward County, which included vertical construction as well as site development. In his role, Mr. Smith was the liaison between the Owner and Contractor performing the oversight of infrastructure, various municipal buildings and utility installations. His duties included managing budgets and schedules and monitoring construction activities. Mr. Smith has been responsible for the development of several projects for the City of Coral Springs. In his role of owner's representative, he was also responsible for coordinating project activities, construction document interpretation, approving pay requests, assisting with dispute resolution and providing directives to multiple parties including contractors and consultants. He will assist with construction administration.

**Matthew O'Rourke** is a senior construction specialist with Chen Moore and Associates. His experience includes supervising and inspecting construction projects involving water and wastewater systems, stormwater drainage systems, and roadways. He also has performed laboratory testing of construction materials. He maintains numerous certifications in construction field inspection, sampling, testing, and quality control management. He has worked on projects for the USACE, the South Florida Water Management District, Broward County and FDOT. He will assist with construction administration.



**Manuel Caamano** is a senior construction inspector with over 15 years of agency related project experience. His experience includes daily inspection reporting, inspecting lighting & ITS systems and the supervision of landscaping and urban design. Most recently, Mr. Caamano has been serving as a senior construction inspector at Fort Lauderdale Hollywood International Airport during the runway upgrades currently on construction. He will assist with construction administration.

## JACOBS

Jacobs' brings to the team a group of professionals experienced port focused, civil, mechanical, electrical, environmental, and transportation subject matter experts (SME).

**Jim Van Ness, P.E.** has thirty-five years' experience in engineering management, design and construction of multi-discipline civil and maritime infrastructure development. Project management responsibilities have included feasibility studies, planning, site investigation, conceptual, preliminary, detailed design, and construction management. He has the ability to oversee all engineering functions on multi-functional facilities. His project experience includes the United States Atlantic and Gulf Coasts, the Great Lakes, the Bahamas, and the Middle East with ports and marine terminals, heavy civil infrastructure, marinas, and buildings. His roles include program management, project management, maritime structural and civil design, and construction administration on infrastructure projects including port terminals, breakwaters, quays, wharfs, jetties, dredging, reclamation and ground improvement, block walls, highway bridges, buildings, crane railways, tie-



down anchorage systems and drainage control, surveying and bathymetry, geotechnical investigation, and environmental impact assessments. Mr. Van Ness will serve as QA/QC for Port/Maritime work.

**Todd Stockberger, P.E.** has 31 years of experience in port and maritime engineering and is a Vice President of Jacobs. He is responsible for project delivery, client relationships, and staff resources. He currently leads all port and maritime work from the Mid-Atlantic through Texas and throughout the Caribbean and Latin America. He serves as project director or manager for major developments (typically those with capital costs in excess of \$100M). These include the Joint Manufacturing and Assembly Facility (JMAF) for NNS, the Port of Gulfport Restoration Program, Virginia Port Authority's Virginia International Gateway expansion, and new terminals for Port Miami. Mr. Stockberger will serve as the Principal-In-Charge for Maritime.

**Linda Batz, P.E.** has 19 years of specialized civil engineering experience on port and terminal projects. She has a wide range of knowledge in multiple project stages - planning, design, permitting, plan/specification production, bidding, contract administration, construction inspection, and certification. She is experienced in multi-discipline project management; site design including site layout, paving and drainage, water distribution and wastewater collection, transportation and traffic systems, and stormwater management facilities; agency and jurisdictional permitting of upland improvements; and plan and specification preparation. Linda brings extensive experience working with code officers and regulatory agencies to secure creative solutions to code disapprovals or regulatory concerns. She is a key member of our Ports & Maritime Group. Ms. Batz shall serve as the maritime civil engineer.



**Karen Faulkenberry, P.E.** has 24 years of experience in the transportation and drainage engineering fields. Her expertise is in urban and rural roadway design, signing and pavement marking, maintenance of traffic (MOT) plans, drainage collection system and pond design, and permitting. Ms. Faulkenberry will support maritime civil engineering efforts.

**Alistair Hart** will assist with container terminals has over 11 years of experience and has been involved in a range of projects encompassing planning, design and construction of ports, terminals, and marine structures. He is experienced in project management, port planning and optimization studies for container and bulk handling terminals in the UK, U.S., Middle East, and Asia. Alistair has undertaken terminal planning for greenfield port facilities and expansion/optimization of existing facilities, including planning and due diligence for the sale of the Port of Melbourne, Australia, and terminal planning for new container in Sokhna, Egypt, and Jeddah, Saudi Arabia.

**Melynn Chiariello, P.E.** is a cruise terminal design expert. Melynn brings 29 years of specialized experience in port and pier planning and design focusing on cruise terminals. She is an industry leader for siting and vetting studies for international cruise line clients. Her projects and clients include Coco Cay, Bahamas,





Labadee, Haiti, Crown Bay, St. Thomas, USVI, Long Beach Cruise Terminal, Royal Caribbean Cruises, Ltd., Disney Cruise Lines, and many, many others.

**Gary Ledford** will assist with cruise terminals. His expertise is in the field of structural design. He has designed bridge structures, wharf facilities, bulkheads, and other marine structures at Port Canaveral, Florida. He has been responsible for planning the piers for several cruise terminals and cargo facilities. He has performed berthing studies of cruise ships, bulk cargo ships, and tankers. Gary has designed several passenger loading ramps and mobile gangways. He has also designed the repair and restoration of pier and bridge structures.

**Ana Elias, PhD., PE, PTOE** will provide transportation and traffic engineering. Ana has 27 years of experience in several areas of the transportation field including: transportation planning, computer modeling and simulation, traffic engineering, and transportation economy. She has proficient knowledge of highly specialized transportation software (Cube Voyager/Avenue/Analyst, VISSIM/VISUM, PARAMICS, TSIS, HCS-2000/2010, and Synchro, including GIS packages), and a thorough understanding of most areas of the transportation industry. Dr. Elias has been the project manager and technical task leader on a broad spectrum of transportation projects—both domestic and international—from planning and travel demand modeling efforts to complex micro-simulation and operational analyses. She has actively participated in many design-build ventures, successfully helping the design teams to prove and flaw-test alternative technical concepts that have successfully gained the praise of clients. Furthermore, her proficiency in understanding clients' needs allows her to excel at developing sound technical scopes that fully satisfy clients' requirements.



**Joseph Martin, P.E.** will provide transportation and traffic engineering. He has over thirty years of Civil Engineering design and construction experience, with expertise in Project Management, highway design, drainage design, construction administration, and site civil design including paving, grading, drainage, water and sewer design, permitting, drainage calculations, report preparation, construction inspection, cost saving initiatives (formally value engineering change proposals), design/build contract administration and as-built plan preparation. This unique experience affords Joe the understanding to manage a projects design and development in such a manner to ensure constructability, quality, and best value are maintained throughout the project's completion.

**David Maas, P.E.** will oversee intermodal and rail. He has over 39 years of continuous experience working in the freight rail industry. His specific expertise has grown from the engineering design side of freight rail and intermodal facilities, into operations planning and analysis, and budgeting efforts for CSX Intermodal, and the Mechanical and Engineering departments of CSX Transportation. Prior to leaving CSX in 2006, after 25 years of service, David was a member of senior management responsible for developing the business case and project management implementation of new technology applications in the operating department.





While at TranSystems, he advanced from a team leader for freight rail facility design to a senior vice-president and principal in the firm with nation-wide client management responsibility for Class 1 railroads, intermodal companies, and many major industrial clients. These services included operations planning and analysis efforts of major rail terminals, intermodal terminals, industrial development complexes, and GIS solutions. He has worked internationally as an intermodal operations and facility design consultant in both Europe and Asia.

**Michael Shostak, P.E.** will provide intermodal and rail. He has extensive industry experience with design, construction and planning projects involving passenger and freight railroads, transit systems, and facilities. His technical expertise includes project management, track and bridge design, cost estimating, construction services, environmental documents, and various planning efforts. Michael has progressive consulting experience, engineering design, and construction with both private and public-sector clients, as well as practical field experience with two freight railroads.



**Paul Starr, PhD, P.E.** is filling the role of maritime structural. Paul brings over 30 years of diversified experience in marine and coastal engineering. He specializes in project management, design, and development of port facilities worldwide. Paul was Jacobs' Project Manager for Owner's Engineering Services at Embraport, a design-build project to construct a new \$600M container terminal in Santos, Brazil. He also served as our Project Manager for the award-winning new \$230M Dames Point Container Terminal in Jacksonville, FL. Most recently, Paul is the Technical Advisor for the new \$460M Container Terminal Moin for APMT in Costa Rica.

**Ray Cox, P.E.** brings over 40 years of port experience and will assist with maritime structural. Ray has extensive experience working throughout Florida for decades. Ray has managed design and development of complex port and pier projects and developed and served on peer review and quality improvement/assurance committees. He utilizes his engineering experience, along with project and production management expertise to deliver efficient, cost-effective, state-of-the-art designs that meet security, safety, operational, logistical, and regulatory requirements. Ray specializes in cruise terminal and berth planning and design including passenger boarding bridges and terminal layout, as well as container and cargo terminals.

**Jim Moore** will lead environmental compliance and permitting. James is a Senior Environmental Specialist with more than 30 years of experience in deepwater port/waterfront development planning and design, and environmental permitting. His experience has been particularly focused on federal and state regulatory programs associated with dredge and fill projects. This includes permit application development and agency negotiations, sovereign submerged lands authorizations, alternatives analysis documentation for wetland and navigable water impacts, sampling and analysis plan development for sediment characterization studies of harbor deepening projects with aquatic or upland dredged material disposal. James was Senior Associate responsible for port-related environmental services coordination and related initiatives for four of Florida's deepwater ports. Including supervision of technical support staff and subconsultants, environmental





assessments, port master planning, mitigation NPDES storm water program compliance, grant funding, State legislative technical assistance, port commission and technical seminar presentations/publications.

**Joel Victor, P.E.** will be our Lead Mechanical engineer and will be responsible for mechanical electrical plumbing & fire protection. Joel Victor has more than 19 years engineering experience in plant piping design and 10 years in building construction experience. His projects include designing piping systems for an offshore oil loading platform, marine oil terminals, naval station home-port steam distribution system, inspection and evaluation of high-pressure steam, fire protection, and compressed air and water distribution piping infrastructure, as well as oil unloading dock fuel, and fire protection piping distribution. His engineering tasks have ranged from authoring technical specifications for marine oil terminal loading arms; Electro-hydraulic gangways, shipyard and wharf fire pumps; marine oil terminal pipelines and piping, to the inspection and design of wharf utility pipelines and piping, power plant cooling and circulating water systems; container yard storm drainage collection and forwarding systems; high- and low-pressure steam piping distribution systems; and building utility systems.



**Carl Osberg, P.E., CFPS** will assist with mechanical electrical plumbing & fire protection. Carl has more than 40 years of experience as lead engineer in the design of piping and fire protection systems for healthcare, institutional, research and development, commercial and educational facilities. He is proficient in the development of construction plans and technical specifications. He has extensive experience in construction administration, construction observation, shop drawing review, contractor pay request verification and approval, and conflict resolution. As a NFPA member, he serves as fire protection engineer bringing NAVFAC Pacific worldwide expertise for delivery of military base development facilities, involving fire hydrant flow tests, design of wet pipe sprinkler systems, design of fire alarm and detection system, design of Mass Notification System, design and layout of fire extinguishers, and development of the life safety analysis.

**John Jones, P.E.** will assist with mechanical electrical plumbing & fire protection. John has nearly 40 years of electrical engineering experience. He specializes in performing professional engineering services for new construction and renovations for telecommunications and power distribution for a wide range of industrial and commercial infrastructure including container port facilities, water treatment facilities, wastewater plants, surface mining, extraction well fields, and vertical construction (offices, warehouses, laboratories, assembly, hospitality). John provides electrical engineering design for utility overhead to underground projects, medium voltage distribution, and substations.

**Sam Nauss, P.E.** will provide geotechnical engineering/materials testing. He has 33 years of experience in establishing subsurface soil investigation programs, including laboratory testing programs, and geophysical investigation programs, preparation of geotechnical design criteria documents for waterfront structures, dredging and reclamation work, bridges, power plants, industrial facilities, and essential structures. Work



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experience includes supervising subsurface soil investigation work, analyzing geotechnical data, designing shallow and deep foundations, including static and dynamic testing of deep foundations, designing, retaining structures designing foundation underpinning systems, seepage and settlement analyses, stability analyses of earth and rock slopes, liquefaction potential analyses and dynamic settlement, designing ground modifications for sites with poor subsurface conditions, and designing trenchless pipe installation.

**Pete Halioris, P.E.** will lead telecommunications. Pete has extensive electrical, communications, and security engineering design, design management, and construction management (CM) experience for electrical (Electronics), RF, power generation, telecommunications, systems engineering and program management. He is familiar with all aspects of electrical and communications for airports, rail transit, facilities, and infrastructure as well as other types of capital projects. His work products range from studies, estimates, schedules, manpower loading, calculations, design work and construction oversight. Pete's areas of specific technical competence include design of radio frequency systems, CCTV and video management systems, access control and Passenger Communications (public address/dynamic signage) systems, fiber optic networks, fire alarm electronics, intrusion detection systems, and toll revenue systems.



**Sean Murphy** is a mechanical engineer with Jacobs and brings with him 12 years of experience including mechanical engineering, project management and BIM execution. Sean is one of Jacobs' most experienced BIM practitioners and is proficient in many of the best mechanical calculation and BIM design software currently used in the industry. As a mechanical engineer, his responsibilities have included determining ventilation requirements for indoor-air quality, heating and cooling load calculations, ductwork and piping design, preparing reports and construction documents, and performing site investigations, and construction phase project administration. Mr. Murphy will assist with GIS and BIM.

**Rebecca Haney, GISP** is responsible for GIS & BIM. She is a Data Management Consultant in Jacob's State and Local Government client sector. She came to the firm in 2014 with years of experience as a data management, quality, integration, and support specialist in the water, wastewater, and storm water utilities industry. She has performed as a project manager, deputy project manager, technical lead, project technologist, and quality control on a variety of projects related to the management of data and information regarding utility assets, integration of systems like GIS and CMMS, and development and implementation of procedures and processes that support short and long term capital, operations, and maintenance programs and initiatives. She has lead and served as staff support for a variety of projects in the water, wastewater, and storm water industries.

**Patrick Daniell, P.E.** is responsible for GIS & BIM. He has more than 26 years of diversified electrical engineering experience in power and lighting distribution design for industrial facilities including marine, industrial, commercial, and residential projects. He is extensively involved in the design and testing of

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cathodic protection and grounding systems. Patrick is proficient with engineering design software including programs for data calculation and analysis, lighting systems, and power distribution.

**Jorge Abisambra, P.E.** will provide cost estimating. He specializes in heavy marine and ports design and construction - structural analysis, static and dynamic equilibrium, soil mechanics and foundation analysis, concrete design, steel structures, cost analysis allocation, schedule, logistics of construction, and shop drawings. He has extensive experience as a senior estimator assisting the ports and maritime group to produce all the engineer's estimates, cost budgets and help with constructability issues. He has direct experience as client, contractor, consulting engineer, field engineering design and management; for mega projects, as well as smaller projects.

#### CUMMINS CEDERBERG

**Jannek Cederberg, M.Sc., P.E.** will provide Coastal Resilience assistance. Mr. Cederberg is formally trained as a coastal and marine engineer from the Technical University of Denmark. He has more than fifteen years of experience in coastal and marine engineering. Prior to relocating to Miami, he worked in the coastal and marine engineering departments for two large international consulting firms. Mr. Cederberg has served as principal engineer for numerous internationally acclaimed waterfront projects. Mr. Cederberg has been selected to participate in expert groups related to marina design and waterfront development as well as serve as an expert witness. He is a recognized speaker on coastal resiliency in Florida.



**Jason Cummins, M.Sc., P.E.** will assist with container terminals. He is a Coastal Engineer with significant experience in inspections, planning, engineering, regulatory permitting and construction of coastal and waterfront development and infrastructure projects in Florida, Caribbean and Latin America. He earned his Bachelor's and Master's degrees in civil and coastal engineering from the University of Florida and has been practicing in Florida since. Mr. Cummins has served as principal engineer on numerous multi-million-dollar waterfront projects in Florida and the Caribbean. He is a recognized expert in coastal and marine construction and is frequently asked to serve as expert witness. He has worked on container terminals over the last decade throughout Florida and the Caribbean.

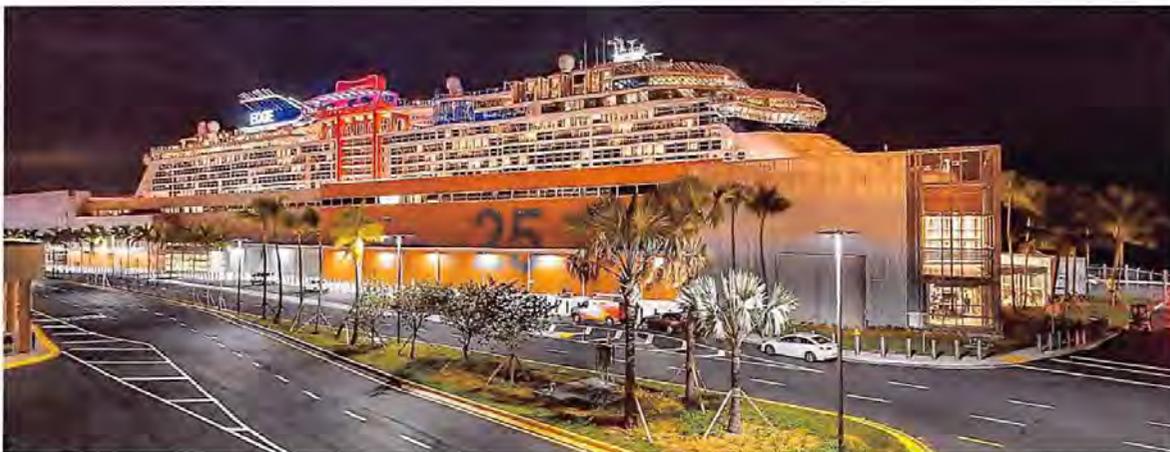
**Jason Taylor, M.Sc., P.E.** is a senior project engineer responsible for the structural inspections, design and construction administration for marine structural engineering projects. Mr. Taylor holds a Master's Degree in Structural Engineering from Stanford University and has twenty-one years of experience as a structural engineer with a focus on coastal and marine structures. He will assist with Maritime Structural efforts.



**Danielle H. Irwin, M.Sc., CFM, PWS, LEED AP** has over 18 years of experience in the field of water resource management including environmental assessment, monitoring, planning and regulatory permitting in the State of Florida. She is able to quickly evaluate complex scientific information related to wetlands, benthic ecosystems, and water quality and communicate it to the public and elected officials for decision-making purposes. She will assist with coastal resilience efforts.

**Gina Chiello** will assist on environmental compliance and permitting efforts, bring her expertise from the field with environmental biological and coastal conditions, assisting engineering and environmental permitting projects from start to finish, including all environmental fieldwork, environmental permit processing, and permit compliance. As a former reviewer with the Florida Department of Environmental Protection, she has a strong background in regulatory proceedings, including environmental and land use regulations at the local, state, and federal levels.

**Jessica C. Ward** is a Marine Biologist and Project Manager with nearly 20 years of experience. She has a strong marine background and has worked both nationally and internationally. Ms. Ward has expertise in the design, oversight and conduct of habitat characterizations and surveys, impact assessments, permitting, and mitigation planning for marine environments. She has extensive experience in designing and conducting monitoring programs for marine hardbottom and coral reef habitat, placement and biological evaluation of artificial reefs, and leading offshore surveys, including deep- water surveys. She will assist with environmental compliance and permitting.



**Rebecah Delp, M.P.S.** is responsible for performing all aquatic and terrestrial biological assessments, writing technical and analytical reports, and assisting with local, state, and federal environmental permitting. Prior to working for Cummins Cederberg, Ms. Delp was a Research Assistant for the Lirman Lab at the University of Miami, focusing on coral restoration and performing tasks such as coral microfragmentation, coral outplanting and nursery upkeep, and scientific diving. She will assist with environmental compliance



and permitting.

**Jon Cunningham** is a Project Engineer with experience in planning, engineering analysis, structural design, inspection and construction administration for marine and waterfront projects. Jon will assist with construction administration efforts specifically with marine and waterfront projects.

### STONER AND ASSOCIATES

**James Stoner, PSM** has been a professional surveyor and mapper for over 38 years and is a second generation land surveyor. He founded Stoner & Associates, Inc. in 1988. Mr. Stoner has extensive experience in all phases of land surveying. Stoner & Associates, Inc., is fully-automated and employs the latest technology to provide accurate, cost-effective surveys. Mr. Stoner has supervised both small and large scale surveying projects. His firm has successfully completed numerous roadway and other various projects, while working directly with the clients and consultants. He has over two decades of experience working at Port Everglades and Fort Lauderdale Hollywood International Airport.

**Richard G. Crawford, Jr., PSM** has been with Stoner & Associates, Inc. for over twenty-five years, and has over thirty years of experience within our industry. During this time, his experience has grown to include all of the types of surveys performed by the firm. Mr. Crawford is well trained and proficient in the processing of survey data collection from a variety of data collection devices, such as GPS, Digital Leveling, and Conventional Total Stations. He is also proficient in the preparation of survey drawings using AutoCAD, MicroStation, and Carlson Survey.

### PAN GEO CONSULTANTS, LLC

**Paul Catledge, P.E.** is a senior geotechnical engineer with over 15 years of engineering experience including geotechnical analysis, design and inspection of deep and shallow foundation systems, and structural design. Paul has worked on projects throughout South Florida for years, as an expert in regard to geotechnical conditions in Broward County. He has extensive experience with coastal geotechnical exploration and continues overseeing construction materials testing and structural inspections. He is registered in multiple states including Florida, New York, Indiana, Texas, Kentucky, Michigan and Louisiana.



**GREGORY A  
MENDEZ, PE  
PROJECT  
MANAGER**



**Education**

Bachelor of  
Engineering, Architectural  
Engineering, University of Miami,  
1998

**Registration**

Professional Engineer, Florida,  
64718, 2006

**Professional Affiliations**

American Society of Civil Engineers  
Cuban American Association of  
Civil Engineers  
Florida Engineering Society  
Florida Healthcare Engineers  
Association  
Latin Builder's Association

Gregory Mendez, P.E. is a senior engineer for the firm and has more than 20 years of civil engineering experience in site and infrastructural development type projects for public and private facilities throughout South Florida. Greg has substantial experience working for port and airports in South Florida. He was chosen to serve as the project manager, due to his extensive experience both previously running projects for BCAD at his previous employer, specific to related projects to the runway expansion. He also served as a senior engineer and project manager at Port Everglades in the past. He knows the expectations and requirements of the Client. He also has extensive utilities design experience and is also very experienced with fast track projects. His experience includes water, drainage and sewer designs, design reviews, managing designs and construction budgets, managing field inspection staff and managing client relations. Greg will serve as project manager.

**Project Experience**

**Punta Limon - Panama Phase I.** CMA was the lead preliminary engineering phase consultant for the development of a greenfield port in Central America. The proposed uses included cargo facilities (with trade zone light manufacturing), cruise terminal facilities, fueling and salvage/repair facilities. In addition, this development included the infrastructure for supporting housing and a maritime trade school. The scope included preliminary investigation (surface and bathymetric survey, geotechnical exploration, environmental impacts and utility demand calculations), facilities and site planning (inclusive of wind/wave studies to maximize cargo loading operations, dredge and fill calculations and access roadway studies), development of options for structural systems (including foundations and bulkhead) and cost estimating. Electrical, water and sewer services were not available adjacent to the site, so preliminary plant planning was included. LNG and solid waste facilities were also considered as part of the development.

In addition to the formal due investigative reports that were presented to the client, CMA developed 30% design drawings (civil, structural, architectural, electrical and landscape architectural) for the overall development. This was inclusive access and circulation roadways, utilities (water, sewer, electrical,





stormwater) and preliminary renderings for cruise terminal facilities and public amenities, such as pedestrian plazas. Structural drawings included preliminary sizing of foundation and bulkhead elements. The level of detail of these drawings greatly assisted in improving the accuracy of the cost estimating task included in the due diligence phase.

**Punta Limon - Panama Phase II.** After the preliminary engineering was accepted by the client, CMA moved into the environmental impact phase of the project. This included a desktop top and field work to determine impacts to endangered species of flora and fauna. In addition, impacts of the dredging operations were considered for impacts to the adjacent waterway. Fueling facilities, both diesel and LNG were considered, including spill prevention and cleanup planning. This task also included coordination with governmental agencies and permit applications through various departments, including environmental protection and navigation impacts.

The following projects represent Mr. Mendez' experience while with another firm.

**Port Everglades - Miscellaneous Projects.**

- Assessment of existing underground utilities in and around Eisenhower Blvd. for conditions and potential replacements
- Re-design of two major access gate areas
- New ship berth reconfiguration at slip 2
- Site plans and associated infrastructure for new cruise terminal

**Broward County Aviation Department – FLL Terminal 4 Civil Works.** Task Manager responsible for producing and coordinating engineering plans associated with the relocation and upgrade of all airside utilities for the Terminal 4 Expansion project. Utilities potable water mains, sanitary sewer mains, pressurized sanitary sewer force mains and the evaluation of the existing sewer pump stations. The project also included the design of the new passenger loading bridge for Gate F2, Terminal 3.

**Broward County Aviation Department – FLL Hydrant Fueling System Design.** Task Manager and engineer of record responsible for producing and coordinating engineering plans associated with the replacement of the existing 12" jet fuel pipeline around Terminal 4 with a 14" new fuel pipeline. This replacement was one of the "enabling" projects for the Terminal 4 expansion project. The project included the design of several pipeline valve vaults, an emergency fuel shut-off and leak detection system and the relocation of the fuel hydrant pit at Gate F2 at Terminal 4 to provide the proper separation to the proposed security access bridge joining Terminal 3 to Terminal 4.

Mr. Mendez was also the project manager responsible for the Airport Expansion Project – General Civil Engineering Contract with BCAD.





**PETER MOORE,  
P.E., F.ASCE, ENV  
SP, LEED AP  
PRINCIPAL-IN-  
CHARGE**



**Education**

Bachelor of Science  
Civil Engineering,  
University of Florida, 1997  
Master of Engineering  
Civil Engineering  
University of Florida, 2004

**Registration**

Professional Engineer, Florida,  
58709, 2002

**Professional Affiliations**

American Society of Civil Engineers

Florida Engineering Society

**Certifications**

Certified Stormwater Inspector

**Awards**

Florida Engineering Society  
Young Engineer of the Year  
Award 2009 (State-wide)

South Florida Business Journal  
Top 40 Under 40 Award 2009  
(Regional)



Peter Moore, P.E., LEED AP, ENV SP, F.ASCE is the president of CMA with more than 22 years of experience with a wide variety of utility, stormwater, transportation and other infrastructure projects. Since joining CMA in 1999, Mr. Moore has focused on the management, planning, design, permitting, and construction of various utility infrastructure projects for public clients throughout South Florida. A lifelong Broward County resident, Mr. Moore has worked on dozens of unique projects for Broward County valued at over \$100M in his career, literally serving in every role in a project team. His earliest projects with BCWWS date back to 1998 which gives him a unique understanding of the County's needs. Of particular note is Mr. Moore's experience in value engineering, including projects for Broward County WWS, Miami-Dade Water and Sewer Department and a development client in Saudi Arabia. Including his assistance as a reviewer and design guideline developer for the firm's work in the Republic of Panama, Mr. Moore has an additional \$500M of international project exposure to give him the full arsenal of tools to serve Broward County.

**Project Experience**

**Punta Limon - Panama Phase I.** CMA was the lead preliminary engineering phase consultant for the development of a greenfield port in Central America. The proposed uses included cargo facilities (with trade zone light manufacturing), cruise terminal facilities, fueling and salvage/repair facilities. In addition, this development included the infrastructure for supporting housing and a maritime trade school. The scope included preliminary investigation (surface and bathymetric survey, geotechnical exploration, environmental impacts and utility demand calculations), facilities and site planning (inclusive of wind/wave studies to maximize cargo loading operations, dredge and fill calculations and access roadway studies), development of options for structural systems (including foundations and bulkhead) and cost estimating. Electrical, water and sewer services were not available adjacent to the site, so preliminary plant planning was included. LNG and solid waste facilities were also considered as part of the development.

In addition to the formal due investigative reports that were presented to the client, CMA developed 30% design drawings



Broward County Bid #PNC2119212P1  
General Services/Port Facilities

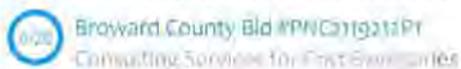


(civil, structural, architectural, electrical and landscape architectural) for the overall development. This was inclusive access and circulation roadways, utilities (water, sewer, electrical, stormwater) and preliminary renderings for cruise terminal facilities and public amenities, such as pedestrian plazas. Structural drawings included preliminary sizing of foundation and bulkhead elements. The level of detail of these drawings greatly assisted in improving the accuracy of the cost estimating task included in the due diligence phase.

**Punta Limon - Panama Phase II.** After the preliminary engineering was accepted by the client, CMA moved into the environmental impact phase of the project. This included a desktop top and field work to determine impacts to endangered species of flora and fauna. In addition, impacts of the dredging operations were considered for impacts to the adjacent waterway. Fueling facilities, both diesel and LNG were considered, including spill prevention and cleanup planning. This task also included coordination with governmental agencies and permit applications through various departments, including environmental protection and navigation impacts.

**BCWWS – Potable Water Storage Tank District 2A.** Chen Moore and Associates is a subconsultant to Carollo Engineers for Civil Engineering, Site Planning and Landscape Architecture Services for the Broward County 2A Tank. The project consists of a 14.50 acre site located in the City of Pompano Beach. As part of this project, Broward County expanded the facility to add a 5.0 million gallon potable water storage tank. Chen Moore provided design and permitting for the yard piping which included 54", 48", 42" and 16" ductile iron pipeline for the new tank. Chen Moore was also responsible for the water and sewer facilities which included a new 6" forcemain a new dry detention area, regrading of the site and storm drain inlets and permitting through FDEP and EPGMD. Chen Moore was responsible for all landscape architecture, site planning and DRC approval through the City.

**Ft Lauderdale FM Rehab, HDD & Swageline (1-4), Fort Lauderdale, FL.** Chen Moore and Associates (CMA) is the prime consultant for the 30" Emergency Force Main Rehabilitation project in the City of Fort Lauderdale. This innovative design-build project, led by Murphy Pipeline Contractors (MPC) was undertaken to provide both mainline force main replacement for aging infrastructure and to provide additional redundancy in case of future issues. The contract was divided into four (4) phases within the City of Fort Lauderdale. The nearly 20,000 linear feet of pipeline is being rehabilitated through a combination of swagelining, directional drilling, and traditional open cut installation over these four phases. CMA provided planning, design, permitting and engineering services during construction. Environmental compliance, subaqueous crossing, public involvement and maintenance of traffic in the busy Sistrunk and Himmarshee Business Districts were some of the additional project complexities. CMA also provided dewatering permitting and groundwater modeling due to contaminated sites within quarter mile of the projects.





**JOSE ACOSTA, P.E., F.ASCE**  
**QA/QC - INFRASTRUCTURE**

**Education**

Masters of Business Administration,  
Master of Business Administration,  
Auburn University, 2003



Bachelor of Science, Civil Engineering, University of Miami, 1999  
Bachelor of Science, Architectural Engineering, University of Miami, 1999

**Registration**

Professional Engineer, Florida, 63827, 2004  
Natl. Council of Examiners for Eng. & Surveying, 41987

**Professional Affiliations**

American Society of Civil Engineers  
American Water Works Association  
Cuban American Association of Civil Engineers  
Florida Engineering Foundation  
Florida Engineering Leadership Institute  
Florida Engineering Society  
Florida Engineers Political Action Committee  
Society of Military Engineers  
Urban Land Institute

Jose L. Acosta, P.E., F.ASCE is a vice president for the firm and has over 20 years of design and project management experience in various markets including municipal continuing service contracts, utility engineering, coastal developments, higher education, healthcare, transportation, transit oriented development, and commercial/residential/industrial private development. His background includes neighborhood improvement projects, streetscape enhancements, utility master planning, transportation planning, on- and off-site infrastructure design, bidding assistance and construction administration services for throughout Monroe, Miami-Dade, Broward and Palm Beach Counties. Mr. Acosta served as the firm's principal for the Punta Limon - Panama port master planning and preliminary engineering projects (Phases I and II) in Panama. Mr. Acosta will provide QA/QC for infrastructure.

**Project Experience**

**Punta Limon - Panama Phase I.** CMA was the lead preliminary engineering phase consultant for the development of a greenfield port in Central America. The proposed uses included cargo facilities (with trade zone light manufacturing), cruise terminal facilities, fueling and salvage/repair facilities. In addition, this development included the infrastructure for supporting housing and a maritime trade school. The scope included preliminary investigation (surface and bathymetric survey, geotechnical exploration, environmental impacts and utility demand calculations), facilities and site planning (inclusive of wind/wave studies to maximize cargo loading operations, dredge and fill calculations and access roadway studies), development of options for structural systems (including foundations and bulkhead) and cost estimating. Electrical, water and sewer services were not available adjacent to the site, so preliminary plant planning was included. LNG and solid waste facilities were also considered as part of the development.

In addition to the formal due investigative reports that were presented to the client, CMA developed 30% design drawings (civil, structural, architectural, electrical and landscape architectural) for the overall development. This was inclusive access and circulation roadways, utilities (water, sewer, electrical, stormwater) and preliminary renderings for cruise terminal



Broward County Bid #PNC2119212P1  
Consulting Services for Port Everglades



facilities and public amenities, such as pedestrian plazas. Structural drawings included preliminary sizing of foundation and bulkhead elements. The level of detail of these drawings greatly assisted in improving the accuracy of the cost estimating task included in the due diligence phase.

**Punta Limon - Panama Phase II.** After the preliminary engineering was accepted by the client, CMA moved into the environmental impact phase of the project. This included a desktop top and field work to determine impacts to endangered species of flora and fauna. In addition, impacts of the dredging operations were considered for impacts to the adjacent waterway. Fueling facilities, both diesel and LNG were considered, including spill prevention and cleanup planning. This task also included coordination with governmental agencies and permit applications through various departments, including environmental protection and navigation impacts.

**City Center Right-of-Way and Utility Improvement Project.** Chen Moore and Associates was the prime consultant and is responsible for providing surveying, planning, geotechnical investigation, design, permitting, preparation of construction documents, bid and award and construction engineering and inspection (CEI) services for infrastructure improvements within the public right-of-way (ROW) areas of the City Center neighborhood of Miami Beach. The project encompasses approximately 24,000 LF of ROW infrastructure improvements including; 8,700 LF of 8-inch water main replacements; sewer improvements, stormwater drainage improvements; paving & grading; roadway/traffic improvements (streets, sidewalks, curb and gutter, drainage, traffic control devices including striping, signing and channelization); streetscaping and landscaping enhancements; decorative, landscape and roadway lighting improvements; and roadway reconstruction. Additionally, due to existing listed contaminated sites within the proximity of the ROW improvements, environmental coordination, including site analysis and consideration of the radius of influence, was necessary for coordinating dewatering operations. Due to the existing mixed residential and commercial environment of this neighborhood, special design efforts were made to incorporate walkable community elements including meeting all ADA requirements, providing street furniture, providing bicycle paths, upgrading sidewalks, incorporating specialty treatments at crosswalks, landscaping improvements with specialized tree wells to provide a walkable surface and bulb outs to increase pedestrian friendliness and safety. This project also required extensive coordination with the public, adjacent CRAs, historic districts and various regulatory agencies.

**NMB-Highland Drive Roundabout.** CMA assisted the City of North Miami Beach with the design of a roundabout at the intersection of NE 137th Street and Highlands Drive, in order to reduce vehicular speed along Highlands Drive. The CMA team provided survey and geotechnical exploration; survey/as-built drawing review from local utilities; civil engineering regarding the site and initial site plan; and design and plan preparation including the demolition, earthwork, paving, grading, drainage, water, signing and marking, details, specifications and stormwater pollution prevention plans.

CMA coordinated permitting through Miami-Dade County – Department of Environmental Resource Management; Miami-Dade County Public Works; Miami-Dade County Fire Department; City of North Miami Beach Public Works; and Miami-Dade County RER Tree Section as required.

Construction administration support services included shop drawing reviews; responses to requests for information; weekly observation of the work and weekly field reports; and the coordination of certification/site close out packages. for Port Everglades



**DANIEL DAVILA,  
P.E.  
MARITIME  
CIVIL**



**Education**

Bachelor of Science  
Civil Engineering  
University of Florida, 2000

**Registration**

Professional Engineer, Florida  
63014, 2005

**Professional Affiliations**

American Academy of  
Environmental Engineers

American Water Works Association

Florida Engineering Society

Florida Healthcare Engineers  
Association

**Certifications**

Stormwater Management  
Inspector

Daniel Davila, P.E. has over 19 years of civil engineering experience. His experience includes planning, design and permitting of utility infrastructure, water and wastewater facilities, utilities master planning, infrastructure rehabilitation and renewal, transportation, roadway and drainage design and construction management. Mr. Davila has assisted numerous clients that range from municipalities, counties, federal agencies, healthcare districts, commercial developers to educational institutions. He has been the contract manager for small projects as well as large complex projects managing millions of dollars in design fees. In addition, he has worked in numerous water and wastewater trenchless technology projects in the State of Florida. Mr. Davila is the Engineer of Record for BCWWS potable water storage tanks and pumping facilities 3A in Dania Beach, 1B1 in Fort Lauderdale and 2A in Pompano Beach. He oversaw Chen Moore's Latin America office managing millions of dollars in design fees in Panama designing hundreds of miles of complex water and sewer projects, pump stations and potable water tanks. His international experience includes projects in Panama, Peru and Saudi Arabia. He served as project manager for the Punta Limon - Panama port master planning and preliminary engineering projects (Phases I and II) in Panama. Mr. Davila will provide Maritime Civil.

**Project Experience**

**Punta Limon - Panama Phase I.** CMA was the lead preliminary engineering phase consultant for the development of a greenfield port in Central America. The proposed uses included cargo facilities (with trade zone light manufacturing), cruise terminal facilities, fueling and salvage/repair facilities. In addition, this development included the infrastructure for supporting housing and a maritime trade school. The scope included preliminary investigation (surface and bathymetric survey, geotechnical exploration, environmental impacts and utility demand calculations), facilities and site planning (inclusive of wind/wave studies to maximize cargo loading operations, dredge and fill calculations and access roadway studies), development of options for structural systems (including foundations and bulkhead) and cost estimating. Electrical, water and sewer services were not available adjacent to the site, so preliminary plant planning was included. LNG and solid waste



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facilities were also considered as part of the development.

In addition to the formal due investigative reports that were presented to the client, CMA developed 30% design drawings (civil, structural, architectural, electrical and landscape architectural) for the overall development. This was inclusive access and circulation roadways, utilities (water, sewer, electrical, stormwater) and preliminary renderings for cruise terminal facilities and public amenities, such as pedestrian plazas. Structural drawings included preliminary sizing of foundation and bulkhead elements. The level of detail of these drawings greatly assisted in improving the accuracy of the cost estimating task included in the due diligence phase.

**Punta Limon - Panama Phase II.** After the preliminary engineering was accepted by the client, CMA moved into the environmental impact phase of the project. This included a desktop top and field work to determine impacts to endangered species of flora and fauna. In addition, impacts of the dredging operations were considered for impacts to the adjacent waterway. Fueling facilities, both diesel and LNG were considered, including spill prevention and cleanup planning. This task also included coordination with governmental agencies and permit applications through various departments, including environmental protection and navigation impacts.

**BCWWS–Potable Water Storage Tank and Pumping System District 3A.** Chen Moore and Associates is a subconsultant to Carollo Engineers for Civil Engineering, Site Planning and Landscape Architecture Services for the Broward County 3A Tank and Pumping facility. The project consists of a 4.9 acre site located in the City of Dania Beach. As part of this project, Broward County expanded the facility to add a 2.5 million gallon potable water storage tank and a High Service Pump Station (HSPS). Chen Moore provided design and permitting for the yard piping which included 24", 18" and 12" ductile iron pipeline for the tanks and pump. Chen Moore was also responsible for the water and sewer facilities which included gravity sewer lines, forcemain, a new lift station, potable water lines and fire lines. It also included a new stormwater system for the site which included the elimination of the existing lime sludge pond and creation of a dry detention system with a network of drainage pipe and storm inlets. The design also included permitting and construction documents for the removal of underground diesel fuel tanks. In addition, Chen Moore was responsible for all landscape architecture, site planning, DRC approvals and variances through the City.

**BCWWS – Potable Water Storage Tank and Pumping System District 1B1.** Chen Moore and Associates is a subconsultant to Carollo Engineers for Civil Engineering, Site Planning and Landscape Architecture Services for the Broward County 1B1 Tank and Pumping facility. The project consists of a 5.70 acre site located in the City of Fort Lauderdale. As part of this project, Broward County expanded the facility to add a 1.5 million gallon potable water storage tank and a High Service Pump Station (HSPS). Chen Moore provided design and permitting for the yard piping which included 24", 16", 12" and 10" ductile iron pipeline for the tank and pump. Chen Moore was also responsible for the water and sewer facilities which, relocation of a 16" forcemain, a new lift station, potable water lines and fire lines. It also included a new stormwater system for the site which included a dry detention system with a network of exfiltration trenches and storm inlets. In addition, Chen Moore was responsible for all landscape architecture, site planning, DRC approvals and variances through the City.



**JASON MCCLAIR, P.E., CFM,  
LEED AP  
STORMWATER**

**Education**

Bachelor of  
Science, Civil  
Engineering,  
University of Florida,  
1996



**Registration**

Professional Engineer, Florida,  
56962, 2001

**Professional Affiliations**

American Public Works Association  
American Society of Civil Engineers  
American Water Works Association  
Broward County Gator Club  
Florida Engineering Society  
National Society of Professional  
Engineers  
University of Florida Alumni  
Association

**Certifications**

SewerCAD Master Modeler  
(Haestad Methods)  
WaterCAD Master Modeler  
(Haestad Methods)  
ICPR Modeler (Streamline  
Technologies)  
Certified Floodplain Manager  
FDOT LAP Compliance  
SWMM Stormwater Modeler  
FDOT LAP Compliance update June  
2014  
SWMM Modeling Software Training

Jason McClair, P.E., CFM, LEED AP is a senior civil engineer with more than 22 years of experience in utility infrastructure design, regulatory permitting, stormwater modeling, stormwater collection systems design, water distribution, and sanitary transmission systems. Since joining CMA in 2001, Mr. McClair has focused on the management, planning, design, permitting, and construction of various utility infrastructure projects for public clients throughout South Florida. He has extensive experience with hydraulic and hydrologic modeling for the analysis of stormwater, water, and wastewater systems. Mr. McClair has over 10 years of experience working directly for BCAD. He was the project manager for the Fort Lauderdale-Hollywood International Airport Stormwater Master Plan Update Project from 2008 through 2013. Those efforts led to CMA being recently selected to lead the overall infrastructure master planning for BCAD's airports. He is currently responsible for the stormwater design and permitting on the FLL North Airfield Pavement Rehabilitation Project. He also is currently working on the stormwater design and permitting on various projects at Fort Lauderdale Executive Airport. Mr. McClair will be the project manager on this contract. In addition to managing their entire project team, Mr. McClair will be responsible for stormwater.

**Project Experience**

**Fort Lauderdale-Hollywood International Airport Stormwater Master Plan Update.** Under Phase 1 of this project, Broward County Aviation Department (BCAD) retained Chen Moore and Associates (CMA) to update the FLL Stormwater Master Plan (SWMP), which was completed by a previous consultant in 2001. CMA reviewed the data and analysis from all prior reports, converted the existing stormwater model from SWMM to ICPR, and updated the ICPR model with any new system data and new projects provided by BCAD. CMA updated the existing conditions stormwater model and created the future conditions stormwater model to assess alternative drainage improvements needed to achieve required and desired Levels of Service (LOS) for various storm events. The stormwater model was used to run rainfall scenarios for the comparison of pre-development (existing) conditions versus post-development (future) conditions from a water quantity (runoff) and water quality (storage) perspective. The stormwater model was used





to analyze the performance of the existing Primary Stormwater Management System (PSMS). Phase 1 for this project included the following work items:

- Review and verify earlier work by other consultants during 2001-2005
- Convert previous SWMM stormwater model to ICPR model
- Obtain updated topographic data for TIN development
- Calculate updated hydrologic parameter for drainage basins

**FLL North Runway Pavement Rehabilitation.** CMA was responsible for all planning, design, and permitting of all stormwater improvements required for the North Airfield Pavements Rehabilitation Project at Fort Lauderdale-Hollywood International Airport (FLL). The pavement improvements within the associated Runway and Taxiway Safety and Object Free Areas impacted on other facilities within the FLL North Airfield, including the existing stormwater management system. CMA was responsible for determining the additional drainage improvements that were necessary to handle the additional stormwater runoff from any new impervious pavement areas. The existing grass areas surrounding the existing pavement areas provide flood control and water quality treatment benefits to the entire North Airfield area by providing storage volume and infiltration capacity for any stormwater runoff from these surrounding impervious areas. When the existing pavement areas are expanded under this project, new storage capacity for stormwater runoff must to be created nearby to account for the loss of existing pervious areas, to account for the loss of any existing stormwater storage capacity, and to provide additional capacity for these new impervious areas. The expansion of the Engineered Material Arresting System Beds (EMAS) beds in the FLL North Airfield also impacted these existing swale areas and dry retention and created additional impervious areas. In order to accomplish these improvements, the CMA team reviewed the exiting overall ICPR stormwater model for FLL to verify the additional stormwater management areas need to be developed in the FLL North Airfield Area.

**Stormwater Master Plan Modeling and Design Implementation.** CMA is providing engineering design services for the under Stormwater Improvement Master Plan Modeling and Design Implementation Project under the for the City of Fort Lauderdale. CMA is responsible for the planning, modeling, design, and permitting for the proposed stormwater improvements within the Victoria Park neighborhood, which was identified as one of the 7 priority neighborhoods with the City. A combination of multiple improvements to the stormwater management system have been developed to alleviate the existing flooding issues within the Victoria Park neighborhood. The proposed stormwater improvements within the Victoria Park neighborhood include separate alternatives for the eastern and western portions of the neighborhood. Within the western portions of the Victoria Park neighborhood, the proposed stormwater improvements consist of installing additional pipe interconnectivity of various existing independent drainage networks located throughout the neighborhood, installing new exfiltration trench, and completing limited roadway swale restoration where feasible. Within the easter portions of the Victoria Park neighborhood, the proposed improvements consist of interconnecting 6 independent positive outfalls into the Middle River, installing new backflow prevention, and adding a new stormwater pump station. The proposed stormwater improvements within the Victoria Park neighborhood are estimated to be approximately \$13 million in construction costs.



**BRENT WHITFIELD,**  
**P.E.**  
**ENV SP**  
**STORMWATER**



**Education**

Master of Science,  
Civil Engineering  
University of Florida, 2003  
Bachelor of Science  
Civil Engineering  
University of Florida, 2001

**Registration**

Professional Engineer, Florida  
65720, 2007

**Professional Affiliations**

American Society of Civil Engineers  
American Water Resources Assoc.  
Florida Engineering Society

**Certifications**

Envision Sustainability Professional  
Florida Stormwater Association  
(FSA) Stormwater Operator  
Certification Level 2

**Awards**

ASCE State Section - Engineer of  
the Year 2018

National Engineers' Council  
Outstanding Engineering  
Achievement Merit - 2019



Brent Whitfield, P.E., ENV SP is the Director of Water Resources at Chen Moore and Associates. Mr. Whitfield has significant professional experience performing watershed, airport and municipal master planning studies in addition to preparing construction plans and specifications and providing construction administration services. Over the past 18 years, Mr. Whitfield has been responsible for the design and management of dozens of utility infrastructure projects. He is currently the project manager on the South County Reclaimed Water Pipeline Phase 1A WUD 18-022 for Palm Beach County. This project includes master planning, design and implementation of a reclaimed main with many challenges to coordinate with various stakeholders including FPL for Palm Beach County Utilities and addresses many of the areas and experience needed in this RFP. He will oversee stormwater design efforts.

**Project Experience**

**South County Reclaimed Water Transmission Pipeline Phase 1A (R2018-0296) with PBCWUD, Palm Beach, FL.** Palm Beach County and Broward County have an Interlocal Agreement related to the construction, ownership, operation, and maintenance of a Regional Reclaimed Water System to deliver reclaimed water from Broward County's northern wastewater treatment plant to the Palm Beach County Water Utilities Department service area. The service initiation to Palm Beach County will be 2 MGD of annual average daily flow by April 2021.

The expansion is being designed in phases for multiple competitively bid construction sub-projects. Detailed construction documents and related permits will be provided to allow the construction of approximately 3.7 miles of reclaimed water pipeline and related facilities to be completed and placed into service before April 2021. The design includes pipe of various size and material, with the transmission main being 24-inch ductile iron pipe and the service lines varying from 10-inch to 12-inch with some sections designed to use C-900 PVC due to corrosion potential. The design also includes a 500 ft horizontal directional drill to cross Glades Road and a private lake.

Preliminary field investigations included as-built records review, site investigation and photo study; environmental assessments;



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subsurface utility engineering; geotechnical investigation; a cultural resources investigation; and survey. The design includes lake discharge facilities to meet irrigation demand at each golf course being served. The permitting process requires a Hillsboro Canal Crossing with the SFWMD; permitting for impacts to County roads; permitting for impacts to trees and wellfields; permitting of reclaimed pipeline; permitting for dewatering during construction. In addition to design, permitting and construction services, Chen Moore will be applying for ENVISION Certification (Institute for Sustainable Infrastructure) on behalf of Palm Beach County.

**2016/2017 City Engineering Services, Coral Springs, FL.** Since 2005, Chen Moore and Associates has served as the City Engineer for Coral Springs. Beginning in February 2012, the firm has also started to provide planning support for the City of Coral Springs Community Development Department. The firm performs the typical duties of an on-staff engineer and planner, including architectural review board compliance, DRC review for site plan compliance, engineering permit review and inspections, development reviews and concurrency evaluations, coordination with other City departments and outside agencies, and a variety of special projects. As part of this contract, the firm manages the vertical construction program for the City, including work for several departments including Police, Fire, Parks and Recs, Public Works and the Fine Arts Center.

Chen Moore and Associates instituted a Municipal Separate Storm Sewer System (MS4) program for the City of Coral Springs and has been maintaining the program for several years. Chen Moore and Associates provided training to the City's building department staff. Currently, Chen Moore and Associates is responsible for inspecting projects that require a MS4 permit in the City of Coral Springs. Inspections occur following heavy rainfalls or on a monthly basis if rainfall has been minimal. As a co-permittee to Broward County through the state MS4 program, Chen Moore and Associates completes a yearly report that ensures the City is in compliance with the requirements of the program.

**Neighborhood Street Program - District 4 Year 1, Lake Worth, FL.** As Lead Project Engineer and Project Manager, Mr. Whitfield is providing engineering design for improvements to roadways, pedestrian facilities, drainage facilities and underground water utilities in District 4 of the City of Lake Worth. The project is funded by a voter approved bond and as such incorporates significant public outreach in addition to the typical engineering project components preparing construction contract documents and procuring permits. Once the design phase is completed, Mr. Whitfield will oversee CMA staff as they provide construction administration and owner's representation during the Contractor's progress.

**Southgate Boulevard & Rock Island Force Main, Margate, FL.** CMA is assisting Carollo Engineers with installing approximately 6,000 linear feet of sanitary sewer force main to provide system redundancy. CMA is responsible for the survey, geotechnical engineering, subsurface utility investigation, design, permitting and bidding assistance. The firm is also providing hydraulic modeling services to verify the impacts to other areas of the sewer transmission system with the implementation of the new force main.



**TERESA A LEWIS,  
E.I.  
STORMWATER**



**Education**

Bachelor  
of Science, Civil  
Engineering, University of Florida,  
2016

**Registration**

Engineer In Training, Florida,  
1100021145, 2017

**Professional Affiliations**

American Society of Civil Engineers

Teresa Lewis, E.I. is an associate engineer in our Fort Lauderdale office. Her previous experience includes serving as a construction engineering and inspection intern where she conducted hands-on field inspection of multi-strand, post-tensioning and grouting, segmental bridge erection, complex concrete segment casting and all aspect of major bridge construction project management; and performing oversight of various construction activities including coordination with contractor personnel, reviewing contract documents and resolving field issues on the project site. Over the past few years, she has become one of the firm's most talented stormwater and water system master planning modelers, specific to municipalities throughout Broward County, working with many local officials addressing future infrastructure improvements proposed within capital improvement projects. She will assist with stormwater design.

**Project Experience**

**Broward County UAZ 110/111 & 113 Water Sewer Improvements 113B (RFP No. R1356803P1), Lauderdale Lakes, FL.** The Water and Sanitary Sewer Improvements for the UAZ 110/111 & 113 Project will include the improvements to the existing water distribution system, sanitary sewer system, and transmission systems within the project area along with the restoration of surface areas disturbed for the construction of said improvements. All projects combined a total area of over 1000 acres within multiple Cities. The existing system being replaced consists of approximately 168,100LF of water mains, 122,100 LF of sanitary sewer mains and 23,600 LF force main. The existing water main consists of asbestos cement, cast iron, ductile iron, galvanized steel, polyvinyl chloride pipe ranging from 2" - 24" in diameter size. The sanitary sewer consists of vitrified clay, fold and form liner, cured in place liner and ductile iron pipe ranging from 8" - 15" in diameter size. The force main consists of asbestos cement, cured in place liner, ductile iron and polyvinyl chloride pipe ranging from 6" - 16" in diameter size. There are 8 Broward County lift stations in these UAZ areas and 1 private lift station which sanitary sewer systems will need to connect to. Two of these stations will need rehabilitation/ replacement. The restoration of roadways, sidewalks, driveways, and landscape areas will need to be performed as needed for



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water and sanitary sewer improvement construction.

**Broward County UAZ 110/111 & 113 Water Sewer Improvements 113A (RFP No. R1356803P1), Lauderdale Lakes, FL.** The Water and Sanitary Sewer Improvements for the UAZ 110/111 & 113 Project included design of the improvements to the existing water distribution system, sanitary sewer system, and transmission systems within the project area along with the restoration of surface areas disturbed for the construction of said improvements. All projects combined a total area of over 1000 acres within multiple Cities. The existing system being replaced consists of approximately 168,100LF of water mains, 122,100 LF of sanitary sewer mains and 23,600 LF force main. The existing water main consists of asbestos cement, cast iron, ductile iron, galvanized steel, polyvinyl chloride pipe ranging from 2" - 24" in diameter size. The sanitary sewer consists of vitrified clay, fold and form liner, cured in place liner and ductile iron pipe ranging from 8" - 15" in diameter size. The force main consists of asbestos cement, cured in place liner, ductile iron and polyvinyl chloride pipe ranging from 6" - 16" in diameter size. There are 8 Broward County lift stations in these UAZ areas and 1 private lift station which sanitary sewer systems will need to connect to. Two of these stations required complete rehabilitation and/or replacement. In addition to the restoration of roadways, sidewalks, and driveways, Chen Moore also provided the landscape design needed for water and sanitary sewer improvement construction.

**FLL North Runway Pavement Rehabilitation, Ft Lauderdale, FL.** CMA was responsible for all planning, design, and permitting of all stormwater improvements required for the North Airfield Pavements Rehabilitation Project at Fort Lauderdale-Hollywood International Airport (FLL). The pavement improvements within the associated Runway and Taxiway Safety and Object Free Areas impacted on other facilities within the FLL North Airfield, including the existing stormwater management system. CMA was responsible for determining the additional drainage improvements that were necessary to handle the additional stormwater runoff from any new impervious pavement areas. The existing grass areas surrounding the existing pavement areas provide flood control and water quality treatment benefits to the entire North Airfield area by providing storage volume and infiltration capacity for any stormwater runoff from these surrounding impervious areas. When the existing pavement areas are expanded under this project, new storage capacity for stormwater runoff must be created nearby to account for the loss of existing pervious areas, to account for the loss of any existing stormwater storage capacity, and to provide additional capacity for these new impervious areas. The expansion of the Engineered Material Arresting System Beds (EMAS) beds in the FLL North Airfield also impacted these existing swale areas and dry retention and created additional impervious areas. In order to accomplish these improvements, the CMA team reviewed the exiting overall ICPR stormwater model for FLL to verify the additional stormwater management areas need to be developed in the FLL North Airfield Area.

**Ft Lauderdale FM Rehab, HDD & Swageline (1-4), Fort Lauderdale, FL.** This innovative design-build project, led by Murphy Pipeline Contractors (MPC) was undertaken to provide both mainline force main replacement for aging infrastructure and to provide additional redundancy in case of future issues. The contract was divided into four (4) phases within the City of Fort Lauderdale. TCMA provided planning, design, permitting and engineering services during construction. Environmental compliance, subaqueous crossing, public involvement and maintenance of traffic in the busy Sistrunk and Himmarshee Business Districts were some of the additional project complexities. CMA also provided dewatering permitting and groundwater modeling due to contaminated sites within quarter mile of the projects.





**MICHAEL A ALBERT, PE**  
**COASTAL RESILIENCE**

**Education**

Master of Science,  
Hydrology  
from College  
of Agricultural  
& Biological Eng,  
University of Florida, 2002  
Bachelor of Science, Geology from  
College of Liberal Arts & Science,  
University of Florida, 1996



**Registration**

Professional Engineer, Florida,  
68598

Michael Albert, P.E. is a Senior Engineer for Chen Moore and Associates. He has more than 17 years of professional experience including an 8-year career at the SFWMD. His key experience includes project management of design and construction management activities for Everglades Restoration projects, water impoundments, water control structures, water and wastewater conveyance systems, and infrastructure master planning. In addition, his technical skills include project management, design, permitting, planning and construction management of water resource related projects. His expertise includes extensive work with the USACE specific to environmental compliance for large projects involving coastal resilience. He will provide Coastal Resilience engineering.

**Project Experience**

South County Reclaimed Water Transmission Pipeline Phase 1A (R2018-0296) with PBCWUD, Palm Beach, FL. Palm Beach County and Broward County have an Interlocal Agreement related to the construction, ownership, operation, and maintenance of a Regional Reclaimed Water System to deliver reclaimed water from Broward County's northern wastewater treatment plant to the Palm Beach County Water Utilities Department service area. The service initiation to Palm Beach County will be 2 MGD of annual average daily flow by April 2021.

The expansion is being designed in phases for multiple competitively bid construction sub-projects. Detailed construction documents and related permits will be provided to allow the construction of approximately 3.7 miles of reclaimed water pipeline and related facilities to be completed and placed into service before April 2021. The design includes pipe of various size and material, with the transmission main being 24-inch ductile iron pipe and the service lines varying from 10-inch to 12-inch with some sections designed to use C-900 PVC due to corrosion potential. The design also includes a 500 ft horizontal directional drill to cross Glades Road and a private lake.

Preliminary field investigations included as-built records review, site investigation and photo study; environmental assessments; subsurface utility engineering; geotechnical investigation; a cultural resources investigation; and survey. The design includes





lake discharge facilities to meet irrigation demand at each golf course being served. The permitting process requires a Hillsboro Canal Crossing with the SFWMD; permitting for impacts to County roads; permitting for impacts to trees and wellfields; permitting of reclaimed pipeline; permitting for dewatering during construction. In addition to design, permitting and construction services, Chen Moore will be applying for ENVISION Certification (Institute for Sustainable Infrastructure) on behalf of Palm Beach County.

**Potable Water Hydraulic Model Update WUD18-004 with PBCWUD, Palm Beach, FL.** CMA is responsible for updating Palm Beach County's existing potable water hydraulic model in InfoWater software. This modeling effort includes the revision and update of the current physical and operating conditions, system calibration, and evaluation of existing and future demands. Physical conditions to be updated as part of the scope include piping layout, system controls and water demand projections. The updated model will be used to determine the adequacy of the system in relation to fire flow, meeting future demand and water age. CMA is responsible for performing data review and investigation, potable water model update, model calibration, potable water model evaluation, and complete a technical memorandum.

**Force Main Hydraulic Model to Support East WWTP Upgrade - City of Margate.** The City has requested CMA to provide a scope of services to evaluate the existing force main hydraulic model with the end goal of determining total flow capacity that can be routed to the East Wastewater Treatment Plant (WWTP) under existing or proposed force main modifications. The existing force main hydraulic model was originally developed in 2008 using the InfoWater software and was partially updated in 2016. Using the force main hydraulic model, this project provides lift station and collection system information, flow record analysis for East and West WWTP, and evaluation of specific scenarios.

**Indian River Drive Water Main Improvements, Hobe Sound, FL.** CMA is assisting the SMRU with the installation of approximately 5,660 linear feet of new water main to replace existing water main that has reached the end of its service life. The project includes the construction of new HDPE water main; the new water main will connect to the existing 10" running water main east-west at the southern end of Indian River Drive and to the existing 10" water main on SE Gleason Street. CMA is also assisting with transferring the water services from the rear of the property to the new water main in the front of the property; the installation of fire hydrants at intervals required by fire department/SMRU; and abandonment of the existing water main.

The CMA team will provide survey, geotechnical exploration, SUE, field investigation, design and permitting for this project.





**SAFIYA T BREA,  
PE, LEED AP  
WATER AND  
WASTEWATER**



**Education**

Bachelor of Science, Civil Engineering, University of Florida, 2002

**Registration**

Professional Engineer, Florida, 66388, 2007

**Professional Affiliations**

American Society of Civil Engineers  
Florida Engineering Leadership Institute  
Florida Engineering Society Leadership Broward  
Women of Tomorrow

**Certifications**

Qualified Stormwater Management Inspector  
OSHA Certification  
LEED AP  
Advanced Work Zone Traffic Control Certification

Safiya Brea, P.E., LEED AP has over 17 years of experience with neighborhood improvement projects, including the design of roadways, sidewalks, drainage, water and wastewater infrastructure. As a senior civil engineer, she has managed projects ranging from smaller design build utility projects to large-scale neighborhood improvement programs from a BODR (Basis of Design Report) through design, permitting, construction management, and closeout with projects with hundreds of thousands of linear feet of water main, force main and gravity sewer, along with regional pump stations. Ms. Brea has managed and designed streetscape improvements, roundabouts, lift station, stormwater improvements and master plans, and BODRs. Her duties include construction management, managing staff addressing construction efforts updating the County's GIS data, design work, water modeling, sewer modeling, and report preparation for municipalities throughout South Florida. She will provide water and wastewater engineering.

**Project Experience**

**Broward County UAZ 110/111 & 113 Water Sewer Improvements 113B, Lauderdale Lakes, FL.** The Water and Sanitary Sewer Improvements for the UAZ 110/111 & 113 Project will include the improvements to the existing water distribution system, sanitary sewer system, and transmission systems within the project area along with the restoration of surface areas disturbed for the construction of said improvements. All projects combined a total area of over 1000 acres within multiple Cities. The existing system being replaced consists of approximately 168,100LF of water mains, 122,100 LF of sanitary sewer mains and 23,600 LF force main. The existing water main consists of asbestos cement, cast iron, ductile iron, galvanized steel, polyvinyl chloride pipe ranging from 2" - 24" in diameter size. The sanitary sewer consists of vitrified clay, fold and form liner, cured in place liner and ductile iron pipe ranging from 8" - 15" in diameter size. The force main consists of asbestos cement, cured in place liner, ductile iron and polyvinyl chloride pipe ranging from 6" - 16" in diameter size. There are 8 Broward County lift stations in these UAZ areas and 1 private lift station which sanitary sewer systems will need to connect to. Two of these stations will need



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rehabilitation/replacement. The restoration of roadways, sidewalks, driveways, and landscape areas will need to be performed as needed for water and sanitary sewer improvement construction.

**3BC Septic Tank Elimination Analysis Memo, Fort Lauderdale, FL.** CMA is providing utility investigation and coordination as well as permitting coordination on Broward County Water and Wastewater Services 3BC Septic Tank Elimination Preliminary Memo. The project also includes data collection and verification; hydraulic modeling; and a memo summarizing the hydraulic findings. The area consists of pockets of unsewered areas that are served by septic tanks that the County has identified to be eliminated and replaced with a new sanitary sewer system.

**Broadview Park NIP 20" Water Main Extension, Broward County, FL.** Chen Moore and Associates was responsible for the design and construction administration of the 20" Water Main Extension on SR-7 (US 441). This project is approximately 9,000 LF in length and links two previous Chen Moore and Associates projects to provide a water source for the Broadview Park Neighborhood from Broward County WTP 1A. This project involved extensive permitting and coordination with FDOT District IV as the majority of the water main falls within FDOT ROW. The permit requirement also included complex Maintenance of Traffic design. The day operations included the horizontal directional drill at Broward Boulevard, water main testing, and restoration and materials testing in association with FDOT inspectors. Night operations included open cut water main installation and roadwork after the pipe installation to allow for the roadway to be opened in the morning. The project was completed on time and under budget.

**BC UAZ 303, 314 & 318 Bid Pack 1, Broward County, FL.** The Broward County UAZ 303, 314, 316 and 318 project was part 1 of what was projected to be an \$8.8 million project replacing existing water and providing sanitary sewer for County Service Areas in the City of Dania Beach, just east of State Road 7, north and south of Griffin Road. The main technical components included replacing 12-inch water mains on County roads, replacing the residential water distribution system, providing sanitary sewer systems to eliminate existing septic tanks, and rehabilitating or installing new lift stations. In order to obtain the necessary information, site visits concentrated on contacting residents to determine the location of existing tanks. A great deal of coordination was required to accommodate developer projects, tie into County projects and obtain easements for crossing private properties. GIS was used to keep track of all ongoing projects, log pertinent site information, determine the projected flow rates, track questions from residents of the area and track responses from utility companies regarding their existing facilities. The design of these improvements began in January 2009 and construction has been completed. Chen Moore and Associates also performed construction administration for this project.

**Hillsboro Beach Water Main Replacement Design/Construction Administration, Hillsboro Beach, FL.** CMA is providing engineering design services and construction administration for water improvement needs for the Town of Hillsboro Beach along A1A from SE 10th Street to the Hillsboro Inlet. CMA previously modeled and completed a system evaluation report determining the facilities in need of replacement. The improvements will include replacement of parallel water mains along the barrier island and has taken into consideration future needs, environment, pipe types, various installation methods, project coordination and funding.





**JENNIFER SMITH,**  
**P.E.**  
**WATER AND**  
**WASTEWATER**



**Education**

Bachelor of Science  
Civil Engineering  
Florida Atlantic University, 2006

**Registration**

Professional Engineer, Florida  
72232, 2011

**Professional Affiliations**

American Society of Civil Engineers

Florida Engineering Society

Florida Water and Environmental  
Association

National Society of Professional  
Engineers

**Certifications**

Stormwater Management  
Inspector  
ICPR 3 and 4 Software Training  
SWMM Software Training

**Awards**

2009 Most Active Broward ASCE  
Member

Jennifer Smith, P.E. is currently serving as a senior engineer with Chen Moore and Associates. Her 13 years of experience in the civil engineering field includes project management and detailed design work on several of the Broward County UAZ Water and Sewer Improvement Projects. Mrs. Smith has been part of some of the largest neighborhood utility infrastructure projects ever to be designed and constructed for BCWWS. Her duties include water main, sanitary sewer, lift station design and permitting, as well as stormwater modeling, design and permitting. Ms. Smith is the most recent ASCE Broward Branch Past President and recently won the Young Engineer of the Year from the Florida Section of ASCE. She will provide water and wastewater engineering.

**Project Experience**

**Flamingo Road Reclaimed Water Main Design Build, Miramar, FL.** The City of Miramar retained Southern Underground Industries, Inc and Chen Moore and Associates (CMA) for a design build of the directional drill of a reclaimed water main. The project is located along Flamingo Road, bounded to the south by Somerset Boulevard and to the north by Miramar Boulevard. The project included the directional drill of approximately 7,700 linear feet of 8-inch reclaimed water main, including under the FDOT Turnpike and SFWMD Canal. The project included 15 connections to service both existing and future property owners and irrigation connections to the Broward County medians. CMA coordinated with the City and Contractor to design, permit and provide limited construction engineering, inspection and administration services for the directional drill of the reclaimed watermain.

**Broward County UAZ 110/111 & 113 Water Sewer Improvements 113B, Lauderdale Lakes, FL.** The Water and Sanitary Sewer Improvements for the UAZ 110/111 & 113 Project will include the improvements to the existing water distribution system, sanitary sewer system, and transmission systems within the project area along with the restoration of surface areas disturbed for the construction of said improvements. All projects combined a total area of over 1000 acres within multiple Cities. The existing system being replaced consists of approximately 168,100LF of water mains, 122,100 LF of sanitary sewer mains



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and 23,600 LF force main. The existing water main consists of asbestos cement, cast iron, ductile iron, galvanized steel, polyvinyl chloride pipe ranging from 2" - 24" in diameter size. The sanitary sewer consists of vitrified clay, fold and form liner, cured in place liner and ductile iron pipe ranging from 8" - 15" in diameter size. The force main consists of asbestos cement, cured in place liner, ductile iron and polyvinyl chloride pipe ranging from 6" - 16" in diameter size. There are 8 Broward County lift stations in these UAZ areas and 1 private lift station which sanitary sewer systems will need to connect to. Two of these stations will need rehabilitation/replacement. The restoration of roadways, sidewalks, driveways, and landscape areas will need to be performed as needed for water and sanitary sewer improvement construction.

**Hillsboro Beach Water Main Replacement Design/Construction Administration, Hillsboro Beach, FL.** CMA is providing engineering design services and construction administration for water improvement needs for the Town of Hillsboro Beach along A1A from SE 10th Street to the Hillsboro Inlet. CMA previously modeled and completed a system evaluation report determining the facilities in need of replacement. The improvements will include replacement of parallel water mains along the barrier island and has taken into consideration future needs, environment, pipe types, various installation methods, project coordination and funding.

**BC UAZ 303, 314 & 318 Bid Pack 1, Broward County, FL.** The Broward County UAZ 303, 314, 316 and 318 project was part 1 of what was projected to be an \$8.8 million project replacing existing water and providing sanitary sewer for County Service Areas in the City of Dania Beach, just east of State Road 7, north and south of Griffin Road. The main technical components included replacing 12-inch water mains on County roads, replacing the residential water distribution system, providing sanitary sewer systems to eliminate existing septic tanks, and rehabilitating or installing new lift stations. In order to obtain the necessary information, site visits concentrated on contacting residents to determine the location of existing tanks. A great deal of coordination was required to accommodate developer projects, tie into County projects and obtain easements for crossing private properties. GIS was used to keep track of all ongoing projects, log pertinent site information, determine the projected flow rates, track questions from residents of the area and track responses from utility companies regarding their existing facilities. The design of these improvements began in January 2009 and construction has been completed. Chen Moore and Associates also performed construction administration for this project.





**SUZANNE MARIE  
DOMBROWSKI,  
P.E., ENV SP  
WATER AND  
WASTEWATER**



**Education**

Bachelor of Science, Civil  
Engineering, University of Florida,  
2005

Master of Engineering, Civil  
Engineering, University of Florida,  
2006

**Registration**

Professional Engineer, Florida,  
69918, 2009

**Professional Affiliations**

American Society of Civil Engineers  
American Water Works Association  
Florida Engineering Society

**Certifications**

Stormwater Management  
Inspector  
FDOT Specifications Package  
Preparation Training for  
Consultants  
Envision Sustainability Professional  
SWMM Stormwater Modeler  
Advanced Maintenance of Traffic

Suzanne Dombrowski, P.E., ENV SP is a senior engineer with Chen Moore and Associates. She holds a bachelor's degree in civil engineering and a master's degree in engineering with a specialization in civil engineering from the University of Florida. Ms. Dombrowski has managed a wide range of municipal utility, drainage and roadway projects from the planning stages throughout construction. She also designs the site civil improvements for both public and municipal facilities. Her extensive experience with water and sewer designs for various large utility Clients in South Florida, specifically in coastal communities makes her a good match for projects at Port Everglades. She will provide water and wastewater engineering.

**Project Experience**

**Broadview Park Neighborhood Improvement Program - Bid Pack 4, Broward County, FL.** The Broadview Park Neighborhood Improvement Program (BNIP) was the last of the Neighborhood Infrastructure Improvements projects to be carried out by Broward County in the unincorporated areas. Chen Moore and Associates was selected as the prime consultant for the Basis of Design Report (BODR) and subsequent bid packages. The fourth Bid Package addressed the sanitary sewer and drainage improvements, as well as improvements to the community's sidewalks, roadway and landscape.

**Broadview Park NIP 20" Water Main Extension.** Chen Moore and Associates was responsible for the design and construction administration of the 20" Water Main Extension on SR-7 (US 441). This project is approximately 9,000 LF in length and links two previous Chen Moore and Associates projects to provide a water source for the Broadview Park Neighborhood from Broward County WTP 1A. This project involved extensive permitting and coordination with FDOT District IV as the majority of the water main falls within FDOT ROW. The permit requirement also included complex Maintenance of Traffic design. The day operations included the horizontal directional drill at Broward Boulevard, water main testing, and restoration and materials testing in association with FDOT inspectors. Night operations included open cut water main installation and roadwork after the pipe installation to allow for the roadway to be opened in





the morning. The project was completed on time and under budget.

**BC UAZ 316 Bid Pack 2, Broward County, FL.** The Broward County UAZ 316 project is part 2 of the estimated \$8.8 million project servicing Broward County utility zones in the City of Dania Beach which includes replacing existing water and providing sanitary sewer just east of State Road 7, and south of Griffin Road. The main technical components include replacing 12-inch water mains on County Roads, replacing the residential water distribution system, providing sanitary sewer systems to eliminate existing septic tanks and rehabilitating or installing new lift stations. In order to obtain the necessary information, site visits concentrated on contacting residents to determine the location of existing tanks. A great deal of coordination was required to accommodate developer projects, tie into County projects and obtain easements for crossing private properties. GIS was used to keep track of all ongoing projects, determine the projected flow rates, track questions from residents of the area and track responses from utility companies regarding their existing facilities. Design of these improvements began in 2009 and construction was completed in 2016. Chen Moore and Associates also performed construction administration for this project.

**Fort Lauderdale-Hollywood International Airport Stormwater Master Plan Update Phase 2, Fort Lauderdale, FL.** The purpose of Phase 2 was to provide routine updates to the stormwater model(s) based on progress design drawings of the South Runway Expansion Project and the associated future development, including but not limited to, terminal and gate area improvements. The existing stormwater model created during Phase 1 includes design assumptions based on preliminary planning documents for the South Runway Expansion Project. The updates to the stormwater model during Phase 2 were based on progress design submittals for the South Runway Expansion Project and approved design plans for other new development at FLL, which enhanced the accuracy of the stormwater model. Phase 2 for this project included the following work items:

- Prepare a Stormwater Capital Improvement Plan for FLL
- Certify existing permits at FLL
- Provide ongoing stormwater permitting assistance to BCAD
- Ongoing coordination with the design team for South Runway
- Conduct analysis of various sea level rise scenarios
- Expansion Project
- Complete drainage review of various developments throughout FLL
- Develop drainage design standards manual
- Prepare application package for stormwater conceptual permit for FLL

**Ft Lauderdale Fire Station 8, Ft Lauderdale, FL.** Chen Moore and Associates is providing landscape architectural, site planning and civil engineering services for the design, permitting and construction inspection services for a new municipal fire station located in an industrial area of the City of Fort Lauderdale. The Fire Station will be designed to Florida Green Building Coalition standards. CMA is a subconsultant to CPZ Architecture and our role entails site design including building placement, parking layout, site circulation, storm water treatment and storage as well as landscape and irrigation design.





**PATRICK D KAIMRAJH, PE  
TRANSPORTATION AND  
TRAFFIC ENGINEERING**

**Education**

Bachelor of  
Science, Civil  
Engineering,  
University of  
Miami, 2010



**Registration**

Professional Engineer, Florida,  
78535, 2015

**Professional Affiliations**

American Society of Civil Engineers  
American Water Works Association  
Florida Engineering Society

Patrick Kaimrajh, P.E. serves as a senior engineer for CMA and specializes in civil engineering design, drafting, permitting, and construction inspection. His 10 years of design experience includes paving, drainage and stormwater management, sanitary sewer and stormwater pump stations, water main, site development, and neighborhood improvement projects. He has prepared engineering drawings, cost evaluations, design reports and various permit applications. In addition, Mr. Kaimrajh has performed construction inspections for drainage, watermain, sanitary sewer, and pavement. He has worked on various significant transportation roadway projects in Broward and Miami-Dade Counties. He has been the lead civil engineer for CMA on the Brightline/Virgin Train Stations and Transit Oriented Development in Fort Lauderdale and West Palm Beach. He will assist with transportation and traffic engineering.

**Project Experience**

**Broward County UAZ 110/111 & 113 Water Sewer Improvements 113A (RFP No. R1356803P1), Lauderdale Lakes, FL.** The Water and Sanitary Sewer Improvements for the UAZ 110/111 & 113 Project included design of the improvements to the existing water distribution system, sanitary sewer system, and transmission systems within the project area along with the restoration of surface areas disturbed for the construction of said improvements. All projects combined a total area of over 1000 acres within multiple Cities. The existing system being replaced consists of approximately 168,100LF of water mains, 122,100 LF of sanitary sewer mains and 23,600 LF force main. The existing water main consists of asbestos cement, cast iron, ductile iron, galvanized steel, polyvinyl chloride pipe ranging from 2" - 24" in diameter size. The sanitary sewer consists of vitrified clay, fold and form liner, cured in place liner and ductile iron pipe ranging from 8" - 15" in diameter size. The force main consists of asbestos cement, cured in place liner, ductile iron and polyvinyl chloride pipe ranging from 6" - 16" in diameter size. There are 8 Broward County lift stations in these UAZ areas and 1 private lift station which sanitary sewer systems will need to connect to. Two of these stations required complete rehabilitation and/or replacement. In addition to the restoration of roadways, sidewalks, and driveways, Chen Moore also



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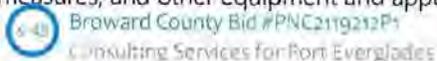


provided the landscape design needed for water and sanitary sewer improvement construction.

**Broward County UAZ 110/111 & 113 Water Sewer Improvements 113B (RFP No. R1356803P1), Lauderdale Lakes, FL.** The Water and Sanitary Sewer Improvements for the UAZ 110/111 & 113 Project will include the improvements to the existing water distribution system, sanitary sewer system, and transmission systems within the project area along with the restoration of surface areas disturbed for the construction of said improvements. All projects combined a total area of over 1000 acres within multiple Cities. The existing system being replaced consists of approximately 168,100LF of water mains, 122,100 LF of sanitary sewer mains and 23,600 LF force main. The existing water main consists of asbestos cement, cast iron, ductile iron, galvanized steel, polyvinyl chloride pipe ranging from 2" - 24" in diameter size. The sanitary sewer consists of vitrified clay, fold and form liner, cured in place liner and ductile iron pipe ranging from 8" - 15" in diameter size. The force main consists of asbestos cement, cured in place liner, ductile iron and polyvinyl chloride pipe ranging from 6" - 16" in diameter size. There are 8 Broward County lift stations in these UAZ areas and 1 private lift station which sanitary sewer systems will need to connect to. Two of these stations will need rehabilitation/replacement. The restoration of roadways, sidewalks, driveways, and landscape areas will need to be performed as needed for water and sanitary sewer improvement construction.

**Stormwater Master Plan Modeling and Design Implementation, Ft Lauderdale, FL.** CMA is providing engineering design services for the Stormwater Improvement Master Plan Modeling and Design Implementation Project under the City of Fort Lauderdale. CMA is responsible for the planning, modeling, design, and permitting for the proposed stormwater improvements within the Victoria Park neighborhood, which was identified as one of the 7 priority neighborhoods with the City. A combination of multiple improvements to the stormwater management system have been developed to alleviate the existing flooding issues within the Victoria Park neighborhood. The proposed stormwater improvements within the Victoria Park neighborhood include separate alternatives for the eastern and western portions of the neighborhood. Within the western portions of the Victoria Park neighborhood, the proposed stormwater improvements consist of installing additional pipe interconnectivity of various existing independent drainage networks located throughout the neighborhood, installing new exfiltration trench, and completing limited roadway swale restoration where feasible. Within the eastern portions of the Victoria Park neighborhood, the proposed improvements consist of interconnecting 6 independent positive outfalls into the Middle River, installing new backflow prevention, and adding a new stormwater pump station. The proposed stormwater improvements within the Victoria Park neighborhood are estimated to be approximately \$13 million in construction costs.

**Brighton Drainage Improvements, Glades County, FL.** The Brighton Seminole Indian Reservation encompasses approximately 57 square miles in Glades County, Florida, within the Indian Prairie Water Use Basin on the northwest side of Lake Okeechobee. The Reservation is located within the boundaries of the Lake Istokpoga - Indian Prairie Basin hydrologic system. The project required an engineering analysis for both structural and non-structural drainage measures. The structural portion of the project consisted of sizing and optimal location for a new pump(s), the construction, supply, and installation of any new pump(s), engine and frames, and fuel storage assemblies; wet well and feed culvert; canal intake structure; end walls; concrete slabs; pump station and fuel tank sheds; intake and discharge erosion control and stabilization measures; and other equipment and appurtenances.





**MICHAEL G BUICK, PE  
ENVIRONMENTAL  
COMPLIANCE AND  
PERMITTING**



**Education**

Bachelor  
of Science,  
Biosystems  
Engineering, University of  
Manitoba, 2000

**Registration**

Professional Engineer, Florida,  
65894, 2007

**Professional Affiliations**

American Society of Civil Engineers  
Environmental Coalition of Miami  
and the Beaches  
Florida Engineering Society  
National Society of Professional  
Engineers  
Urban Land Institute

**Certifications**

Certified Stormwater Management  
Inspector

Mike Buick, P.E. is a senior engineer and has over 16 years of experience in site development. His experience includes planning, design, permitting and construction administration of site infrastructure including site paving, grading and drainage and site utility plans for many municipal and land development projects. Many of Mr. Buick's projects have been in on-sites with complex environmental remediation and mitigation requirements. Mr. Buick has been able to maneuver civil design efforts along with collaborating with environmental consultants and regulators to meet required specifications in an efficient and concise way. Mr. Buick will assist with environmental compliance and permitting.

**Project Experience**

**Ft Lauderdale Fire Station 8, Ft Lauderdale, FL.** Chen Moore and Associates is providing landscape architectural, site planning and civil engineering services for the design, permitting and construction inspection services for a new municipal fire station located in an industrial area of the City of Fort Lauderdale. The Fire Station will be designed to Florida Green Building Coalition standards. CMA is a subconsultant to CPZ Architecture and our role entails site design including building placement, parking layout, site circulation, storm water treatment and storage as well as landscape and irrigation design.

**AS-01 - MIA Rental Car Facility Drainage Assessment - Civil Engineering Services, Miami, FL.** The Miami Rental Car Facility has operating car washes and these do use some reclaimed water, so metered potable water coming into the facility does not equal the sanitary sewer flows out of the facility and the monthly water & sewer fees paid are exorbitant and not an accurate representation of what is actually being used. CMA shall closely examine the existing sanitary sewer system, connections and points/means of discharge, coordinate with M-D WASD and recommend a proper means of metering the existing flows and prepare a report, documenting said recommendations accordingly.

**Diana Drive Roadway & Drainage Improvements - BID: FY 2013-2014-006, Hallandale Beach, FL.** CMA was tasked with





the design and reconstruct Diana Drive, including new bike lanes, from Golden Isles Drive, east to just past SE 26th Avenue and to re-stripe SE 26th Avenue from Diana drive to Hallandale Beach Blvd., for the City of Hallandale Beach. The proposed design and realignment includes divided (eastbound and westbound) lanes, a new bike lane (on the eastbound lane) and shared use striping (on the westbound lane), additional on-street parallel parking spaces, a new drainage system, a new landscaped and irrigated median, new curb, new sidewalks with ADA accessibility, signage, striping, landscaping and irrigation. CMA provided a new topographic survey, geotechnical exploration, engineering design, permitting, bid & award assistance and, as an optional service, limited construction administration support services.

**City Center Right-of-Way and Utility Improvement Project, Miami Beach, FL.** Chen Moore and Associates was the prime consultant and is responsible for providing surveying, planning, geotechnical investigation, design, permitting, preparation of construction documents, bid and award and construction engineering and inspection (CEI) services for infrastructure improvements within the public right-of-way (ROW) areas of the City Center neighborhood of Miami Beach. The project encompasses approximately 24,000 LF of ROW infrastructure improvements including: 8,700 LF of 8-inch water main replacements; sewer improvements, stormwater drainage improvements; paving & grading; roadway/traffic improvements (streets, sidewalks, curb and gutter, drainage, traffic control devices including striping, signing and channelization); streetscaping and landscaping enhancements; decorative, landscape and roadway lighting improvements; and roadway reconstruction. Additionally, due to existing listed contaminated sites within the proximity of the ROW improvements, environmental coordination, including site analysis and consideration of the radius of influence, was necessary for coordinating dewatering operations. Due to the existing mixed residential and commercial environment of this neighborhood, special design efforts were made to incorporate walkable community elements including meeting all ADA requirements, providing street furniture, providing bicycle paths, upgrading sidewalks, incorporating specialty treatments at crosswalks, landscaping improvements with specialized tree wells to provide a walkable surface and bulb outs to increase pedestrian friendliness and safety. This project also required extensive coordination with the public, adjacent CRAs, historic districts and various regulatory agencies.

As part of the proposed stormwater and drainage services, extensive analysis was conducted utilizing ICPR Modeling and GIS to meet or exceed required stormwater Level of Services standards. ICPR Modeling was utilized for the design and permitting of 14 drainage gravity wells. The proposed stormwater design included the introduction of catch basins and stormwater piping to effectively collect and route the stormwater to 16 drainage gravity wells with overflow outfall connections to Biscayne Bay. Due to the environmental sensitivity of Biscayne Bay design and implementation of water quality treatment measures was an important consideration and design factor of the system prior to outfall to the Bay and was closely coordinated with regulatory agencies during the permitting process.



**CRISTOBAL BETANCOURT, RLA  
LANDSCAPE  
ARCHITECTURE**



**Education**

Bachelor of  
Science  
Landscape Architecture  
Cornell University, 1995  
Master of Science, Urban Design  
Royal Danish Academy of Fine Arts  
School of Architecture, 1996

**Registration**

Registered Landscape Architect,  
Florida, LA6666941, 2008

**Professional Affiliations**

American Planning Association

American Society of Landscape  
Architects

Florida Recreation and Park  
Association

Urban Land Institute

**Certifications**

Council of Landscape Architectural  
Registration Board

Cris Betancourt, RLA is Chen Moore and Associates' Director of Landscape Architecture and Planning. He has over 23 years of experience providing planning and landscape architecture design solutions for public and private sector clients. Mr. Betancourt provides a full range of services starting with due diligence and master planning culminating in detailed site design. He is well versed in the use of low-impact development techniques applied to site planning. He is currently working on the Broward County UAZ Water and Sewer Improvement project that addresses many of the areas and experience needed in this RFP. Mr. Betancourt and his team have landscape architecture contracts with most FDOT districts in Florida, including District 4. He has worked on airports and ports in Florida and in the Caribbean. Mr. Betancourt will lead landscape architecture efforts and can assist in master planning needs.

**Project Experience**

**Broward County UAZ 110/111 & 113 Water Sewer Improvements 113B, Lauderdale Lakes, FL.** The Water and Sanitary Sewer Improvements for the UAZ 110/111 & 113 Project will include the improvements to the existing water distribution system, sanitary sewer system, and transmission systems within the project area along with the restoration of surface areas disturbed for the construction of said improvements. All projects combined a total area of over 1000 acres within multiple Cities. The existing system being replaced consists of approximately 168,100LF of water mains, 122,100 LF of sanitary sewer mains and 23,600 LF force main. The existing water main consists of asbestos cement, cast iron, ductile iron, galvanized steel, polyvinyl chloride pipe ranging from 2" - 24" in diameter size. The sanitary sewer consists of vitrified clay, fold and form liner, cured in place liner and ductile iron pipe ranging from 8" - 15" in diameter size. The force main consists of asbestos cement, cured in place liner, ductile iron and polyvinyl chloride pipe ranging from 6" - 16" in diameter size. There are 8 Broward County lift stations in these UAZ areas and 1 private lift station which sanitary sewer systems will need to connect to. Two of these stations will need rehabilitation/replacement. The restoration of roadways, sidewalks, driveways, and landscape areas will need to be performed as needed for water and sanitary sewer improvement construction.



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**BCWWS–Potable Water Storage Tank and Pumping System District 3A.** Chen Moore and Associates is a subconsultant to Carollo Engineers for Civil Engineering, Site Planning and Landscape Architecture Services for the Broward County 3A Tank and Pumping facility. The project consists of a 4.9 acre site located in the City of Dania Beach. As part of this project, Broward County expanded the facility to add a 2.5 million gallon potable water storage tank and a High Service Pump Station (HSPS). Chen Moore provided design and permitting for the yard piping which included 24", 18" and 12" ductile iron pipeline for the tanks and pump. Chen Moore was also responsible for the water and sewer facilities which included gravity sewer lines, forcemain, a new lift station, potable water lines and fire lines. It also included a new stormwater system for the site which included the elimination of the existing lime sludge pond and creation of a dry detention system with a network of drainage pipe and storm inlets. The design also included permitting and construction documents for the removal of underground diesel fuel tanks. In addition, Chen Moore was responsible for all landscape architecture, site planning, DRC approvals and variances through the City.

**BCWWS – Potable Water Storage Tank and Pumping System District 1B1.** Chen Moore and Associates is a subconsultant to Carollo Engineers for Civil Engineering, Site Planning and Landscape Architecture Services for the Broward County 1B1 Tank and Pumping facility. The project consists of a 5.70 acre site located in the City of Fort Lauderdale. As part of this project, Broward County expanded the facility to add a 1.5 million gallon potable water storage tank and a High Service Pump Station (HSPS). Chen Moore provided design and permitting for the yard piping which included 24", 16", 12" and 10" ductile iron pipeline for the tank and pump. Chen Moore was also responsible for the water and sewer facilities which, relocation of a 16" forcemain, a new lift station, potable water lines and fire lines. It also included a new stormwater system for the site which included a dry detention system with a network of exfiltration trenches and storm inlets. In addition, Chen Moore was responsible for all landscape architecture, site planning, DRC approvals and variances through the City.

**2016/2017 City Engineering Services, Coral Springs, FL.** Since 2005, Chen Moore and Associates has served as the City Engineer for Coral Springs. Beginning in February 2012, the firm has also started to provide planning support for the City of Coral Springs Community Development Department. The firm performs the typical duties of an on-staff engineer and planner, including architectural review board compliance, DRC review for site plan compliance, engineering permit review and inspections, development reviews and concurrency evaluations, coordination with other City departments and outside agencies, and a variety of special projects. As part of this contract, the firm manages the vertical construction program for the City, including work for several departments including Police, Fire, Parks and Recs, Public Works and the Fine Arts Center. Chen Moore and Associates instituted a Municipal Separate Storm Sewer System (MS4) program for the City of Coral Springs and has been maintaining the program for several years. Chen Moore and Associates provided training to the City's building department staff. Currently, Chen Moore and Associates is responsible for inspecting projects that require a MS4 permit in the City of Coral Springs. Inspections occur following heavy rainfalls or on a monthly basis if rainfall has been minimal. As a co-permittee to Broward County through the state MS4 program, Chen Moore and Associates completes a yearly report that ensures the City is in compliance with the requirements of the program.





**ERIC HARRISON,  
RLA  
SITE PLANNING**



**Education**

Bachelor of Science  
Landscape Architecture  
University of Florida, 2002  
Associate of Arts  
Palm Beach Community College  
1996

**Registration**

Registered Landscape Architect  
Florida, LA6667129, 2012

**Professional Affiliations**

International Society of  
Arboriculture

Eric Harrison, RLA has over 16 years of landscape architecture experience with several municipalities throughout South Florida. He has provided design services and site planning for parks and recreation, university campuses, including the three most recent BCWWS tank and pump station projects which include facilities 3A, 1B1 and 2A. He also has significant experience working on the Broward County UAZ Water and Sewer Improvement project that addresses many of the areas and experience needed in this RFP. He has extensive experience working for projects for BCAD, Broward County and FDOT District 4 projects over the last decade. Mr. Harrison will assist with landscape architecture and irrigation design needs.

**Project Experience**

**Broward County UAZ 110/111 & 113 Water Sewer Improvements 113B, Lauderdale Lakes, FL.** The Water and Sanitary Sewer Improvements for the UAZ 110/111 & 113 Project will include the improvements to the existing water distribution system, sanitary sewer system, and transmission systems within the project area along with the restoration of surface areas disturbed for the construction of said improvements. All projects combined a total area of over 1000 acres within multiple Cities. The existing system being replaced consists of approximately 168,100LF of water mains, 122,100 LF of sanitary sewer mains and 23,600 LF force main. The existing water main consists of asbestos cement, cast iron, ductile iron, galvanized steel, polyvinyl chloride pipe ranging from 2" - 24" in diameter size. The sanitary sewer consists of vitrified clay, fold and form liner, cured in place liner and ductile iron pipe ranging from 8" - 15" in diameter size. The force main consists of asbestos cement, cured in place liner, ductile iron and polyvinyl chloride pipe ranging from 6" - 16" in diameter size. There are 8 Broward County lift stations in these UAZ areas and 1 private lift station which sanitary sewer systems will need to connect to. Two of these stations will need rehabilitation/replacement. The restoration of roadways, sidewalks, driveways, and landscape areas will need to be performed as needed for water and sanitary sewer improvement construction.

**Broward County UAZ 110/111 & 113 Water Sewer Improvements 113A, Lauderdale Lakes, FL.** The Water and



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Sanitary Sewer Improvements for the UAZ 110/111 & 113 Project included design of the improvements to the existing water distribution system, sanitary sewer system, and transmission systems within the project area along with the restoration of surface areas disturbed for the construction of said improvements. All projects combined a total area of over 1000 acres within multiple Cities. The existing system being replaced consists of approximately 168,100LF of water mains, 122,100 LF of sanitary sewer mains and 23,600 LF force main. The existing water main consists of asbestos cement, cast iron, ductile iron, galvanized steel, polyvinyl chloride pipe ranging from 2" - 24" in diameter size. The sanitary sewer consists of vitrified clay, fold and form liner, cured in place liner and ductile iron pipe ranging from 8" - 15" in diameter size. The force main consists of asbestos cement, cured in place liner, ductile iron and polyvinyl chloride pipe ranging from 6" - 16" in diameter size. There are 8 Broward County lift stations in these UAZ areas and 1 private lift station which sanitary sewer systems will need to connect to. Two of these stations required complete rehabilitation and/or replacement. In addition to the restoration of roadways, sidewalks, and driveways, Chen Moore also provided the landscape design needed for water and sanitary sewer improvement construction.

**BCWWS–Potable Water Storage Tank and Pumping System District 3A.** Chen Moore and Associates is a subconsultant to Carollo Engineers for Civil Engineering, Site Planning and Landscape Architecture Services for the Broward County 3A Tank and Pumping facility. The project consists of a 4.9 acre site located in the City of Dania Beach. As part of this project, Broward County expanded the facility to add a 2.5 million gallon potable water storage tank and a High Service Pump Station (HSPS). Chen Moore provided design and permitting for the yard piping which included 24", 18" and 12" ductile iron pipeline for the tanks and pump. Chen Moore was also responsible for the water and sewer facilities which included gravity sewer lines, forcemain, a new lift station, potable water lines and fire lines. It also included a new stormwater system for the site which included the elimination of the existing lime sludge pond and creation of a dry detention system with a network of drainage pipe and storm inlets. The design also included permitting and construction documents for the removal of underground diesel fuel tanks. In addition, Chen Moore was responsible for all landscape architecture, site planning, DRC approvals and variances through the City.

**BCWWS – Potable Water Storage Tank and Pumping System District 1B1.** Chen Moore and Associates is a subconsultant to Carollo Engineers for Civil Engineering, Site Planning and Landscape Architecture Services for the Broward County 1B1 Tank and Pumping facility. The project consists of a 5.70 acre site located in the City of Fort Lauderdale. As part of this project, Broward County expanded the facility to add a 1.5 million gallon potable water storage tank and a High Service Pump Station (HSPS). Chen Moore provided design and permitting for the yard piping which included 24", 16", 12" and 10" ductile iron pipeline for the tank and pump. Chen Moore was also responsible for the water and sewer facilities which, relocation of a 16" forcemain, a new lift station, potable water lines and fire lines. It also included a new stormwater system for the site which included a dry detention system with a network of exfiltration trenches and storm inlets. In addition, Chen Moore was responsible for all landscape architecture, site planning, DRC approvals and variances through the City.

**BCWWS – Potable Water Storage Tank District 2A.** Chen Moore and Associates is a subconsultant to Carollo Engineers for Civil Engineering, Site Planning and Landscape Architecture Services for the Broward County 2A Tank. The project consists of a 14.50 acre site located in the City of Pompano Beach. As part of this project, Broward County expanded the facility to add a 5.0 million gallon potable water storage tank. Chen Moore provided design and permitting for the yard piping which included 54", 48", 42" and 16" ductile iron pipeline for the new tank. Chen Moore was also responsible for the water and sewer facilities which included a new 6" forcemain a new dry detention area, regrading of the site and storm drain inlets and permitting through FDEP and EPGMD. Chen Moore was responsible for all landscape architecture, site planning and DRC approval through the City.





**JOSE MCCRAY  
CONSTRUCTION  
ADMINISTRATION**

**Certifications**

FDOT – CTQP  
Asphalt Level 1  
Troxler Radiation  
Safety Officer  
Troxler Nuclear  
Density Gauge Operator  
OSHA 8 Hour Trench Safety  
Course  
PSMJ Project Management  
Bootcamp  
Florida Stormwater and  
Sedimentation Control Inspector  
FEC Railroad Contractor Safety  
IMSA Traffic Signal Inspector



Jose McCray is a senior inspector for Chen Moore and Associates. Mr. McCray has over 35 years of construction experience, from surveying through project management. His present responsibilities include coordination and monitoring of construction activities including governmental projects and site development for residential, commercial and industrial use projects. He serves as liaison to owners, contractors, subcontractors, residents and governmental agencies. Additional responsibilities include overseeing the review/processing of change orders, progress payments and reports, and representation of owners and engineers at pre-construction meetings and other related conferences. His responsibilities included managing staff and construction administration services for several neighborhood improvement projects for Broward County Water and Wastewater Services and several private residential/commercial land development clients. These projects included the construction of roadway, water distribution, sewer, wastewater lift stations, drainage and paving. Mr. McCray has also served as a project manager and superintendent for large South Florida contracting companies. He will assist with construction administration.

**Project Experience**

**FCAA Cudjoe Regional Wastewater Collection, Key West, FL.**

Chen Moore was the prime consultant responsible for the design, permitting, and construction under this \$90 million design-build utility project. The proposed utility improvements included the replacement of existing water mains and the installation of new sanitary sewer collection systems that will convey sewage from four of the Lower Keys to a transmission force main and/or master lift station located along US1/Overseas Highway. The project includes replacement of 35,579 LF of 4" C-900 water main, 21,831 LF of 6" C-900 water main and 205 LF of 8" C-900 water main. This project was the single largest in terms of value and number of customers served ever undertaken by Monroe County. The utility improvements consisted of wastewater service and water replacement to the islands of Ramrod Key, Lower Sugarloaf Key, Little Torch Key, and Big Pine Key. The wastewater collection system includes approximately 500,000 linear feet of gravity sewer and low-pressure grinder sewer





with over 62 neighborhood lift stations that serve approximately 4,500 customers. The transmission system consists of four master pump stations and PVC and HDPE pipeline laid along US Highway 1. The project requires close coordination with the local, state and federal permitting agencies. Chen Moore participated in neighborhood meetings to explain the proposed improvements.

**Broward County UAZ 110/111 & 113 Water Sewer Improvements 113B, Lauderdale Lakes, FL.** The Water and Sanitary Sewer Improvements for the UAZ 110/111 & 113 Project will include the improvements to the existing water distribution system, sanitary sewer system, and transmission systems within the project area along with the restoration of surface areas disturbed for the construction of said improvements. All projects combined a total area of over 1000 acres within multiple Cities. The existing system being replaced consists of approximately 168,100LF of water mains, 122,100 LF of sanitary sewer mains and 23,600 LF force main. The existing water main consists of asbestos cement, cast iron, ductile iron, galvanized steel, polyvinyl chloride pipe ranging from 2" - 24" in diameter size. The sanitary sewer consists of vitrified clay, fold and form liner, cured in place liner and ductile iron pipe ranging from 8" – 15" in diameter size. The force main consists of asbestos cement, cured in place liner, ductile iron and polyvinyl chloride pipe ranging from 6" – 16" in diameter size. There are 8 Broward County lift stations in these UAZ areas and 1 private lift station which sanitary sewer systems will need to connect to. Two of these stations will need rehabilitation/replacement. The restoration of roadways, sidewalks, driveways, and landscape areas will need to be performed as needed for water and sanitary sewer improvement construction.

**BC UAZ 316 Bid Pack 2, Broward County, FL.** The Broward County UAZ 316 project is part 2 of the estimated \$8.8 million project servicing Broward County utility zones in the City of Dania Beach which includes replacing existing water and providing sanitary sewer just east of State Road 7, and south of Griffin Road. The main technical components include replacing 12-inch water mains on County Roads, replacing the residential water distribution system, providing sanitary sewer systems to eliminate existing septic tanks and rehabilitating or installing new lift stations. In order to obtain the necessary information, site visits concentrated on contacting residents to determine the location of existing tanks. A great deal of coordination was required to accommodate developer projects, tie into County projects and obtain easements for crossing private properties. GIS was used to keep track of all ongoing projects, determine the projected flow rates, track questions from residents of the area and track responses from utility companies regarding their existing facilities. Design of these improvements began in 2009 and construction was completed in 2016. Chen Moore and Associates also performed construction administration for this project.

**Hillsboro Beach Water Main Replacement Design/Construction Administration, Hillsboro Beach, FL.** CMA is providing engineering design services and construction administration for water improvement needs for the Town of Hillsboro Beach along A1A from SE 10th Street to the Hillsboro Inlet. CMA previously modeled and completed a system evaluation report determining the facilities in need of replacement. The improvements will include replacement of parallel water mains along the barrier island and has taken into consideration future needs, environment, pipe types, various installation methods, project coordination and funding.





**DERRICK SMITH, CFM, LEED AP  
CONSTRUCTION  
ADMINISTRATION**

**Education**

Bachelor of  
Science  
Building  
Construction  
Management  
University of Florida,  
2005



**Professional Affiliations**

Student Chapter of the  
Associated Builders and  
Contractors

University of Florida Alumni  
Association

**Certifications**

Earthwork Construction  
Inspection Level I  
Concrete Field Inspector  
Specifications  
Managing Floodplain  
Development through the NFIP  
10-Hour OSHA Hazard  
Recognition Training for the  
Construction Industry Course  
NPDES Inspector  
Hazmat Certification

Derrick Smith, CFM, LEED AP has over 14 years of experience as a construction project administrator and engineering inspector. He has assisted municipal clients in the role of construction project administrator and owner's representative on several projects, including Broward County, which included vertical construction as well as site development. In his role, Mr. Smith was the liaison between the Owner and Contractor performing the oversight of infrastructure, various municipal buildings and utility installations. His duties included managing budgets and schedules and monitoring construction activities. Mr. Smith has been responsible for the development of several projects for the City of Coral Springs. In his role of owner's representative, he was also responsible for coordinating project activities, construction document interpretation, approving pay requests, assisting with dispute resolution and providing directives to multiple parties including contractors and consultants. He will assist with construction administration.

**Project Experience**

**Broward County UAZ 110/111 & 113 Water Sewer Improvements 113B, Lauderdale Lakes, FL.** The Water and Sanitary Sewer Improvements for the UAZ 110/111 & 113 Project will include the improvements to the existing water distribution system, sanitary sewer system, and transmission systems within the project area along with the restoration of surface areas disturbed for the construction of said improvements. All projects combined a total area of over 1000 acres within multiple Cities. The existing system being replaced consists of approximately 168,100LF of water mains, 122,100 LF of sanitary sewer mains and 23,600 LF force main. The existing water main consists of asbestos cement, cast iron, ductile iron, galvanized steel, polyvinyl chloride pipe ranging from 2" - 24" in diameter size. The sanitary sewer consists of vitrified clay, fold and form liner, cured in place liner and ductile iron pipe ranging from 8" - 15" in diameter size. The force main consists of asbestos cement, cured in place liner, ductile iron and polyvinyl chloride pipe ranging from 6" - 16" in diameter size. There are 8 Broward County lift stations in these UAZ areas and 1 private lift station which sanitary sewer systems will need to connect to. Two of these stations will need rehabilitation/replacement. The restoration of roadways, sidewalks, driveways, and landscape areas will need



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to be performed as needed for water and sanitary sewer improvement construction.

**Broward County UAZ 110/111 & 113 Water Sewer Improvements 110/111, Lauderdale Lakes, FL.** The Water and Sanitary Sewer Improvements for the UAZ 110/111 & 113 Project will include the improvements to the existing water distribution system, sanitary sewer system, and transmission systems within the project area along with the restoration of surface areas disturbed for the construction of said improvements. All projects combined a total area of over 1000 acres within multiple Cities. The existing system being replaced consists of approximately 168,100LF of water mains, 122,100 LF of sanitary sewer mains and 23,600 LF force main. The existing water main consists of asbestos cement, cast iron, ductile iron, galvanized steel, polyvinyl chloride pipe ranging from 2" - 24" in diameter size. The sanitary sewer consists of vitrified clay, fold and form liner, cured in place liner and ductile iron pipe ranging from 8" – 15" in diameter size. The force main consists of asbestos cement, cured in place liner, ductile iron and polyvinyl chloride pipe ranging from 6" – 16" in diameter size. There are 8 Broward County lift stations in these UAZ areas and 1 private lift station which sanitary sewer systems will need to connect to. Two of these stations will need rehabilitation/replacement. The restoration of roadways, sidewalks, driveways, and landscape areas will need to be performed as needed for water and sanitary sewer improvement construction.

**Hillsboro Beach Water Main Replacement Design/Construction Administration, Hillsboro Beach, FL.** CMA is providing engineering design services and construction administration for water improvement needs for the Town of Hillsboro Beach along A1A from SE 10th Street to the Hillsboro Inlet. CMA previously modeled and completed a system evaluation report determining the facilities in need of replacement. The improvements will include replacement of parallel water mains along the barrier island and has taken into consideration future needs, environment, pipe types, various installation methods, project coordination and funding.

**2016/2017 City Engineering Services, Coral Springs, FL.** Since 2005, Chen Moore and Associates has served as the City Engineer for Coral Springs. Beginning in February 2012, the firm has also started to provide planning support for the City of Coral Springs Community Development Department. The firm performs the typical duties of an on-staff engineer and planner, including architectural review board compliance, DRC review for site plan compliance, engineering permit review and inspections, development reviews and concurrency evaluations, coordination with other City departments and outside agencies, and a variety of special projects. As part of this contract, the firm manages the vertical construction program for the City, including work for several departments including Police, Fire, Parks and Recs, Public Works and the Fine Arts Center.

Chen Moore and Associates instituted a Municipal Separate Storm Sewer System (MS4) program for the City of Coral Springs and has been maintaining the program for several years. Chen Moore and Associates provided training to the City's building department staff. Currently, Chen Moore and Associates is responsible for inspecting projects that require a MS4 permit in the City of Coral Springs. Inspections occur following heavy rainfalls or on a monthly basis if rainfall has been minimal. As a co-permittee to Broward County through the state MS4 program, Chen Moore and Associates completes a yearly report that ensures the City is in compliance with the requirements of the program.





**MATTHEW R O'ROURKE**  
**CONSTRUCTION**  
**ADMINISTRATION**

**Certifications**

A.C.I. – Concrete & Aggregate Testing Technician  
Nuclear Safety HAZMAT Certificate  
FDOT CTQP – Concrete, Earthwork, Aggregate, LBR Technician  
U.S.A.C.E. – Contractor Quality Control Manager  
FDOT Project Administrators Construction Academy 2011  
Radiation Safety Officer  
FDOT Maintenance of Traffic – Advanced Level



Matthew O'Rourke is a senior construction specialist with Chen Moore and Associates. His experience includes supervising and inspecting construction projects involving water and wastewater systems, stormwater drainage systems, and roadways. He also has performed laboratory testing of construction materials. He maintains numerous certifications in construction field inspection, sampling, testing, and quality control management. He has worked on projects for the USACE, the South Florida Water Management District, Broward County and FDOT. He will assist with construction administration.

**Project Experience**

**Broward County UAZ 110/111 & 113 Water Sewer Improvements 113B (RFP No. R1356803P1), Lauderdale Lakes, FL.** The Water and Sanitary Sewer Improvements for the UAZ 110/111 & 113 Project will include the improvements to the existing water distribution system, sanitary sewer system, and transmission systems within the project area along with the restoration of surface areas disturbed for the construction of said improvements. All projects combined a total area of over 1000 acres within multiple Cities. The existing system being replaced consists of approximately 168,100LF of water mains, 122,100 LF of sanitary sewer mains and 23,600 LF force main. The existing water main consists of asbestos cement, cast iron, ductile iron, galvanized steel, polyvinyl chloride pipe ranging from 2" - 24" in diameter size. The sanitary sewer consists of vitrified clay, fold and form liner, cured in place liner and ductile iron pipe ranging from 8" - 15" in diameter size. The force main consists of asbestos cement, cured in place liner, ductile iron and polyvinyl chloride pipe ranging from 6" - 16" in diameter size. There are 8 Broward County lift stations in these UAZ areas and 1 private lift station which sanitary sewer systems will need to connect to. Two of these stations will need rehabilitation/replacement. The restoration of roadways, sidewalks, driveways, and landscape areas will need to be performed as needed for water and sanitary sewer improvement construction.

**Broward County UAZ 110/111 & 113 Water Sewer Improvements 110/111 (RFP No. R1356803P1), Lauderdale Lakes, FL.** The Water and Sanitary Sewer Improvements for the UAZ 110/111 & 113 Project will include the improvements to the existing water distribution system, sanitary sewer system, and transmission systems within the project area along with the



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The following projects represent Mr. O'Rourke's experience while with another firm.

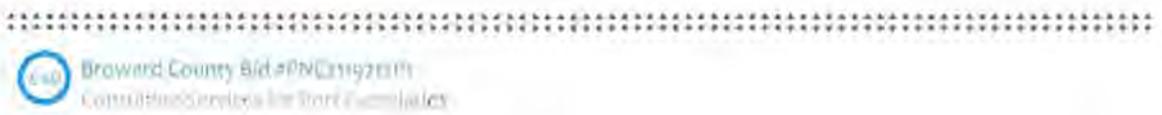
**Stormwater Improvements, Palm Beach County, FL.** Served as senior engineering technician and provided quality control for SR A1A Water Main & stormwater improvements.

**Stormwater Treatment Area 2 Compartment B North & South Buildouts. QA/QC Lab Manager.** Constructed and managed the USACE accredited onsite construction materials testing laboratory and performed QA/QC testing of construction materials utilized during construction. Performed field and laboratory tests including Sampling, Concrete Plastic Properties, Concrete Compressive Strength, Sieve Analysis, Atterberg Limits, Moisture Content & Specific Gravity.

**Everglades Agricultural Area A-1 Reservoir.** Constructed and managed the CMEC accredited onsite aggregate Quality Control laboratory for the onsite aggregate processing plant (GMP 2). Performed preliminary and production testing of onsite borrow materials including materials processed through the aggregate processing plant.

Constructed and obtained CMEC accreditation for the Quality Assurance Laboratory (GMP 4).

**Indian River Estates Stormwater Improvements Phase II, St. Lucie County, FL.** Senior roadway inspector for a \$5 million stormwater drainage improvement project that encompassed approximately nine miles of drainage line from 12 to 72 inches in diameter. Performed field inspection services for the engineer of record. Coordinated with police, fire, emergency, postal and sanitation services. Interacted and coordinated with homeowners. Attended neighborhood association meetings. Addressed homeowner concerns and complaints. Reviewed contractor pay applications. Attended weekly progress meetings. Documented inspection observations. Provided oversight of restoration of areas disturbed by construction.





**MANUEL A CAAMANO**  
**CONSTRUCTION**  
**ADMINISTRATION**

**Certifications**

Certifications  
OSHA 10 HR  
FDOT Earthworks  
Level 1  
NICET Level II  
FDOT Concrete Field Inspector  
Specifications  
FDOT Advanced MOT  
WZTC Certified (NYSDOT)  
Certificate in Engineering



Manuel Caamano is a senior construction inspector with over 15 years of agency related project experience. His experience includes daily inspection reporting, inspecting lighting & ITS systems and the supervision of landscaping and urban design. Most recently, Mr. Caamano has been serving as a senior construction inspector at Fort Lauderdale Hollywood International Airport during the runway upgrades currently on construction. He will assist with construction administration.

**Project Experience**

**Broward County UAZ 110/111 & 113 Water Sewer Improvements 113B (RFP No. R1356803P1), Lauderdale Lakes, FL.** The Water and Sanitary Sewer Improvements for the UAZ 110/111 & 113 Project will include the improvements to the existing water distribution system, sanitary sewer system, and transmission systems within the project area along with the restoration of surface areas disturbed for the construction of said improvements. All projects combined a total area of over 1000 acres within multiple Cities. The existing system being replaced consists of approximately 168,100LF of water mains, 122,100 LF of sanitary sewer mains and 23,600 LF force main. The existing water main consists of asbestos cement, cast iron, ductile iron, galvanized steel, polyvinyl chloride pipe ranging from 2" - 24" in diameter size. The sanitary sewer consists of vitrified clay, fold and form liner, cured in place liner and ductile iron pipe ranging from 8" - 15" in diameter size. The force main consists of asbestos cement, cured in place liner, ductile iron and polyvinyl chloride pipe ranging from 6" - 16" in diameter size. There are 8 Broward County lift stations in these UAZ areas and 1 private lift station which sanitary sewer systems will need to connect to. Two of these stations will need rehabilitation/replacement. The restoration of roadways, sidewalks, driveways, and landscape areas will need to be performed as needed for water and sanitary sewer improvement construction.

**Broward County UAZ 110/111 & 113 Water Sewer Improvements 110/111 (RFP No. R1356803P1), Lauderdale Lakes, FL.** The Water and Sanitary Sewer Improvements for the UAZ 110/111 & 113 Project will include the improvements to the existing water distribution system, sanitary sewer system, and transmission systems within the project area along with the restoration of surface areas disturbed for the construction of said improvements. All projects combined a total area of over



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1000 acres within multiple Cities. The existing system being replaced consists of approximately 168,100LF of water mains, 122,100 LF of sanitary sewer mains and 23,600 LF force main. The existing water main consists of asbestos cement, cast iron, ductile iron, galvanized steel, polyvinyl chloride pipe ranging from 2" - 24" in diameter size. The sanitary sewer consists of vitrified clay, fold and form liner, cured in place liner and ductile iron pipe ranging from 8" - 15" in diameter size. The force main consists of asbestos cement, cured in place liner, ductile iron and polyvinyl chloride pipe ranging from 6" - 16" in diameter size. There are 8 Broward County lift stations in these UAZ areas and 1 private lift station which sanitary sewer systems will need to connect to. Two of these stations will need rehabilitation/replacement. The restoration of roadways, sidewalks, driveways, and landscape areas will need to be performed as needed for water and sanitary sewer improvement construction.

**FLL North Runway Pavement Rehabilitation, Ft Lauderdale, FL.** CMA was responsible for all planning, design, and permitting of all stormwater improvements required for the North Airfield Pavements Rehabilitation Project at Fort Lauderdale-Hollywood International Airport (FLL). The pavement improvements within the associated Runway and Taxiway Safety and Object Free Areas impacted on other facilities within the FLL North Airfield, including the existing stormwater management system. CMA was responsible for determining the additional drainage improvements that were necessary to handle the additional stormwater runoff from any new impervious pavement areas. The existing grass areas surrounding the existing pavement areas provide flood control and water quality treatment benefits to the entire North Airfield area by providing storage volume and infiltration capacity for any stormwater runoff from these surrounding impervious areas. When the existing pavement areas are expanded under this project, new storage capacity for stormwater runoff must be created nearby to account for the loss of existing pervious areas, to account for the loss of any existing stormwater storage capacity, and to provide additional capacity for these new impervious areas. The expansion of the Engineered Material Arresting System Beds (EMAS) beds in the FLL North Airfield also impacted these existing swale areas and dry retention and created additional impervious areas. In order to accomplish these improvements, the CMA team reviewed the exiting overall ICPR stormwater model for FLL to verify the additional stormwater management areas need to be developed in the FLL North Airfield Area.

**Ft Lauderdale FM Rehab, HDD & Swageline (1-4), Fort Lauderdale, FL.** Chen Moore and Associates was the prime consultant for the 30" Emergency Force Main Rehabilitation project in the City of Fort Lauderdale. This innovative design-build project, led by Murphy Pipeline Contractors (MPC) was undertaken to provide both mainline force main replacement for aging infrastructure and to provide additional redundancy in case of future issues. The contract was divided into four (4) phases within the City of Fort Lauderdale. The nearly 20,000 linear feet of pipeline was rehabilitated through a combination of swagelining, directional drilling, and traditional open cut installation over these four phases. CMA provided planning, design, permitting and engineering services during construction. Environmental compliance, subaqueous crossing, public involvement and maintenance of traffic in the busy Sistrunk and Himmarshee Business Districts were some of the additional project complexities. CMA also provided dewatering permitting and groundwater modeling due to contaminated sites within quarter mile of the projects.





**JIM VAN NESS, P.E.**  
**QA/QC PORT/MARITIME**

**Education**

BS, Civil Engineering, Clemson University, 1982

**Registration**

Professional Engineer: SC (#11696, 1987)

Jim Van Ness, P.E. has thirty-five years' experience in engineering management, design and construction of multi-discipline civil and maritime infrastructure development. Project management responsibilities have included feasibility studies, planning, site investigation, conceptual, preliminary, detailed design, and construction management. He has the ability to oversee all engineering functions on multi-functional facilities. His project experience includes the United States Atlantic and Gulf Coasts, the Great Lakes, the Bahamas, and the Middle East with ports and marine terminals, heavy civil infrastructure, marinas, and buildings. His roles include program management, project management, maritime structural and civil design, and construction administration on infrastructure projects including port terminals, breakwaters, quays, wharfs, jetties, dredging, reclamation and ground improvement, block walls, highway bridges, buildings, crane railways, tie-down anchorage systems and drainage control, surveying and bathymetry, geotechnical investigation, and environmental impact assessments. Mr. Van Ness will serve as QA/QC for Port/Maritime work.

**Project Experience**

**Hugh K. Leatherman Terminal (HLT), South Carolina Ports Authority (SCPA), North Charleston, SC.** Project Director and Program Manager for the design and construction SCPA's new greenfield flagship terminal project. The HLT is a \$1.5B, three ship berths, 2.4 million TEU container terminal with a dedicated port access road and intermodal facility in the program. Opening date is scheduled for March 2021. Specific assignments included procurement and management of numerous terminal planning, design, construction, and site investigation contracts.

Responsibilities included interface with the SC Department of Transportation and Palmetto Railways on the Port Access Road and Navy Base Intermodal Facility, as well as with all other government, regulatory, and commercial stakeholders.

**Inland Port Terminal Dillon (IPD), SCPA, Dillon, SC.** Program Manager for the design and construction SCPA's new intermodal container terminal project. IPD is a \$50M, railroad and truck served container terminal, serving the Pee Dee region of South Carolina. Opening date was April 2018.

Program Manager, Wando Welch Terminal (WWT) Wharf



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Improvements and Repairs, SCPA, Mt. Pleasant, SC. Program Manager for the structural investigation, design, and construction phases for the refurbishment of the WWT container berth and wharf structure. Project delivered on budget and schedule with a total cost exceeding \$50M. Challenges included pre-design existing testing of foundation piles and construction on SCPA's largest and busiest container terminal.

Scope of works included:

- Replacement and Increase capacity of Ship to Shore Gantry Crane Rail Beams, Fender System, and Mooring Bollards
- Upgrade of the Crane Electrical & Fiber Optic Communication Systems
- Refurbishment of Foundation Piles, Pile Caps, and Wharf Deck

**WWT Ship to Shore (STS) Gantry Cranes 38 - 40, SCPA, Mt. Pleasant, SC.** Director of Engineering and Program Manager for the design and procurement of four new STS Gantry Cranes to service the increase capacity and larger container vessels of SCPA's largest and busiest terminal. Greatest challenge is ensuring quality and schedule is maintained and delivery, erection, commissioning and testing on a congested operating container terminal with minimal interference to Operations. Total project cost exceeded \$65 million.

**WWT STS Gantry Crane Modifications, SCPA, Mt. Pleasant, SC.** Program Manager for the design and construction for the modifications to four existing STS Gantry Cranes to service the increase capacity and larger container vessels of SCPA's largest and busiest terminal. Scope included increasing the height under spreader by 40 feet, the largest increase in boom height at the time of the project, and improvements to the mechanical and structural elements of the crane to increase productivity. Greatest challenge was ensuring quality and schedule is maintained, and delivery, erection, commissioning and testing on a congested operating container terminal with minimal interference to Operations. A pile supported temporary work site was constructed within container yard for the modifications, including crane rails and hurricane tie-down systems.

**WWT Refrigerated Container Service Area (RCSA), SCPA, Mt. Pleasant, SC.** Program Manager for the design and construction of the new RCSA, to repair and service refrigerated containers. Total project cost \$8.7M.

**WWT Container Yard Improvements, SCPA, Mt. Pleasant, SC.** Program Manager for the design and phased construction of the revised arrangement of the container yard. This project increased the container capacity of the WWT by 30% and required terminal modeling and simulation studies to optimize the arrangement, traffic patterns, rubber tire gantry crane quantities, and phasing. Total project cost exceeds \$20M.

**WWT New Vessel Operations Buildings, SCPA, Mt. Pleasant, SC.** Program Manager for the design and phased construction of two new Vessel Operations Buildings for wharf operations. The project required phased construction and demolition of three existing buildings, to increase capacity of the wharf and increase efficiency of traffic patterns. Total project cost exceeds \$10M.





**TODD STOCKBERGER, PE  
PRINCIPAL-IN-CHARGE -  
MARITIME**

**Education**

M.S., 1989, Civil/Ocean and Coastal  
Engineering, Purdue University  
B.S., 1987, Civil/Structural  
Engineering, Purdue University

**Registrations/Certifications**

Professional Engineer: FL #55837  
(2000); SC #22582 (2003); PR  
#17119 (1997); US Virgin Islands  
#2-2015969 (2000) AL (#30706-  
E (2009); LA #34650 (2009); MS  
#19162 (2009); NC #035951  
(2009); and TX #105368 (2010); VA  
0402053883; GA #039544

Todd Stockberger has 31 years of experience in port and maritime engineering and is a Vice President of Jacobs. He is responsible for project delivery, client relationships, and staff resources. He currently leads all port and maritime work from the Mid-Atlantic through Texas and throughout the Caribbean and Latin America. He serves as project director or manager for major developments (typically those with capital costs in excess of \$100M). These include the Joint Manufacturing and Assembly Facility (JMAF) for NNS, the Port of Gulfport Restoration Program, Virginia Port Authority's Virginia International Gateway expansion, and new terminals for Port Miami.

Todd's responsibilities have included national and international port, maritime, and coastal projects for private and public industries, as well as all levels of government agencies. He is experienced in providing planning, permitting, design, project management, and construction phase services, including design-build services. He is experienced in the management of all aspects of these projects including planning, detail design, permit acquisition, environmental impact statements, bid document preparation and evaluation, community involvement, and construction management.

**Principal-in-Charge, Architectural and Maritime Structures On-Call Engineering Services, Port Miami, FL.** Responsible for architectural and marine structures engineering services. Specific assignments include services for cruise berths and container terminals (planning and feasibility studies, condition inspections, final design and bid document preparation, cost estimates, services during construction, and other miscellaneous engineering services as needed).

**Principal-in-Charge, On-Call General Engineering Services, Georgia Port Authority, GA.** Responsible for general engineering services including civil, structural, and marine engineering. Specific assignments have included include planning and feasibility studies, condition surveys, terminal planning and design, bid document preparation, EA and EIS preparation and permitting, cost estimates, services during construction, and other services as needed.

**Principal-in-Charge, Port of Gulfport Reconstruction**





**Program.** Responsible for providing program management services to deliver the Port's \$570 redevelopment program. The multi-year program includes: 84-acre expansion of the West Pier, shore protection for the expanded West Pier, upgraded utilities, improved rail access, restoration of the West Pier Wharf (Berths 1-6), new approximately 320,000 SF multi-user Transit Storage Facility with refrigerated storage, two new tenant Administration/Maintenance and Repair Facilities, a new four story Port Operations and Administration Facility, restoration of the Commercial Small Craft Harbor, new high-mast lighting, new water storage tank, new security systems, new container handling Gantry Cranes, and new landscaping and fencing. Project Manager, On-Call Marine Engineering Services, Ft. Lauderdale, FL. Project manager for projects including the Midport gantry crane electrification project, and the Southport bulkhead inspection, corrosion study, and cathodic protection design.

**Program Director, On-Call General Engineering Services, Tampa Port Authority.** Responsible for general engineering services including civil, structural, and marine engineering. Specific assignments include planning and feasibility studies; structural and underwater inspections; final design and bid document preparation; permitting; cost estimates; services during construction; and other miscellaneous engineering services as needed.

**Project Principal, Dames Point Container Terminal, Jacksonville Port Authority (JAXPORT), Jacksonville, FL.** Principal for the development of a 160-acre container terminal including 3,000 linear feet of bulkhead for two berths and paving for a rubber-tired gantry (RTG) crane operation to increase the number of containers shipped through JAXPORT by 50 percent. Responsibilities included coordination and delivery of all planning, permitting, mitigation, engineering and construction phases of this project. Additional duties included construction administration and project management throughout the construction phase. Design innovations by the project team led to savings of approximately \$20 million.

**Project Manager, Port of Miami's Redevelopment Program, Miami, FL.** Project manager responsible for project management, design and construction phase services for a new cruise berth and two new container terminals including the associated crane rails, pavement, lighting, electrical, and upland stacking areas, a new refrigerated container storage area, a new cargo gate complex. Fully automated terminal consisting of 18 gates serving all of the Port's container operations, port-wide mooring improvements, and security improvements. \$110M.

**Project Director, Arawak Cay Port Development, Nassau, Bahamas.** Contracted with a group of 18 stakeholders ACPDC to develop a multi-use port on Arawak Cay located at the west end of the harbor in Nassau, Bahamas. The scope includes working alongside KPMG for development concepts, pricing, organization and engineering for moving the commercial maritime activity from downtown Nassau to a centralized location. This includes three container berths, a ferry terminal, a bulk material terminal, associated uplands as well as the security plan and design to meet ISPS. Concept engineering for a multipurpose Port in Nassau. \$600,000 Fee for concept/planning phase.





**LINDA BATZ, P.E.**  
**MARITIME CIVIL**

**Education**

MBA, Business Administration,  
University of Central Florida, 1998

BS, Civil Engineering, Valparaiso  
University, 1991

**Registration**

Professional Engineer: FL (#51292)

FDEP Qualified Stormwater  
Management Inspector (No.  
13095)

Linda Batz, P.E. has 19 years of specialized civil engineering experience on port and terminal projects. She has a wide range of knowledge in multiple project stages - planning, design, permitting, plan/specification production, bidding, contract administration, construction inspection, and certification. She is experienced in multi-discipline project management; site design including site layout, paving and drainage, water distribution and wastewater collection, transportation and traffic systems, and stormwater management facilities; agency and jurisdictional permitting of upland improvements; and plan and specification preparation. Linda brings extensive experience working with code officers and regulatory agencies to secure creative solutions to code disapprovals or regulatory concerns. She is a key member of our Ports & Maritime Group. Ms. Batz shall serve as the maritime civil engineer.

**Project Experience**

**Canaveral Port Authority (CPA), Port Canaveral, FL.** Under a continuing services contract, Linda provided timely response and professional advice to Port Staff to support daily cruise, cargo, and tenant activities. Work included performing infrastructure studies, conceptual plans, estimates, legal descriptions for port-leased lands, tenant site improvement plan reviews, regulations research, land ownership research, master map updates, capital budgeting, and providing support data and plans to consultants, tenants, and utility providers.

**Strategic Weapon Systems Ashore (SWSA), Lockheed Martin Space Systems Company (LMSSC) and Electric Boat Corporation (EB), Cape Canaveral Air Force Station (CCAFS), Cape Canaveral, FL.** SWSA is a one-of-a-kind facility for the Navy which will allow for the testing of fire control, launch systems for submarine-launched missile systems to be conducted at one facility. Prior to being promoted to Project Manager in August 2017, Linda provided site design and construction support services for heavy pavement, site grading, potable water, fire protection water, lift station/forcemain, and systems piping.

**Multiple Office Modifications for Fleet Ballistic Missile Program, LMSSC, CCAFS, Cape Canaveral, FL.** Managed four multi-discipline building modifications for office support and provided services during construction.





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**Virginia International Gateway, Phase II Expansion, Virginia Ports Authority, Portsmouth, VA.** Designed site infrastructure for automated crane stack yard expansion, rail yard reconfiguration, and gate expansion. Work included services during construction.

**North Cargo Berths 5&6 Marine Terminal, Port Canaveral, FL.** Responsible for planning, permitting, and design of terminal yard and related upland infrastructure improvements. Work performed included design of stormwater management system for 76 acres including design of 38 acres berth/terminal yard pavement and infrastructure, roadway extensions, and new security gatehouse.

**Commercial Vehicle Access and Payment Systems at Cruise Terminals, CPA, Port Canaveral, FL.** Retrofitted heavily utilized cruise passenger parking lot, for a new roadway for commercial traffic to pay for access to the north cruise terminal area, designed payment lanes for similar operation for south terminals, and designed pay booth entrance area for passengers at south terminals. The project was designed and awarded within two months for an on-time \$250K construction prior to the new ship arrival. Subsequent projects included concept plans for additional commercial vehicle parking areas at CT5/6 and CT10; concept plans for a rental car facility; and construction plans for infrastructure upgrades at passenger parking areas to allow for new automated payment systems.

**Cruise Terminal No. 6, CPA, Port Canaveral, FL.** Prepared 30% site design for new 120,000 sf two-story cruise terminal and 750-car parking garage for design-build RFP. Work included fast-tracked permitting modification to regional stormwater management system.

**George King Boulevard Widening, CPA, Port Canaveral, FL.** Project involved widening a 1.4 mile, 2-laned roadway to 4-lanes, adding and modifying traffic signals, modifying drainage and utility systems, enhancing entire corridor with street lighting and landscaping, providing overhead truss structures for signage, and permitting with three agencies. Coordinated with FPL regarding relocation of transmission and distribution lines. Permitted project with FDEP, FDOT, and ACOE.

**Charles Rowland Drive Realignment, CPA, Port Canaveral, FL.** Worked with CPA Engineering, Operations, and Security Departments to develop initial plans for roadway relocation and parking lot reconfigurations associated with new payment system at two cruise terminals. Provided environmental permitting and construction services. Quickly designed Phase 2 of the project which was then constructed as a change order to the Phase 1 thus resulting in an expedited schedule and cost savings.

**Traffic Flow Study at North Cruise Terminals, CPA, Port Canaveral, FL.** Worked with Engineering, Operations, and Security Departments to develop initial plans for \$3.6M roadway relocation and parking lot reconfigurations associated with new payment system at two cruise terminals.

**Repave Cove Parking, CPA, Port Canaveral, FL.** Prepared plans to mill, repave, and restripe 11,000 sy asphalt pavement in the busy commercial area. Engineer's opinion of probable cost of \$200,000 equaled the awarded contractor's price. One pre-bid RFI regarded scheduling, zero construction RFIs, and no changes were a direct result of the accurate and complete construction documents.

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**KAREN FAULKENBERRY, P.E.**  
**MARITIME CIVIL**

**Education**

ME, Water Resources Engineering,  
University of Florida

BS, Civil Engineering, University of  
Florida

**Registrations**

Professional Engineer: FL (#54015);  
GA (PE032851)

Karen Faulkenberry, P.E. has 24 years of experience in the transportation and drainage engineering fields. Her expertise is in urban and rural roadway design, signing and pavement marking, maintenance of traffic (MOT) plans, drainage collection system and pond design, and permitting. Ms. Faulkenberry will support maritime civil engineering efforts.

**Project Experience**

**Government of Montserrat, Carr's Bay Development, Montserrat.** Project consisted of design of a new port facility for the island of Montserrat. Responsibilities included civil site design, layout and drawings for the 4.3- acre port, dredging plans, grading and drainage design, potable water main design, facility striping plans, traffic maneuver modeling, fire protection distribution design, sanitary sewer collection system design, existing utility coordination, concrete pavement design, and drafting for all civil drawings associated with the project.

**Port of Palm Beach, Maritime Office Building Demolition and Container Yard, Riviera Beach, FL.** Project consisted of demolition of an existing five-story office building and three-acre site redevelopment into a refrigerated container yard with heavy-duty pavement. Responsibilities included demolition plans, civil site layout, pavement design, stormwater drainage, grading and permitting through the Florida Department of Environmental Protection, utility coordination, potable water design and permitting, and construction sequencing.

**FDOT District Two, Bessent Road Bridge Replacement, Jacksonville, FL.** Provided roadway design, MOT, drainage design and permitting, and signing and pavement marking design for this off-system (local) bridge. The new Bessent Road Bridge traverses West Branch and is approximately 200 feet long.

**FDOT District Two, US 17 Design, Putnam County, FL.** Provided roadway and MOT design services for US 17 from west of Dunn's Creek Bridge to North Boundary Road. Within these limits, US 17 is mostly an existing two- lane rural roadway. The roadway transitions to a four-lane rural divided section and the proposed typical section is a four-lane divided section.

**FDOT District Two, State Road 200 (SR A1A), Nassau County,**



Broward County Bid #PNC2119212P1  
Consulting Services for Port Expansion



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**FL.** This project provided roadway engineering services to widen an existing four-lane rural roadway to a six-lane urban roadway from its interchange with Interstate 95 (I-95) to a point approximately 2.2 miles. At the interchange with I-95, FDOT D2's first diverging diamond intersection was designed on SR 200. Responsibilities for this project included roadway design, interchange ramp design, and all maintenance of traffic plans.

**Jacksonville Transportation Authority, Southside Boulevard and Baymeadows Road Intersection and Baymeadows Road Improvements, Jacksonville, FL.** Responsible for design and preparation of final design documents for improvements to approximately two miles of Baymeadows Road. Project design elements include roadway widening at five major intersections, milling and resurfacing with overbuild and cross-slope correction, drainage design, signing and pavement marking, signalization, and MOT.

**Florida Department of Transportation, SR 23 Branan Field/Chaffee Road, Jacksonville, FL.** Responsible for design and plans preparation of design documents for approximately 1.6 miles of new roadway alignment. Specific design tasks included horizontal and vertical roadway design, preliminary drainage design and design of the signals at all signalized intersections.

**City of Jacksonville, Starratt Road Improvements, Jacksonville, FL.** Responsible for design and preparation of final design documents for improvements to 1.5 miles of Starratt Road from New Berlin Road to Duval Station Road. Starratt Road is a two-lane rural collector that will be upgraded to a multi-lane facility with curb and gutter, sidewalks, and bicycle lanes. Project limits included Starratt Road and its intersections with New Berlin Road and Duval Station Road. Specifically responsible for roadway design, drainage design, maintenance of traffic plans and cross-sections.

**City of Jacksonville, Hood Road Roadway Improvements, Jacksonville, FL.** This project involved the redesign of approximately 3.5 miles of an existing two-lane rural roadway to a three-lane urban section. There is one section of the 3.5-mile length that was redesigned as a five-lane urban section to accommodate the excessive industrial traffic. Specific responsibilities included roadway design, drainage design, signing and pavement markings, maintenance of traffic, St. Johns River Water Management District (SJRWMD) permitting, and post design services during construction.

**City of Jacksonville, Oakwood Villas Septic Tank Phase-Out Project, Jacksonville, FL.** A study phase for this project preceded the design phase, and it revealed drainage and roadway deficiencies throughout the mainly residential area of more than 1,000 acres. Since money remained after the major drainage issues were addressed, the project's scope was expanded to include needed roadway redesign. Project responsibilities included design of all roadways and drainage collection systems, permitting through the SJRWMD, pond siting and design, maintenance of traffic, signing and pavement marking, erosion control and utility relocation.





**ALISTAIR HART**  
**CONTAINER TERMINALS**

**Education**

Eng (Hons), Civil Engineering,  
University of Cardiff

Alistair Hart will assist with container terminals has over 11 years of experience and has been involved in a range of projects encompassing planning, design and construction of ports, terminals, and marine structures. He is experienced in project management, port planning and optimization studies for container and bulk handling terminals in the UK, U.S., Middle East, and Asia. Alistair has undertaken terminal planning for greenfield port facilities and expansion/optimization of existing facilities, including planning and due diligence for the sale of the Port of Melbourne, Australia, and terminal planning for new container in Sokhna, Egypt, and Jeddah, Saudi Arabia.

**Project Experience**

**NIT Central Rail Yard Expansion, Port of Virginia, Norfolk, VA.** Planning and design of expansion and improvements to an existing rail yard at Norfolk International Terminals container terminal. The existing yard will be expanded to provide addition rail tracks to increase capacity and to change the yard operation from reach stackers to rubber tired gantry cranes. The improvements also include upgrading of civil and electrical works. Alistair is the Project Manager for the expansion planning and design, leading a multi-disciplinary team, and is also providing technical input for planning of the cargo handling operation at the yard and the interface between the rail yard and the other parts of the container terminal.

**Georgia Ports Authority On-Call Marine Engineering Services, GA.** Served as Program Manager for contract providing on-call engineering services to the Georgia Ports Authority, serving container, break-bulk, and auto terminals. Responsible for managing the program, client and stakeholder engagement, project management, terminal planning, and team management of local design team. Projects encompassed all aspects of engineering at the port terminals, ranging from terminal planning and marine structures to landside civil and mechanical works.

Oversaw several multidisciplinary projects including highways infrastructure to link areas of the Brunswick Auto terminal involving civil, electrical, and drainage works, and expansion of the Garden City Container Terminal providing new storage yard and utilities.



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Consulting Services for Port Expansion



**Hydrocarbons Supply Program, States of Guernsey, Guernsey.** Major program to identify issues in the current hydrocarbon supply chain to the island of Guernsey. Project objective was to develop a risk-based approach to identification and selection of a solution which will provide a safe and secure hydrocarbon supply now and in the future. Includes consideration of the whole supply chain from source of hydrocarbons through various transport options to get them to the island, the uploading and storage facilities. Role included site selection and assessment, concept design for marine hydrocarbon import facilities including jetties, breakwaters, and dredging/navigation, and development of a cost benefit model to analyze different supply options ranging from ship import to pipeline.

**Alaska LNG Marine Facilities Pre-FEED, AK LNG, AK.** The Alaska LNG project involves the proposed piping of gas through Alaska from the North Slope to the Cook Inlet at the south where gas will be liquefied and exported as LNG. Jacobs was contracted to provide the Pre-FEED for the marine facilities at the LNG export site in Nikiski, Cook Inlet. Work included providing technical and project deliverables required for regulatory approval and the design of marine facilities. Located in Houston, U.S., with an integrated client/Jacobs team performing a client facing role monitoring and reporting project progress and managing and undertaking marine studies. Undertook concept designs, cost estimates, execution schedules, and cost benefit analysis for support vessel facilities and material offload facilities. Also produced feasibility studies and investigations into material offloading at existing local port facilities and the required support vessel operations to service the LNG export operation.

**Technical Due Diligence Advisory Services, Port of Melbourne, Australia** Provided sell-side technical due diligence advisory services for the AU\$9.7B privatization of the Port of Melbourne, which handles all types of cargo – liquid bulk, dry bulk, roll-on/roll-off, project cargo, passengers, pleasure craft, and international and local containers. Located in office at project location attending discussions with and presenting to the client on a daily basis. Undertook due diligence of port activities including calculation of current port capacity for a wide range of import and export operations including Ro-Ro, Lo-Lo, dry and liquid bulk, break-bulk and containers. Capacity estimates focused on berth and yard capacity with consideration to marine navigation channel and landside constraints. Also investigated future expansion options for container handling to meet the forecast future demand, including production of concept drawings, cost estimates, and construction phasing.

**Tacaamol Aromatics Project, UAE.** Front End Engineering Design (FEED) for port and marine works for a new port to export liquid bulk products associated with world-scale integrated chemicals complexes in Ruwais and Tacaamol. Jacobs was commissioned by the client to develop the FEED designs for the landside and port facilities up to the award of EPC Contracts. The port includes three berths for the export of liquid products and a quay for the import of construction materials, together with associated port buildings and infrastructure. Future development at the site includes additional liquid product berths, a container terminal, and an LNG import facility. Alistair was project manager and team lead for the design and delivery of the marine FEED documents and undertook master planning for the port development. Role included master planning, review and approval of specifications, FEED drawings, technical studies and reports, and the management of subcontracts for marine services including mooring analyses, hazard and risk assessments, and real-time navigation simulations.





**MELYNNE CHIARIELLO**  
**CRUISE TERMINAL**

**Education**

MS, Ocean Structural Engineering,  
Florida Institute of Technology

MBA, Management and  
Accounting, Florida State  
University

BS, Management Information  
Systems, Florida State University

**Registration**

Professional Engineer: FL (#60866)

Melynne Chiariello, P.E. is a cruise terminal design expert. Melynne brings 29 years of specialized experience in port and pier planning and design focusing on cruise terminals. She is an industry leader for siting and vetting studies for international cruise line clients. Her projects and clients include Coco Cay, Bahamas, Labadee, Haiti, Crown Bay, St. Thomas, USVI, Long Beach Cruise Terminal, Royal Caribbean Cruises, Ltd., Disney Cruise Lines, and many, many others.

**Project Experience**

**Mooring and Berthing Analysis, Miami-Dade County, Port Miami, FL.** Responsible for mooring and berthing analysis for design of the bollards and fenders at the new Miami Cruise Terminal A.

**Oasis of the Seas Port Readiness Evaluations, Royal Caribbean Cruise Lines, Miami, FL.** Performed assessments of various ports of call and turn ports for suitability for the new Oasis of the Seas. Analyses for these ports included: mooring and berthing, structural stability, and Thruster Impacts Conceptual design of security structures for the ports. Also assisted with STAR Center Simulations.

**Long Beach Cruise Pier, Carnival Corporation, Miami, FL.** Performed mooring and berthing analysis to determine the retrofitting requirements of the existing cruise berth for a larger class of ship.

**CocoCay Development, Royal Caribbean Cruise Lines, Little Stirrup Cay, Bahamas.** Project involved pier design for vessels up to 400 m LOA for Royal Caribbean's private destination CocoCay, located in the Berry Islands of the Bahamas. Managed engineering design team for the upland improvements. Prepared Environmental Impact Assessment and oversaw the permitting process. Performed construction management services.

**Labadee Waterside Improvements, Royal Caribbean Cruise Lines, Labadee, Haiti.** Project consisted of a cruise pier for Oasis of the Seas and Breakwater design for Royal Caribbean's private destination Labadee, located on the north coast of Haiti on the Atlantic Ocean. Scope of work included the development of new entrance channels and placement of navigational aids.



Broward County Bid #PNC2119212P1  
Consulting Services for Port Everglades



Interfaced with Government Officials and local contractors. Performed construction management services.

**Bermuda Dredging of the North Channel, Royal Caribbean Cruises Ltd., Royal Dockyard, Bermuda.** Project consisted of the widening of existing channel to accommodate larger cruise vessel. Work included geotechnical studies, surveying, environmental studies, preparation of tender documents, and services during construction.

**Mooring and Berthing Analysis and Pier Improvements, Curacao Ports Authority, Willemstad, Curacao.** Responsible for mooring and berthing analysis to determine required improvements for Mega Jetty to accommodate new vessel classes. Improvements included the addition of new fenders, bollards and dolphins.

**Mooring and Berthing Analysis and Pier Improvements, St Lucia Air and Sea Ports Authority, Castries, St. Lucia.** Responsible for mooring and berthing analysis to determine required improvements for Berth 1 Jetty to accommodate vessels up to Oasis class. Improvements included the addition of new fenders, bollards, dolphins and pier extension.

**Worldwide Port Vetting, Disney Cruise Lines, Lake Buena Vista, Florida.** Evaluated ports worldwide for a new vessel class to determine whether berth modifications were required. Provided a summary of necessary improvements including the estimated costs for the required changes.

**Mooring and Berthing Analysis and Pier Improvements for Crown Bay, Royal Caribbean Cruises Ltd., Willemstad, Curacao.** Responsible for mooring and berthing analysis to determine required improvements for Mega Jetty to accommodate new vessel classes. Improvements included the addition of new fenders, bollards, and dolphins.

**Mooring Bollard Improvements at Crown Bay, Virgin Islands Port Authority, Charlotte Amalie, St. Thomas, U.S. Virgin Islands.** Project involved the addition of a high-wind bollard to provide adequate mooring strength for the new mega-cruise ship Oasis of the Seas.

**Mooring Buoy Relocation and Breasting Dolphin Design, West Indian Company, Charlotte Amalie, St. Thomas, U.S. Virgin Islands.** Project involved the relocation of an existing mooring buoy to provide adequate mooring strength for the new mega-cruise ship Oasis of the Seas. Additional scope elements included the design of a new breasting dolphin.

**Cruise Ship Study, 2022 FIFA World Cup Qatar Supreme Committee for Delivery and Legacy, Doha, Qatar.** Explored opportunities to use cruise ships for temporary accommodations during the Q22 FIFA World Cup. Report analyzed several ports for navigation, berthing, mooring and service capabilities.

**Mooring and Berthing Analysis, Port of Galveston, Galveston, TX.** Responsible for improvement designs for the Port of Galveston Texas to accommodate new vessel classes, including the addition of new fenders and bollards.





**GARY LEDFORD**  
**CRUISE TERMINAL**

**Education**

MS, Engineering, Structures and Applied Mechanics, University of South Florida, 1975

BS, Engineering, Structures, Materials, and Fluids, University of South Florida, 1974

**Registration**

Professional Engineer: FL (#20664, 1980)

Gary Ledford will assist with cruise terminals. His expertise is in the field of structural design. He has designed bridge structures, wharf facilities, bulkheads, and other marine structures at Port Canaveral, Florida. He has been responsible for planning the piers for several cruise terminals and cargo facilities. He has performed berthing studies of cruise ships, bulk cargo ships, and tankers. Gary has designed several passenger loading ramps and mobile gangways. He has also designed the repair and restoration of pier and bridge structures.

Since 1997 Gary has been the project manager and lead design engineer of fire training facility designs, both land based and maritime trainers. He has also been responsible for leading design teams through actual live fire training.

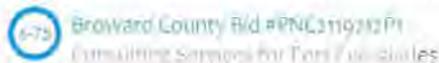
**Project Experience**

**CT1 Berth, Port Canaveral, FL.** Responsible for the planning, design, and construction administration services for the 1,400 ft long deep bulkhead berth for Oasis Class cruise vessels. Project included the demolition of South Cargo Pier 5 and a portion of South Cargo Pier 4, Tanker Berth 1 and a petroleum barge berth. SCP 4 remained active during this project. \$31.4M. Other project features:

- Deep bulkhead wall berth: 54-in diameter pipe piles with Z-SSP combi-wall with A-frame pipe pile tie-back system.
- Dredging to -37-ft MLLW with off-shore disposal of spoil.
- Vessel side thrusters and azipod propulsion underwater scour protection mats.
- Prop wash deflector wall integrated with future water taxi slip.
- Mooring and berthing analysis – Oasis and Quantum Classes; Carnival Dream Class; Norwegian Epic and Breakaway Classes.
- Passing ship analysis with surge effects on moored vessels.
- Cruise vessel to terminal interface – luggage/stores handling, mobile gangways, potable water stations, bunker fuel pits.
- Corrosion protection utilizing 50% slag concrete mix with calcium nitrite corrosion inhibitor.
- Commercially certified Professional Engineer divers inspected underwater construction.
- Permits obtained in record time including the concurrence for off-shore disposal.



**Section 203 Navigation Improvements Feasibility Study, and Canaveral Harbor 44 Foot Channel Navigation**





**Improvements Project, Port Canaveral, FL.** Led the team that prepared the Engineering Appendix to the Canaveral Harbor Section 203 Study which included widening and deepening of the main channel, widening the approach to the West Turning Basin (WTB), and providing larger turning circles within the port's two basins. The WTB turning circle and the recommended channel width was driven by the large sail area of the cruise ships, while the recommended channel depth was driven by the deeper draft cargo vessels. Prepared plans and specifications to construct the Recommended Plan, and provided construction administration services during construction.

**North Cargo Berths 5 & 6, Port Canaveral, FL.** Performed planning and design of an 1,800 ft long deep bulkhead wall berth utilizing a combination wall of 54 inch diameter pipe piles with steel sheet pile Z sections, with a relieving platform with 18 in<sup>2</sup> prestressed concrete piles. Design load was 1,200 PSF and the bulkhead design depth was -43 ft MLW. Project included STS container crane rails, the transfer beams that were used to transfer the cranes from the delivery vessel to the berth rails, heavy weather shore mooring dolphins, and dredging with off-shore disposal of the spoil.

**CT10 Mooring Improvements, Port Canaveral, FL.** Planned, designed, and prepared construction documents for additional mooring structures so that cruise terminal 10 could expand from Voyager Class vessels to Freedom Class vessels. Also activities included verification that the existing gangways will accommodate the larger vessels.

**West Turning Basin Navigation Improvements, Port Canaveral, FL.** Provided planning and design services to widen the access to the West Turning Basin for Freedom Class vessels. The project included dredging with sand recovery for re-use, and relocation of an existing roadway and utilities.

**CT8 Berth Improvements, Port Canaveral, FL.** Performed planning and preliminary design of improvements to the berth that will be needed for the larger Disney cruise ship. Improvements included additional mooring structures, deepening an existing bulkhead wall, dredging, modifications to the scour protection system, modifications to the dock for future "cold-ironing" infrastructure, and replacement of the fixed gangways with a "jet-way" style gangway.

**Cruise Terminal Siting Study, Jacksonville Port Authority, FL.** Performed site evaluation of landside and waterside features needed to berth Voyager Class vessels at two sites in Jacksonville. The project included the evaluation of the navigation in the channels, turning basin, berth approach, upland traffic patterns, and space needed for the terminal and parking. Alternate site plans and preliminary cost estimates were developed for each site.

Project Manager and Design Engineer, St. Maarten Cruise Berth Study, St. Maarten Port Authority, St. Maarten. Evaluated a proposed cruise pier expansion including cargo improvements and breakwaters for Genesis class cruise ships.



Broward County Bid #PNC219313P1  
Consulting Services for Port Synchrodes



**ANA ELIAS, PHD, P.E., PTOE  
TRANSPORTATION AND  
TRAFFIC ENGINEERING**

**Education**

PhD, Civil Engineering, University of Florida

ME, Civil Engineering, University of Florida

BS, Civil Engineering, University of Cordoba, Argentina

**Registration**

Professional Engineer: FL (#66369, 2007)

**Certification**

Florida Professional Traffic Operations Engineer (#2332, 2007)

Ana Elias, PhD., PE, PTOE will provide transportation and traffic engineering. Ana has 27 years of experience in several areas of the transportation field including: transportation planning, computer modeling and simulation, traffic engineering, and transportation economy. She has proficient knowledge of highly specialized transportation software (Cube Voyager/Avenue/Analyst, VISSIM/VISUM, PARAMICS, TSIS, HCS-2000/2010, and Synchro, including GIS packages), and a thorough understanding of most areas of the transportation industry. Dr. Elias has been the project manager and technical task leader on a broad spectrum of transportation projects—both domestic and international—from planning and travel demand modeling efforts to complex micro-simulation and operational analyses. She has actively participated in many design-build ventures, successfully helping the design teams to prove and flaw-test alternative technical concepts that have successfully gained the praise of clients. Furthermore, her proficiency in understanding clients' needs allows her to excel at developing sound technical scopes that fully satisfy clients' requirements.

**Project Experience**

**FDOT District 6, SR 7 from SW 8th Street to GGI Park and Ride Lot Corridor Study, Miami, FL.** This study provided professional transportation planning, traffic operations, and environmental services for the development and evaluation of corridor alternatives to develop a recommendation for further study for a critical arterial in Miami-Dade County; namely, SR 7. The project involved a detailed compilation of existing conditions and coordination with a project advisory team (PAT) to determine a series of strategies from which viable build alternatives were developed and analyzed using a variety of planning and operational tools such as SERPM 6.5 travel demand model, VISSIM, Synchro, and LOSPLAN. The first lane elimination project in District 6 was approved by Central Office as part of the SR 7 Corridor Study. In an effort to accelerate the implementation, the lane elimination recommended improvements were incorporated into three programmed RRR.

**FDOT District 4, District-wide Urban Model Application Support, FL.** Assisted the Systems Planning staff with applying the Dynamic Traffic Assignment (DTA)/Mesoscopic tool. The





state-of-the-art DTA tool applies Cube Avenue in the modeling of the Southeast Regional Planning Model (SERPM). Currently, the DTA tool is being updated for use with the latest SERPM 7 Activity- Based Model in the modeling of managed lanes. Tasks performed to-date include subarea identification and network preparation, traffic data analysis, demand estimation, DTA tool calibration and validation, and a static versus dynamic assignment test.

**BeltLine West Streetcar Project Environmental Assessment, Atlanta, GA.** Determined the locally preferred transit and trail alignment, to complete an environmental assessment (EA), to prepare for the next phase in project development with FTA, and to support public outreach and stakeholder communication for the Atlanta BeltLine West Corridor. Modern Streetcar was selected in a Tier I Environmental Impact Statement as the preferred transit mode for the entire BeltLine network. This project focused on implementing streetcar in the West Corridor which runs approximately 4.6 miles. Ana assisted with the travel demand modeling and transit ridership forecasting tasks. Future traffic forecasting will be performed using two methods, historical traffic growth, and the ARC travel demand model. The ridership forecast for the streetcar extension is being developed using FTA's national model, STOPS.

**FDOT District 4, SE 17th Street Transit Study, Fort Lauderdale, FL.** The study evaluated transit service on SE 17th Street from SR 5/US 1 east to Port Everglades, as an extension to the Federal Transit Administration (FTA) approved Downtown Transit Circulator known as The Wave Streetcar. As part of this work order, the mesoscopic Dynamic Traffic Assignment (DTA) tool developed by District 4 is being applied to determine the level of diversion expected if the typical cross-section of SE 17th Street were to be reduced by one lane. Additionally, a more detailed microscopic simulation analysis is being performed using the VISSIM software which includes the calibration of AM and PM peak periods, and future No-Build and Build analyses with the proposed streetcar extension in place.

**FDOT District 4, Central Broward East-West Transit Study, Fort Lauderdale, FL.** This study developed and evaluated a series of transit corridors and modes in Central Broward County (Fort Lauderdale) to determine the most effective way to accommodate future east-west travel demand. A detailed analysis was undertaken utilizing the VISSIM microsimulation software to simulate and evaluate the traffic and transit operations along the Broward Boulevard and SR 7 corridors given the preferred alternative. Ana was Senior Technical Director of the "VISSIM/3-D Modeling Supplemental Services" task related to this project. She evaluated the future operating characteristics of SR 7 between Riverland Road and Broward Boulevard and along Broward Boulevard from SR 7 to just west of I-95 with at-grade transit service along the median of these two arterial roadways.





**JOSEPH MARTIN, P.E.  
TRANSPORTATION AND  
TRAFFIC ENGINEERING**

**Education**

BS, Civil Engineering, University of Miami

**Registration**

Florida Professional Engineer,  
#47621

Joseph Martin, P.E. will provide transportation and traffic engineering. He has over thirty years of Civil Engineering design and construction experience, with expertise in Project Management, highway design, drainage design, construction administration, and site civil design including paving, grading, drainage, water and sewer design, permitting, drainage calculations, report preparation, construction inspection, cost saving initiatives (formally value engineering change proposals), design/build contract administration and as-built plan preparation. This unique experience affords Joe the understanding to manage a projects design and development in such a manner to ensure constructability, quality, and best value are maintained throughout the project's completion.

**Project Experience**

**Fort Lauderdale, FL, EAC Consulting, Inc,** Vice President/Special Projects in responsible charge of the Company's Design-Build Pursuits. Primary responsibilities include supervision of multi-disciplines design teams to meet our Design-Build project needs. Current responsibilities include, business development of Design and Design Build pursuits, personnel allocations, contract negotiations, staff-hour estimates, production scheduling, invoicing, strategic planning, financial budgeting, geometric design, drainage design, maintenance of traffic, roadway pavement markings, signing, permitting, constructability reviews, construction contract preparation, construction contract administration, and final project certification. Also, as technical lead, Joe provides technical support across the Firm, providing design guidance and constructability reviews.

**Coral Gables, FL, Odebrecht USA,** Design Build Manager. As the corporation was undergoing restructuring, Joe's day-to-day responsibility shifted to include performing the role as Design-Build Manager on MDX's \$150M SR 836 Ultimate Project. This Design-Build Project consists of 4.7 miles of roadway widening (from NW 17th Avenue to NW 57th Avenue) to the ultimate 8 lane roadway typical section, including 9 new bridges, 21 bridge widening's, 2 Diverging Diamond Interchanges (DDI), 3 CD Roads and 5 arterial road crossings. Design Build Manager responsible for the management of the Roadway and Bridge Division's pursuit and management. Primary responsibilities





include tracking future DB opportunities, developing procurement strategies, preparation and review of Pre-Sell Documents, ELOI's, ATC's, Technical Proposal's and responses to questions generated through the DB procurement process throughout Florida. Responsibilities also include, DB teaming agreement negotiations, design contract negotiations, project scheduling, design and constructability reviews, comment resolution and developing creative design solutions to constructability issues.

**I-95 and Spanish River Interchange, Boca Raton, FL**, FDOT District IV. The design of a new three level interchange with I-95 and Spanish River Boulevard in the City of Boca Raton. This project was advanced from the PD&E phase to a pre-60% project completion phase when the owner (FDOT District IV) modified the delivery method from a conventional design bid build to a design build project. Mr. Martin was in responsible charge and in direct supervision of the design and project manager. He was also responsible to prepare the proposed Request for Proposal (RFP) for the design build and has been involved in the technical review of the proposals.

**Overseas Highway (US 1/SR 5), Duck Key, FL**, FDOT District IV. Milling and resurfacing design of a 14 mile section of two lane roadway from north of Duck Key. Mr. Martin is in responsible charge and direct supervision of the roadway design and project management.

**SW 1st Street, Miami, FL**, FDOT District VI. Reconstruction of a highly urbanized roadway section though Little Havana in the City of Miami from SW 17th Street to SW 5th Street (1 mile) in Miami Dade County. Mr. Martin is in responsible charge and direct supervision of the roadway design and project management.

**Grassy Key (US 1/SR 5), Florida Keys, FL**, FDOT District VI. Resurfacing, and widening of a 5 mile, two lane section of US 1 in the Florida Keys. Mr. Martin was responsible for the Post Design Service Project Management.

**Tamiami Trail (SR 90), FL**, Army Corps of Engineers (ACOE). 11 mile roadway reconstruction project including a 1 mile bridge. This project was a part of the Everglades Restoration Act. Mr. Martin is in responsible charge for the Post Design Services.

**SR 826 & SR 836 Interchange, Miami, FL**. Mr. Martin was responsible for the plans review coordination of the interchange to ensure all FDOT and ASHTO geometry requirements are being achieved. This project is a design build contract with plan reviews being submitted in phases per section/ramps.

**Palm Avenue, FL, Broward County** Highway Construction and Engineering Division (BCHCED). 1 mile of a roadway reconstruction to a new 4 lane typical section. Mr. Martin is in direct supervision of the roadway design, drainage design, landscaping design, irrigation design, signing and pavement marking design teams. Mr. Martin's efforts included the project management coordinating between the County and the City of Cooper City to accommodate a water main replacement, landscaping and street light enhancements.





**DAVID MAAS, P.E.  
INTERMODAL AND RAIL**

**Education**

M.B.A., Jacksonville University

B.S., Civil Engineering, University of North Carolina at Charlotte

Leadership Development Program, University of Maryland

Technology Leadership Program, University of North Carolina

**Registration**

Professional Engineer (Civil), Florida, No. 51800

David Maas, P.E. will oversee intermodal and rail. He has over 39 years of continuous experience working in the freight rail industry. His specific expertise has grown from the engineering design side of freight rail and intermodal facilities, into operations planning and analysis, and budgeting efforts for CSX Intermodal, and the Mechanical and Engineering departments of CSX Transportation. Prior to leaving CSX in 2006, after 25 years of service, David was a member of senior management responsible for developing the business case and project management implementation of new technology applications in the operating department. While at TranSystems, he advanced from a team leader for freight rail facility design to a senior vice-president and principal in the firm with nation-wide client management responsibility for Class 1 railroads, intermodal companies, and many major industrial clients. These services included operations planning and analysis efforts of major rail terminals, intermodal terminals, industrial development complexes, and GIS solutions. He has worked internationally as an intermodal operations and facility design consultant in both Europe and Asia.

David's international experience includes the Dutch Ministry of Transportation, where he provided intermodal terminal operations analysis and recommendations for the Port of Rotterdam, Netherlands, on-site at its Maasvlekte facilities. This effort included Sealand's fully automated port facility and the Dutch railway's on-dock intermodal terminal. David had the privilege to work on-site in Hong Kong as an intermodal operations planning consultant to the KCRC railway.

David's strengths include strategic thinker, good listener, very client focused, a good leader with a coaching and delegation style, and works well in cross-functional team environments. He considers himself very creative, hardworking, with excellent planning and presentation skills.

**Project Experience**

**Intermodal Bedford Park Intermodal Terminal Retrofit for Rail Mounted Cranes Study.** Dave Maas served as client manager and provided operations planning and feasibility discussion in providing CSX Intermodal with facility layouts, and a concept of continuous operations during the retrofit process





of replacing rubber-tired gantry cranes with wide span rail mounted gantry cranes.

**FEC Port Everglades ICTF Operations Planning.** Dave Maas served as client manager and provided operations planning and facility conceptual planning to the Florida East Coast (FEC) for the proposed and now in service ICTF for Port Everglades Florida. This initial review provided a major change to the planned facility, equipment to be used, and the overall operation of the terminal. FEC used the concept plan to for there RFI, RFQ, and finally for the design build RFP for the ICTF implementation.

**BNSF / Ferromex Punta Colonet Corridor Alternatives Analysis.** Dave Maas was the project manager and stakeholder liaison for a feasibility study conducted to analyze potential rail routes between the proposed Punta Colonet Port site located on the Mexican Baja to potential connection points with the BNSF throughout the southwestern portion of the United States. This project sponsored by the BNSF and Ferromex used a GIS approach to develop the three-dimensional modeling tool necessary to complete a comparative analysis of the potential routes. Publicly available data bases for imagery, topography, zoning, cultural sensitive areas, and drainage were combined into a single three dimensional modeling tool. Using predetermined maximum curvature, grades, and typical cut and fill sections, probable costs of construction where completed for all of the various route options including drainage and bridge structures. The alignments generated from the three-dimensional model were converted for display using Google earth and Google Mapper for presentation to senior members of both BNSF and Ferromex. This google earth tool was used to provide a bird's eye of the potential routes and highlight the pros, cons, and challenges of each alternative.

**East Metro Rail Capacity Study, project location, Ramsey County Rail Authority.** Dave Maas served as the task lead for the operation analysis and planning study to identify the impacts and recommend solutions to freight and passenger rail constraints for purposes of the development of a regional multimodal transit hub at the Union Depot in downtown St. Paul. The modeling study included operations for BNSF, UP, CPR, TCW, Amtrak and Red Rock Commuter trains within the corridor. The study illustrated that sharing of the rail corridor infrastructure for both freight and passenger rail operations was feasible and the analysis use performance metrics that showed no degradation is service to any carrier based their proposed increase in train service driven by volume projections for each stakeholder, and the proposed infrastructure improvements that were recommended based on the analysis performed.

**BNSF Alliance Yard Capital Investment Alternatives Analysis.** Dave Maas served as client manger and handled all communication with BNSF senior leadership in the evaluation of multiple capital programs recommended within the BNSF to improve the operations of the unit train yard in Alliance Nebraska. Dave led the terminal operations analysis for the various options for this important terminal known as the heart of the Power River Basin. This third party neutral role was well accepted and provided the BNSF with the needed efficiency and effectiveness measurements to make a well thought through capital decision. This initial effort became the model for future capital planning efforts and process the BNSF used for multiple project evaluation efforts on an annual basis.





**MICHAEL SHOSTAK, P.E.**  
**INTERMODAL AND RAIL**

**Education**

BS, Civil Engineering, University of Tennessee, 1984

**Registration**

Professional Engineer: FL (#73320);  
IL (#062-46075); GA (#25276)

Michael Shostak, P.E. will provide intermodal and rail. He has extensive industry experience with design, construction and planning projects involving passenger and freight railroads, transit systems, and facilities. His technical expertise includes project management, track and bridge design, cost estimating, construction services, environmental documents, and various planning efforts. Michael has progressive consulting experience, engineering design, and construction with both private and public-sector clients, as well as practical field experience with two freight railroads.

**Project Experience**

**Jacksonville Port Authority, Blount Island Rail Improvements, Jacksonville, FL.** Responsible for design and construction services for complete replacement of 19,800 ft of track on wood ties with 115# welded rail on steel ties, 19 turnouts, 25 crossings. Close coordination was required to maintain port operations during construction.

**CSX Transportation, Capacity Improvement Projects, Various Locations.** Responsible for design, permitting, bid assistance and construction services for multiple CSXT capacity improvement projects including:

- Catskill, NY: 7.8 miles new second main track with 40 ft steel bridge.
- Banks, AL: New 7,000 ft storage siding.
- Auburn, GA: new 5-track switching yard, yard office, and 2.1-mile siding.
- Adger, AL: 3,200 ft siding extension with 120 ft concrete bridge.

**CSX Transportation, Public Project Program Management, Various Locations.** Responsible for preliminary and construction engineering for over 175 outside party projects on CSXT in FL, SC, GA. Project reviews for bridge and roadway projects, force account estimates, agreement handling, coordination of construction inspectors.

**South Florida Regional Transportation Authority (Tri-Rail), Utility Permitting/Corridor Occupancy Program, W. Palm Beach to Miami, FL.** Responsible for implementing the corridor





occupancy transition process from CSXT to SFRTA. Developed utility permit and right-of-entry procedures, applications, standards for pipelines and wirelines, a permit fee schedule, and SFRTA website content for use by outside parties. Coordinated with Florida Department of Transportation (FDOT) to set up permit procedures. Managed program and reviewed occupancy applications and design information for utilities, highway and bridge projects, and new freight sidetracks. Prepared cost estimates for track, signal and crossing projects.

**Norfolk Southern (NS) Railway, Capacity Improvement Projects, Various Locations.** Responsible for design, permitting, bid assistance and construction services for multiple NS capacity improvement projects including:

- Atlanta, GA: new 3.2-mile third main line around Inman Yard.
- Selma, AL: New 12,000 ft main line bypass around existing yard.
- Brownsboro, AL: 6,700 ft extension of existing passing siding.
- Elkton, VA: New 2.7 mile passing siding with two 34 ft steel bridges.

**Florida East Coast Railway (FECR)/All Aboard Florida, Miami-Orlando, FL:** Worked on the concept design for double tracking the existing FECR corridor between Miami and Cocoa and construction of a new rail corridor between Cocoa and the Orlando airport. Track and bridge design, cost estimating, Rail Traffic Controller simulations.

**Norfolk Southern Railway, Support Services for Charlotte Area Transit System (CATS) South Corridor/Blue Line LRT, Charlotte, NC.** Responsible for design reviews, force account estimating, and construction services for CATS' new light rail transit line that shares five miles of active NS right-of-way. Represented NS for various tasks and coordination between NS, CATS and CATS' consultant and contractor teams. Work included a new 110' NS railroad bridge with temporary shoofly track, two highway overpasses, and multiple grade crossing upgrades.

**Wisconsin Department of Transportation (WisDOT), High Speed Rail Design, Watertown to Madison, WI.** Responsible for the track design effort for upgrading an existing 42-mile short line freight rail corridor from 25 mph to 110 mph passenger train standards. Developed track design criteria, led track design effort, coordinated track, structural, and grade crossing design, bid assistance for bridge work; environmental permitting. Coordination with WisDOT, local and state agencies, public groups, shippers, property owners, Wand Southern Railroad and Canadian Pacific Railway.





**PAUL STARR, PHD, PE, CENG  
MARITIME STRUCTURAL**

**Education**

PhD, Fluid Dynamics & Sediment Motion, University of Manchester, UK, 1989

BSc, Civil Engineering, University of Manchester, UK, 1984

**Registrations**

Professional Engineer: FL (#70636, 2009); TX (#96270, 2005)

Chartered Engineer (CEng): UK (#47424076, 1994)

Paul Starr, PhD, P.E. is filling the role of maritime structural. Paul brings over 30 years of diversified experience in marine and coastal engineering. He specializes in project management, design, and development of port facilities worldwide. Paul was Jacobs' Project Manager for Owner's Engineering Services at Embraport, a design-build project to construct a new \$600M container terminal in Santos, Brazil. He also served as our Project Manager for the award-winning new \$230M Dames Point Container Terminal in Jacksonville, FL. Most recently, Paul is the Technical Advisor for the new \$460M Container Terminal Moin for APMT in Costa Rica.

**Project Experience**

**APMT Moin Container Terminal, Costa Rica.** Responsible for design and construction of Moin Container Terminal, comprising 79 ha of reclamation and 5,000 lf of berth protected by a 5,300 lf breakwater. The phased project began with Phase 2A, which includes the detailed engineering, nationalization of design documents and permitting, and construction of the container terminal that will include 600 m of wharf structure, backland area of approximately 40 ha to be used as a container yard, buildings, and support facilities.

**Embraport Container Terminal, Santos, Brazil.** Responsible for this design-build project to construct a new container terminal in Santos, Brazil. The project includes 650 lm of piled platform quay deck with a berth depth of 16 m; 87 ha of container terminal development; plus dredging, buildings and bridges. Role included Engineer's representation, design review and auditing and other engineer's duties.

**Haiti Port Sector Study, International Finance Corporation, Washington DC.** Managed this high profile study into the status of Haiti's port infrastructure following the January 2010 earthquake. The study included benchmarking of tariffs with other ports in the region; market demand forecasting; assessment of the condition of existing facilities (post earthquake); recommendations for new facilities including coastal and structural considerations; cost estimating and advice on revision to regulatory structure of the ports. The project was completed on a demanding schedule.





**Port of Miami Wharf Strengthening Program, Miami Dade Seaport Department, Miami, FL.** Oversaw the strengthening of 7,300 lf of wharf to for the Port of Miami's container terminals in preparation of deepening the harbor to 52 ft. The project included underwater inspection, structural evaluation, engineering, and detailed design development of Wharves I through VII to accommodate larger vessels at the Port of Miami. Also involved in contract administration during construction. The project was completed in 2014, in time for the opening of the New Panama canal.

**Mayport Ferry Gantry Replacement, Jacksonville Port Authority, Jacksonville, FL.** Supervised the design-build contract to replace aging 60 year old gantry structures used to adjust ro-ro ramps on Jaxport's historic St. Johns River ferry service. Provided engineering and design services for structures that were replaced on both sides of the St. Johns River with new corrosion resistant gantries. The project was 100% financed by the Ferry Boat Discretionary Program under the American Recovery and Reinvestment Act, and as such, the entire schedule of design, fabrication and installation was limited to a three month schedule to comply with the funding availability requirements. The timing of installation was also critical to the schedule because the gantries had to be installed while the ferry was in dry dock during the month of December 2010. Despite the demanding timeline the project was completed ahead of schedule and well within the budget.

**Dames Point Container Terminal, Jacksonville Port Authority, Jacksonville, FL.** Managed the development of a 160 acre container terminal including 3,000 lf of bulkhead for two berths, and paving for an RTG operation to increase the number of containers shipped through JaxPort by 50%. Responsibilities included coordination, design and delivery of all planning, permitting, mitigation, engineering and construction phases of this project. Additional duties included construction administration and project management throughout the construction phase. Project awards included: Project Excellence Award 2010, ASCE COPRI; Diamond Award for Project Excellence 2010, ACEC New York; International Project of the Year 2009, British Construction Industry Awards; Individual Consultant of the Year (2nd place) 2009, British Expertise Awards; Gold Award for Construction Management 2009, Construction Management Association USA

**Port St. Joe Berth and Dredge Design, Panama City, FL.** Supervised the design and construction of a new shallow depth bulkhead for berthing of barges.

**Security Operations Center, Jacksonville Port Authority, Jacksonville, FL.** Worked as part of the Federal program for increasing security at Seaports, JaxPort successfully applied for a grant to construct a security operations center to centralize all their CCTV and other security measures. The budget was limited but the port required maximization of floor area to provide them with optimum usage for future needs for the building. Developed and promoted a unique design utilizing shipping containers to minimize costs while maximizing space.

**On-Call Engineering Services, Jacksonville Port Authority, Jacksonville, FL.** Responsible for management of varied engineering projects including waterfront structures, pavements, dredging, building construction, railworks, above and underwater inspections, topographic surveys, and geotechnical investigations.





**RAYMOND COX, P.E.**  
**MARITIME STRUCTURAL**

**Education**

ME, Structural Engineering,  
University of Florida, 1980

BS, Civil Engineering, University of  
Florida, 1979

**Registrations**

Professional Engineer: FL (#34212);  
WA (#24794); AZ (#21522); NV

Ray Cox, P.E. brings over 40 years of port experience and will assist with maritime structural. Ray has extensive experience working throughout Florida for decades. Ray has managed design and development of complex port and pier projects and developed and served on peer review and quality improvement/assurance committees. He utilizes his engineering experience, along with project and production management expertise to deliver efficient, cost-effective, state-of-the-art designs that meet security, safety, operational, logistical, and regulatory requirements. Ray specializes in cruise terminal and berth planning and design including passenger boarding bridges and terminal layout, as well as container and cargo terminals.

**Project Experience**

**Georgia Ports Authority, Engineering and Environmental Program Management, Savannah, GA.** Served as Program Manager, transitioning to Quality Manager (after training new PM) for \$40 to \$60M in annual capital improvements. Managed the numerous engineering, planning, and environmental permitting projects as requested by the GPA, and provided construction oversight and Quality Assurance services. Projects ranged from High Mast Lighting upgrades, to annual structural inspections, fire protection upgrades, equipment purchases, repairs and rehabilitation of wharves and warehouses, pavement expansion and rehabilitation to rail improvements. Projects were located across the five Atlantic Coast terminals.

**Virginia International Gateway, Virginia Port Authority, Portsmouth, VA.** Project Engineer for the 650-ft extension of the container berth structure. The project completed the planned build-out of the VIT terminal by constructing a concrete cylindrical pile supported wharf along the Elizabeth River. Consideration to lessons learned during the original construction, maintenance issues, and cost were included in the design.

**Point Seraphine Berth Extension, Castries, Saint Lucia W.I., Saint Lucia Air and Seaports Authority.** Project involved the design of an extension to the existing cruise ship berth, along with three new mooring dolphins. The extension was accomplished through the use of 180 ft x 100 ft pipe-Z bulkhead system. The three 150 mT mooring dolphins were designed as coffercells with a concrete cap. oose sand and silts over the hard limestone,





and a seismic active area lead to the coffercells as the best solution for the extension and dolphins.  
**Texas Cruise Ship Terminal at Pier 27/29 (Terminal No. 2), Port of Galveston, TX.** Renovations of the Piers 27-29 facility that utilized the design/build method. Project included renovations to an existing 80,000 sf warehouse, along with pier expansion, site, and roadway improvements to accommodate ships up to 1,000 ft in length and 3,500 passengers. Project also included an upgrade and expansion of the existing warehouse, modified deck facilities, and construction of access/circulation roads for passenger pickup and drop-off.

**Miami-Dade Seaport Department, Port of Miami, Miami-Dade County, FL.** Project/Program Manager for various professional continuing service work order contracts, providing structural, mechanical, electrical, and environmental services. Projects range from post-hurricane inspections and damage repairs, to feasibility studies, bulkhead extensions, gantry runways, to fender replacements. Many include the initial concept designs, permitting services, and engineering support services during construction.;

- Cruise Terminal A Marine Infrastructure: Review of the construction documentation and technical support during the construction stage. The project consisted of the demolition of the existing bulkhead; dredging of a large area behind the existing bulkhead; and the construction of a new bulkhead with the respective stations, drainage systems, fenders, bollards and pavement.
- Cruise Terminal E Waterfront Improvement: Engineer of Record (EOR) for the Design, Permitting, Bidding and Construction Phase for the installation of new bollards and runways for the Passenger Boarding Bridges, including tie-downs.
- Cruise Terminal J Bulkhead Repair: EOR for the reconstruction of the concrete cap, Ro/Ro ramp, bollards and fenders replacement, and replacement of the water stations.
- SFCT Cargo Yard Densification: EOR for the densification of the container yard in order to achieve the same, or more, capacity with less storage area. Project included capacity and traffic analysis; new runways and turning pads; pavement and markings; drainage systems; new illumination and high mast poles; electrification by means of substation expansion, high voltage ductbanks, construction of two new vaults, transformers, and switchboards; new reefer racks with plugs and the related electrification; coordination with PortMiami, SFCT and Florida Power & Light (FPL); and repowering of existing facilities. The services included design, permitting, advertisement and bidding support, and construction phase support.
- Rubber Tire Gantry Runways: To accommodate the use of three new Rubber Tire Gantry (RTG) cranes, the Port required improvements to the pavements in the Universal Maritime Service Corporation/Maersk area of its container storage yard on Lummus Island. Evaluation of several pavement options was necessary to determine the optimum section to carry the 45-ton wheel loads of the RTG.
- Replacement of Fenders along the South Container Berth of Lummus Island: Conceptual design and construction plan preparation for new ship fenders along 5,000 ft of container wharf. As part of the study, an evaluation of current and planned ships using the facilities was performed. Based on this information, a large-diameter, foam-filled fender was recommended that was capable of resisting the berthing force for a 1,000-ft, 80,000-GRT, 6,000-TEU, and post-panamax vessel.
- Wharf 6 Bulkhead Extension, Lummus Island: As part of the Port of Miami long-term capital improvement projects, a new container wharf was required. Extending 1,000 ft from the end of the existing Wharf 5, plans for a new bulkhead, and portal crane rail system were developed. To reduce construction costs, a combined bulkhead and crane rail beam system was developed. This combined system was estimated to save the Port approximately \$750,000 versus the use of separate bulkhead and crane rail beams.





**JIM MOORE.  
ENVIRONMENTAL  
COMPLIANCE AND  
PERMITTING**

**Education**

BS, Physical Geography, University of Florida, 1987

Jim Moore will lead environmental compliance and permitting. James is a Senior Environmental Specialist with more than 30 years of experience in deepwater port/waterfront development planning and design, and environmental permitting. His experience has been particularly focused on federal and state regulatory programs associated with dredge and fill projects. This includes permit application development and agency negotiations, sovereign submerged lands authorizations, alternatives analysis documentation for wetland and navigable water impacts, sampling and analysis plan development for sediment characterization studies of harbor deepening projects with aquatic or upland dredged material disposal. James was Senior Associate responsible for port-related environmental services coordination and related initiatives for four of Florida's deepwater ports. Including supervision of technical support staff and subconsultants, environmental assessments, port master planning, mitigation NPDES storm water program compliance, grand funding, State legislative technical assistance, port commission and technical seminar presentations/publications.

**Project Experience**

**Colonel Island Terminal Berth 4, Georgia Ports Authority, Glynn County, GA.** Responsible for managing State and Federal permit acquisition for a new 600' Ro/Ro berth at GPA's Colonel Island auto terminal.

Cruise Terminal 1, Canaveral Port Authority, Brevard County, FL. Responsible for State and Federal permit acquisition for the marine construction component of CPA's newest cruise terminal. Coordination with agencies required relocation of an existing public boat ramp with a new ramp facility with improved public access and amenities. Project required authorization for off-shore disposal of 250,000 cy of dredged material and was designed, permitted and constructed in under 12 months to accommodate port of call schedule for RCL Oasis of the Seas. Total project construction costs approximately \$15M.

**Canaveral Harbor Widening and Deepening Section 203 Study, Canaveral Port Authority, Brevard County, FL.** Responsible for managing updates and revisions to the Engineering Appendix developed with U.S. Army Corps of Engineers (USACE) oversight for \$30M of improvements to the





Canaveral Harbor Channel including 3.1M cy of dredging approved for offshore disposal. Study has been approved and signed by the Assistant Secretary of the Army for submittal to Congress for future funding considerations under WRDA.

**Berth 12 Dredging, Port Manatee, Manatee County Port Authority, Manatee County, FL.** Responsible for development of plans and specifications for the successfully completed dredging of 1.3M cy of hydraulic dredging to expand Port Manatee's Berth 12.

**South Port Container Terminal Design, Manatee County Port Authority, Manatee County, FL.** Responsible for design and permitting of the future Phase 1 component of a 32-acre South Port container terminal. Site is designed for an estimated 300,000 TEU annual throughput including reefer capacity. Tasks included conceptual design alternatives, heavy paving, access improvements, drainage, lighting, reefer electrical, and utility improvements, permitting, stormwater design, and FDEP and County permitting. Responsible for all phases of final site and construction plan approval.

**Warehouse 11, Manatee County Port Authority, FL.** Managed all aspects of construction administration for the construction of a new 172,000 sf dry storage warehouse. Services provided included oversight of pavement, foundation, lighting, parking, fire protection, and utilities improvements. Other areas of responsibility included managing improvements to landscaping and irrigation systems. Instrumental in strategically applying the Authority's direct purchase program on this \$11M project construction cost, resulting in a 26% cost savings.

**Port of Portland, Portland, Oregon.** Provided contract and permit negotiation assistance for the use of the Dredge Oregon for the O&M dredging of the Columbia River 40-ft navigational channel; Upland Disposal Site Acquisition for the Columbia River 40-ft project and proposed 43-ft project. Oversaw wetland reviews, Phase I and II Environmental Site Assessments (ESAs), and related permitting support for disposal and mitigation sites located in Washington and Oregon. Provided technical assistance for ocean disposal site selection process for new sites off the mouth of the Columbia River. Marine Terminals #2 and #5 Maintenance Dredging Permits. Developed and processed the joint Federal/State permit applications and Section 401 Water Quality Certification.

**City of Portland, Bureau of Environmental Services, Portland, OR.** Responsible for in-water construction alternatives and permitting analysis for the Northwest Combined Sewer Overflow Force main installation across the superfund listed portion of the Willamette River.

**U.S. Army Corps of Engineers (USACE), Seattle District, WA.** Responsible for ESA consultation and Section 404 alternatives analysis for the Tongue Point, Oregon limited remedial investigation and remedial design for a 20- acre uncontrolled landfill.

**Georgia-Pacific Paper Mill, Toledo, OR.** Responsible for permitting the replacement of 12,000 ft of effluent pipeline from the mill effluent ponds to the ocean outfall discharge.





**JOEL VICTOR  
MECHANICAL ELECTRICAL  
PLUMBING & FIRE  
PROTECTION**

**Education**

BS, Mechanical Engineering, New York Institute of Technology

**Certification**

Engineering in Training: NY Transportation Worker Identification Credential (TWIC®)

Secure Worker's Access Consortium (SWAC®)

OSHA 10-Hour

PATH Roadway Workers Certification

Joel Victor, P.E. will be our Lead Mechanical engineer and will be responsible for mechanical electrical plumbing & fire protection. Joel Victor has more than 19 years engineering experience in plant piping design and 10 years in building construction experience. His projects include designing piping systems for an offshore oil loading platform, marine oil terminals, naval station home-port steam distribution system, inspection and evaluation of high-pressure steam, fire protection, and compressed air and water distribution piping infrastructure, as well as oil unloading dock fuel, and fire protection piping distribution. His engineering tasks have ranged from authoring technical specifications for marine oil terminal loading arms; Electro-hydraulic gangways, shipyard and wharf fire pumps; marine oil terminal pipelines and piping, to the inspection and design of wharf utility pipelines and piping, power plant cooling and circulating water systems; container yard storm drainage collection and forwarding systems; high- and low-pressure steam piping distribution systems; and building utility systems.

**Project Experience**

**Rockaway Boardwalk Redevelopment and Storm Resiliency, NYCEDC, Queens, NY.** Project involves the design of the replacement boardwalk and access points along 4.7 miles of shoreline. As Lead Mechanical Engineer, he was responsible for the design for the relocation of existing water mains along Ocean Promenade and the boardwalk water supply piping and water piping winterizing access stations.

**East Side Coastal Resiliency (ESCR) Preliminary and Final Design, NYCDDC, NY.** This post Superstorm Sandy federally funded resiliency project includes the design of a continuous flood protection barrier in the lower east side of Manhattan from Montgomery Street to East 25th Street along the East River. In addition to the flood protection barrier to protect the City from storm surge, the ESCR project comprises enhancements to the resiliency and programming of the existing parks within the project area, improved connectivity between the City and the waterfront, and enhancing the overall recreational and urban environment. The scope during this second phase of the ESCR project includes the development of design criteria for the flood protection system, detailed construction documents, construction cost estimates, a construction phasing and



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scheduling study, condition assessments of the existing drainage infrastructure and East River Park promenade, development of an operations and maintenance manual for the flood protection system, and participating in stakeholder and community engagement sessions. The project includes extensive coordination with various City agencies, including Con Edison, to identify key utilities and other infrastructure that will be impacted by the proposed work and to develop innovative solutions that will minimize impacts on the community and integrating the flood barrier with the City's key infrastructure to protect it from future storm surge events.

**69th Street Historic Transfer Bridge, Riverside Park Fund, New York, NY.** Responsible for restoration of the historic bridge. Project elements included the evaluation of the existing transfer pier machinery and equipment and the stabilization of said equipment, restoration of the deteriorated bridge foundations, construction of access platforms, restoration of the bridge superstructure, and installation of a ferry floating landing.

**69th Street Historic Transfer Bridge, Riverside Park Fund, New York, NY.** Responsible for restoration of the historic bridge. Project elements included the evaluation of the existing transfer pier machinery and equipment and the stabilization of said equipment, restoration of the deteriorated bridge foundations, construction of access platforms, restoration of the bridge superstructure, and installation of a ferry floating landing.

**Marine Oil Terminal Engineering and Maintenance Standards (MOTEMS) Site Audits, CA.** Responsible for the site inspection of dockside fire protections systems, mechanical equipment, product piping, and pipelines for marine oil terminals. The audits comprise site required inspection/assessment of the existing marine oil terminal's fire, spill incidence response plan, maintenance, construction information records for the fire protection system infrastructure, equipment, and product piping and pipelines as well as liquid product transfer systems (marine loading arms, hose marine ship-to-shore hoses and cranes as part of the requirement of the State of California's adoption of MOTEMS). The end product is a condition assessment report, comprising a law compliance assessment, a narrow scope fire hazard risk assessment, and any recommendations for improvements to the maintenance recording and incident planning documentation system.

**Pier 86 Reconstruction, Hudson River Park Trust, New York, NY.** Responsible for design, drawings, and specifications for the potable water, fire water, sanitary sewer systems' piping design as part of the reconstruction of Pier 86 for the Intrepid Sea, Air & Space Museum. Overall project scope of work included mechanical utilities, new steel pipe piles, precast prestressed concrete framing and deck, fendering, and mooring appurtenances.

Mechanical Engineer, Rehabilitation of Berths 11 and 12, Brooklyn Navy Yard Development Corporation, Brooklyn, NY. Project involved replacing the emergency vessel pier at the former Brooklyn Navy Yard. Designed the mechanical utility systems, and authored utility systems' project specifications.

**NAVFAC EXWC A/E Services for Waterfront Facilities** Contract. Mechanical Engineer for three consecutive, similar indefinite quantity underwater inspection, condition assessment, and repair design contracts with the U.S. Navy. Tasks under this contract include the condition inspection and design of repairs for various waterfront facilities including bridges, piers, and bulkheads. CH2M provides prioritized repair recommendations for the Navy's use in preparing facility maintenance management plans.





**CARL OSBERG, P.E., CFPS  
MECHANICAL ELECTRICAL  
PLUMBING & FIRE  
PROTECTION**

**Education**

BS, Architectural & Building  
Construction Engineering,  
Milwaukee School of Engineering

**Registration**

Professional Engineer: DC  
(#904613); ID (#12977); MD;  
(#35591); WV (#016728); FL  
(1983, #33991); LA (2003,  
#30837), WI; (1983, #22424); VA  
(#0402047450); CT; NY; and WA

**Certification**

Certified Fire Protection Specialist  
(CFPS): National Fire Protection  
Association (2005, #2270)

Carl Osberg, P.E., CFPS will assist with mechanical electrical plumbing & fire protection. Carl has more than 40 years of experience as lead engineer in the design of piping and fire protection systems for healthcare, institutional, research and development, commercial and educational facilities. He is proficient in the development of construction plans and technical specifications. He has extensive experience in construction administration, construction observation, shop drawing review, contractor pay request verification and approval, and conflict resolution. As a NFPA member, he serves as fire protection engineer bringing NAVFAC Pacific worldwide expertise for delivery of military base development facilities, involving fire hydrant flow tests, design of wet pipe sprinkler systems, design of fire alarm and detection system, design of Mass Notification System, design and layout of fire extinguishers, and development of the life safety analysis.

**Project Experience**

**Newport Terminal, Georgia Ports Authority, GA.** Evaluated new fire pump installation for site terminal storage facilities per NFPA 20 code requirements and prepared a technical memorandum identifying deficiencies and required corrections.

**Ocean Terminal, Georgia Ports Authority, GA.** Site investigated existing fire suppression system in seven warehouses. Prepared hydraulic calculations to determine adequacy of existing fire water supply. Prepared technical memorandum identifying capacity of existing suppression system, analyzed various fire water supply options, prepared preliminary cost estimates for recommended water supply options, and determined class of commodities, height they could be stored at, and how they could be stored in each warehouse.

**Dallas/Fort Worth International Airport, Dallas, TX.** Project was the installation of approximately 30 checked baggage screening machines, baggage conveyor modifications, new resolution rooms, break rooms, and toilet facilities. Performed design phase peer reviews of the fire protection systems for the construction of the new Air Transportation Security Act Compliance (ATSAC) II facilities within three existing terminals. Performed site observations and shop drawing reviews during the construction phase. Wrote and executed functional



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performance tests for the commissioning of fire protection systems, Lead Fire Protection and Plumbing Engineer, Julia Street Cruise Terminal, Port of New Orleans, LA. Designed the fire suppression and fire alarm system for the addition and renovations to this existing cruise terminal.

**Erato Street Cruise Terminal, Port of New Orleans, LA.** Designed the fire protection systems for this new \$30M cruise terminal, which is the first cruise terminal to incorporate a parking structure within the cruise terminal. The lower two levels of the 200,000 ft<sup>2</sup> terminal are used for embarkation and debarkation activities. The upper four levels provide parking for 2,000 vehicles. Systems included fire pump, wet and dry fire standpipes, wet and dry fire sprinkler systems, fire alarm systems, and fire extinguishers.

**ASOC and SPIF, Cape Canaveral, FL.** Performed hydraulic calculations and analysis for existing deluge system that protected the rocket assembly area in the Spacecraft Processing and Integration Facility (SPIF). Performed hydraulic calculations and analysis for the Atlas Spaceflight Operations Center (ASOC). Project also included the evaluation and analysis of the existing water supply and the design and installation of new fire pumps.

**Whole Barracks Concept Renovation, Bachelors Enlisted Quarters 5704 and 5696, Camp Foster, Okinawa, Japan.** Performed fire protection services including the removal and replacement of the fire standpipe system and installation of a complete new combination standpipe and wet pipe sprinkler system throughout the building. Designed a new fire alarm and detection system and a combined mass notification system and connection to the Base Giant Voice system. Also, a new fire extinguisher cabinets and fire extinguishers was included in the design.

**Whole Barracks Concept Renovation, Bachelors Enlisted Quarters Camp Schwab, Okinawa, Japan.** Performed fire protection services for complete renovation of an existing barracks. Fire protection services include the removal and replacement of the fire standpipe system. A new fire alarm and detection system was designed along with a combined mass notification system and connection to the Base Giant Voice system. New fire extinguisher cabinets and fire extinguishers was included in the design.

**Pararescue Training Facility, California Air National Guard (CA ANG), Moffett Federal Air Field (FAF), CA.** Provided fire suppression and fire alarm/mass notification design for this 47,800 sf facility. Design included a new fire pump and wet pipe sprinkler system with combination Class III fire standpipes. Fire flow testing was performed prior to design and hydraulic calculations using computer software was prepared. Fire alarm and MNS final acceptance testing was performed as part of our services. Fire extinguisher locations and type were specified and indicated on the drawings.

**Camp Beauregard Training Site Facilities, Pineville, LA.** Provided design of new fire alarm and detection systems, as well as designed a new fire suppression systems and performed fire hydrant flow testing for a full design to repurpose federal building involving total 34,300 sf for a dining facility, five dormitory buildings, and a physical fitness center.



**JOHN JONES, P.E., .CFPS  
MECHANICAL ELECTRICAL  
PLUMBING & FIRE  
PROTECTION**

**Education**

MBA, Business Administration BS,  
Electrical Engineering

**Registration**

Professional Engineer: FL; GA

John Jones, P.E. will assist with mechanical electrical plumbing & fire protection. John has nearly 40 years of electrical engineering experience. He specializes in performing professional engineering services for new construction and renovations for telecommunications and power distribution for a wide range of industrial and commercial infrastructure including container port facilities, water treatment facilities, wastewater plants, surface mining, extraction well fields, and vertical construction (offices, warehouses, laboratories, assembly, hospitality). John provides electrical engineering design for utility overhead to underground projects, medium voltage distribution, and substations.

**Project Experience**

**Strategic Weapons System Ashore (SWSA) at Cape Canaveral, Lockheed Martin Space Systems Corp., US Navy, General Dynamics Electric Boat.** Served as Lead Electrical Engineer for power distribution system and designer for conveyance systems for cabling for Navy equipment.

**Center Hill Park Recreation Center, City of Atlanta, GA.** Constructibility, value engineering, and commissioning review of construction drawings for this 95,000 sf facility, which is a two-story brick structure that primarily consists of a swimming pool, gymnasium, men's and women's locker rooms, meeting facilities, and classrooms.

**Interconnect to Tampa Bay Water Pipeline, City of Tampa, FL.** Lead Electrical Engineer for a single valve station for a new 36-in pipeline, monitoring and controls for the interconnection of the two distribution systems.

Jerry Plott Water Treatment Plant, Tuscaloosa, AL. Lead Electrical Engineer for power, telecommunications, security, and fire detection for new 12-mgd membrane water treatment plant. Project included one raw water pumping station, two flocculation, sedimentation, and flash mix tanks, one operations/administration building containing a membrane treatment system, finished water pumping station, prestressed clearwell, and backwash equalization basin. Provided support for bidding and services during construction through final completion.





**Crane Crew Facility, Canaveral Port Authority, FL.** Provided design and construction services for new temporary Crane Crew Facility on Dolfin Rd. and associated utility service from Florida Power & Light and sewage lift station.

**Mississippi Port Authority, Port of Gulfport Restoration Program, Gulfport, MS.** Restoration for recovery from hurricane Katrina.

**Georgia Port Authority, Garden City Terminal, Savannah, Georgia.** Electrical support for numerous projects for power distribution, new facilities, high mast lighting, and telecommunications. Master planning recommendations on utilities, power substations, on site power generation, power distribution and construction costs. Projects included water pumping station improvements, wastewater lift stations, power for reefers, high mast lighting, quay crane electrification and substation support and utilities for modernization of a major east coast container facility.

**Port Jersey Expansion, Jersey City & Bayonne, NJ.** Electrical QC for gate improvements project and yard expansion modernization.

**Port of Los Angeles, Berth 200, Los Angeles, CA.** Designed modifications and rehabilitation for existing storm water pump station. Prepared performance specifications and criteria package for design-build delivery of new pump station.

**Moin Terminal, Limon, Costa Rica.** Electrical Technical Reviewer for landside improvements for container terminal, and causeway lighting design, includes utilities improvements and substation. Vertical construction included administrative building, agricultural inspection platform, workshop/canteen building, portal gates, and reefer receiving/dispatch.



**SAM NAUSS, P.E.**  
**GEOTECHNICAL ENGINEERING/  
MATERIALS TESTING**

**Education**

Graduate Level Geotechnical Courses, Columbia University (New York), 1996

MS, Structural/Geotechnical Engineering, Lehigh University (Bethlehem, PA), 1984

BS, Civil Engineering, West Virginia University, 1981

**Registration**

Professional Engineer: DE (2001); MS (2000); PA (1989); VA (2010)

National Council of Examiners for Engineering and Surveying (NCEES) Certification

40-Hour Occupational Safety and Health Administration (OSHA) training for Hazardous Waste Operations

Sam Nauss, P.E. will provide geotechnical engineering/materials testing. He has 33 years of experience in establishing subsurface soil investigation programs, including laboratory testing programs, and geophysical investigation programs, preparation of geotechnical design criteria documents for waterfront structures, dredging and reclamation work, bridges, power plants, industrial facilities, and essential structures. Work experience includes supervising subsurface soil investigation work, analyzing geotechnical data, designing shallow and deep foundations, including static and dynamic testing of deep foundations, designing, retaining structures designing foundation underpinning systems, seepage and settlement analyses, stability analyses of earth and rock slopes, liquefaction potential analyses and dynamic settlement, designing ground modifications for sites with poor subsurface conditions, and designing trenchless pipe installation.

**Project Experience**

**Naval Facilities Engineering Command, Engineering and Expeditionary Warfare Center, A/E Services for Waterfront Facilities Contract, OCONUS.** Worked on three consecutive, similar Indefinite Quantity Underwater Inspection, Condition Assessment, and Repair Design Contracts. Tasks include the condition inspection and design of repairs for various waterfront facilities including bridges, piers, and bulkheads. The team provides prioritized repair recommendations for the Navy's use in preparing facility maintenance management plans. Recent task orders have included the inspection of Navy facilities in Japan, AUTEK, and Diego Garcia, BIOT.

**Mindanao Berth Extension Project, Mindanao International Container Terminal Services Inc. (MICTSI), Mindanao, Philippines.** Proposed 300 m berth extension at the Mindanao Container Terminal located in Tagaloan on the island of Mindanao in the Philippines. The berth extension is for MICTSI. The berth extension is a 300-m-long by 45-m-wide steel pile-supported structure located adjacent to an existing wharf. Scope of work included the development of preliminary concepts and plans, detailed design of the berth extension and associated facilities including dredging, preparation of tender documents, supervision of hydrographic and geotechnical investigations, and preparation of construction drawings, technical specifications,



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and cost estimate.

**Ship Dock 3 Extension, Engineering, Procurement, and Construction Detail Engineering Design and Construction Support, Vopak Terminal, Deer Park Inc, Deer Park, TX.** Responsible for quality assurance/quality control (QA/QC) and review of a dynamic pile load test program, performing a detailed pile capacity evaluation for the existing Ship Dock 3, detailed deep foundation design and analysis for the proposed Ship Docks 4 and 5, new mooring and breasting dolphins, and trestles, and preparing the specifications for steel pipe piles and drilled shaft foundation for construction.

**Inland Dock 12 Terminal, Vopak Borco International Ltd., Freeport, Bahamas.** Responsible for detail engineering of the design for a new exposed rock face berth. Work include review of the proposed marine subsurface investigation and rock core laboratory testing program, rock mass characterization and evaluations, and slope stability analyses of the proposed exposed rock face berth. This project is to be built along approximately 920 ft of existing limestone rock-face comprises the design of onshore mooring structures, fender structures, concrete walkway slabs, loading platform, gangway and stores crane foundation and associated civil works to permit product exchange of liquid petroleum products using barge and tankers vessels.

**Ras Laffan Port Expansion, Qatar Petroleum, Qatar.** Project included development of offshore geotechnical investigation programs, and preparation of interpretative report of the findings. Project geotechnical design included design of new quaywalls (12 m to 23 m high) for the liquid product berths, container berth, tug berth, and Navy and Coast Guard berth. Work included bearing capacity, settlement, and slope stability evaluations and preparation of drawings and specifications.

**On-Call New York City Economic Development Corporation, Marine Engineering Services, New York, NY.** Responsible for comprehensive "on-call" marine engineering services for waterfront sites in all five boroughs of New York City. The services provided include above and underwater inspections, condition evaluations, recommendations for maintenance, preparation of designs, drawings, and specifications for repairs, cost estimating, and inspection of construction.

**Dawei Sea Port Project, Italian-Thai Development Public Company (ITD), Dawei, Myanmar.** Development of a new port in Dawei, Myanmar for Thailand's largest contractor, ITD. The new port is part of the Dawei Development Project which includes a deep-sea port, industrial estates, power plants, steel mill, and road/rail links between Dawei and the Thai-Myanmar border. Scope of work included the preparation of a port master plan, preliminary design, and a detailed design for the first phase of port development. The first phase of development included breakwaters and revetments, an approach channel, dredging and excavation of an inner and outer harbor, nearly three km of quaywalls (diaphragm wall), 50 m apron, tug base, access roads, stormwater drainage, and port utilities. Tasks included a hydrographic data acquisition program, establishment of extreme and operational wave conditions physical model testing for wave agitation, vessel response, and breakwater stability, a navigation simulation, and the preparation of construction drawings, technical specifications, and cost estimate.





**PETE HALIORIS**  
**TELECOMMUNICATIONS**

**Education**

BS, Electrical Engineering,  
University of Maryland, 1989

Pete Halioris, P.E. will lead telecommunications. Pete has extensive electrical, communications, and security engineering design, design management, and construction management (CM) experience for electrical (Electronics), RF, power generation, telecommunications, systems engineering and program management. He is familiar with all aspects of electrical and communications for airports, rail transit, facilities, and infrastructure as well as other types of capital projects. His work products range from studies, estimates, schedules, manpower loading, calculations, design work and construction oversight. Pete's areas of specific technical competence include design of radio frequency systems, CCTV and video management systems, access control and Passenger Communications (public address/dynamic signage) systems, fiber optic networks, fire alarm electronics, intrusion detection systems, and toll revenue systems.

**Project Experience**

**Port Authority of NY & NJ (PANYNJ), LaGuardia Airport Redevelopment Project, Queens, NY.** Pete served as Program Manager responsible for designing toll revenue electronics for several garages, preparing electronics utility conduit designs and developing the design for relocation of the Watch Engineer office. Systems included SCADA, electrical, BMS, and electronic systems.

**Port Authority of NY & NJ, Trans-Hudson (PATH) Railroad, Security Improvements Program, Jersey City, NJ.** Pete served as Manager/Senior Electronics Engineer responsible for designing detailed contract drawings and specifications for the installation of security fencing access control systems, intrusion detection, and CCTV surveillance on the track approaches to the Hackensack River Bridge. The project entailed preparation of a detailed contract design for the installation of security fencing in conjunction with intrusion detection, closed circuit television surveillance and access control systems on the track approaches to the bridge.

**Port Authority of NY & NJ, Airports Perimeter Intrusion Detection Systems, Various Locations, NY and NJ.** Pete served as Program Manager responsible for designing the power and communication infrastructure for perimeter intrusion detection





systems for the PANYNJ airports. The system is a complex mix of high technology sensors which must be accommodated on common communication backbone. The project was implemented at three of the busiest airports in the country, which required extensive coordination with the facilities regarding construction phasing and staging activities. The infrastructure included thousands of feet of underground infrastructure with supporting manholes, and hand holes. The technology included RADARS, CCTV, volumetric and point intrusion detection systems. The system implanted an overall SCADA system for remote alarm and diagnostic monitoring of the field equipment.

**Port Authority of NY & NJ, Newark Liberty International Airport, CCTV System and Infrastructure Design, Newark, NJ.** Pete served as Program Manager responsible for providing security system design for the airports' parking lots. Tasks included development of detailed construction drawings /documents and management of toll electronics vendor management, electronics construction cost estimate, and construction phase support. Pete managed the creation of block wiring diagrams, site plans, elevations, and equipment schedules. The project also included installation of state of the art digital messaging signs informing customers of E-ZPass lanes and parking costs and an extensive fiber optic and copper cabling and conduit infrastructure.

**Port Authority of NY & NJ, John F. Kennedy International Airport, Terminal 5 RF Coverage Expansion, Jamaica, NY.** Pete served as Program Manager/Senior Electronic Engineer responsible for performing site inspections, development of electrical and electronics contract plans, and quality control related to in-building RF enhancements. The system design utilized head end equipment with DAS antennas placed within the building to improve 800MHz coverage in a critical transportation area.

**Port Authority of NY & NJ, George Washington Bridge Bus Station Redevelopment, NY.** Provided new electronic equipment, as part of the GWB Bus station modification project. The design effort includes installation of new CCTV cameras, police communication equipment, electronic message signage, speaker equipment and new head end equipment tied together with a fiber optic backbone.

**Federal Aviation Administration (FAA).** Performed engineering and over- seeing electronic systems at FAA air traffic towers and buildings throughout the east coast. Equipment includes engineering/installation of voice switches, weather/radar, systems, traffic management hardware/software, and power. Oversaw project from start to testing; Site surveying and site drawings creating/updating.

**MTA East Side Access, Various Contracts, New York, NY.** \$10B+ program linking the Long Island Rail Road (LIRR) mainline in Queens to a new terminal station under the historic Grand Central Terminal in Manhattan. Scope included tunnels, facilities, rail infrastructure and systems, fire/life systems, maintenance/storage yards, and associated upgrades to existing LIRR, MNR and Amtrak facilities in the affected area.

**Contract CM 179.** Responsible for overseeing testing of communication systems, including radio Frequency equipment and interfaces, control systems, and communication systems commissioning and integration.

**MTA PA/VMS CIS Systems.** Pete provided submittals and as-built drawings. He also oversaw the installation and testing of the PA/VMS cabinets including FAT and on site installation; as well as managed power augmentation to each station.



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**SEAN MURPHY**  
**GIS & BIM**

**Education**

BS Mechanical and Aerospace  
Engineering, Rutgers University  
2006

AS Engineering Science County  
College of Morris, 2004

Sean Murphy is a mechanical engineer with Jacobs and brings with him 12 years of experience including mechanical engineering, project management and BIM execution. Sean is one of Jacobs' most experienced BIM practitioners and is proficient in many of the best mechanical calculation and BIM design software currently used in the industry. As a mechanical engineer, his responsibilities have included determining ventilation requirements for indoor-air quality, heating and cooling load calculations, ductwork and piping design, preparing reports and construction documents, and performing site investigations, and construction phase project administration. Mr. Murphy will assist with GIS and BIM.

**Project Experience**

**Replacement of Substation No. 14, PANYNJ, Harrison, NJ.** Design services for the new Substation No. 14 electricity processing station. BIM Manager responsible for maintaining the BIM/CAD execution plan and standards. The execution plan defined the integration of BIM/CAD software deliverables and project structure. Responsibilities also included generating clash detection reports and facilitating clash review meetings with the project team.

**Replacement of Substation No. 9, PANYNJ, Harrison, NJ.** Retained to provide design services for the new Substation No. 9 electricity processing station. The purpose of this facility is the receipt of energy from the utility company, voltage conversion, energy storage, and energy delivery to the 3rd rails of the tracks served. The design of this facility included related site improvements. Served as BIM Manager responsible for maintaining the BIM/CAD execution plan and standards. Also responsible for generating clash detection reports and facilitating clash review meetings with the project team.

**Liberty Park, World Trade Center, Y7704407, PANYNJ, New York, NY.** Retained as part of a joint venture to design the rooftop park. Responsible for sizing and locating electric unit heaters, louvers, and exhaust fans. Also responsible for sizing locating floor drains, trap guards, and a backflow preventer assembly. The mechanical equipment served the rooftop park pump room and stormwater detention tank room.





**BIM Manager, Harmon Shop Replacement Phase V Stage I, Design Build, MTA Metro-North Railroad (MNR), Harmon Yard, NY.** Responsible for preparing the BIM/CAD execution plan. The execution plan defined the integration of BIM/CAD software deliverables and collaboration method. Also responsible for generating clash detection reports and facilitating clash review meetings with the project team. The ultimate objective of Phase V was to design and construct a new EMU Annex Building with a Consist Shop Facility in Stage I and the Running Repair and Support Shop Facility in Stage II to replace the existing Harmon Main Shop Building (Building 6). The overall site is approximately 100 acres in size.

**Construction of Part of Second Avenue Subway Route 132A, 86th Street Station, Station Finishes, Mechanical, Electrical, and Plumbing Systems, Ancillary Buildings and Entrances in the Borough of Manhattan "B" Division, MTA New York City Transit (NYCT), New York, NY** Responsible for preparing interference and simulation models to facilitate construction coordination. The interference i-models were used to facilitate client-contractor web presentation. Also responsible for generating the BIM Implementation Plan which identifies how the COBie data shall be managed and interoperates among all Design and Contractor team members

**Replacement of Substation No. 14, PANYNJ, Harrison, NJ.** Design services for the new Substation No. 14 electricity processing station. BIM Manager responsible for maintaining the BIM/CAD execution plan and standards. The execution plan defined the integration of BIM/CAD software deliverables and project structure. Responsibilities also included generating clash detection reports and facilitating clash review meetings with the project team.

**Replacement of Substation No. 9, PANYNJ, Harrison, NJ.** Retained to provide design services for the new Substation No. 9 electricity processing station. The purpose of this facility is the receipt of energy from the utility company, voltage conversion, energy storage, and energy delivery to the 3rd rails of the tracks served. The design of this facility included related site improvements. Served as BIM Manager responsible for maintaining the BIM/CAD execution plan and standards. Also responsible for generating clash detection reports and facilitating clash review meetings with the project team.

**Liberty Park, World Trade Center, Y7704407, PANYNJ, New York, NY.** Retained as part of a joint venture to design the rooftop park. Responsible for sizing and locating electric unit heaters, louvers, and exhaust fans. Also responsible for sizing locating floor drains, trap guards, and a backflow preventer assembly. The mechanical equipment served the rooftop park pump room and stormwater detention tank room.

**Harmon Shop Replacement Phase V Stage I, Design Build, MTA Metro-North Railroad (MNR), Harmon Yard, NY.** Responsible for preparing the BIM/CAD execution plan. The execution plan defined the integration of BIM/CAD software deliverables and collaboration method. Also responsible for generating clash detection reports and facilitating clash review meetings with the project team. The ultimate objective of Phase V was to design and construct a new EMU Annex Building with a Consist Shop Facility in Stage I and the Running Repair and Support Shop Facility in Stage II to replace the existing Harmon Main Shop Building (Building 6). The overall site is approximately 100 acres in size.



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**REBECCA HANEY, GISP**  
**GIS & BIM**

**Education**

M.P.A., Public Administration, Old Dominion University, 2010  
B.B.A., Economics, James Madison University, 2004

Rebecca Haney, GISP is responsible for GIS & BIM. She is a Data Management Consultant in Jacob's State and Local Government client sector. She came to the firm in 2014 with years of experience as a data management, quality, integration, and support specialist in the water, wastewater, and storm water utilities industry. She has performed as a project manager, deputy project manager, technical lead, project technologist, and quality control on a variety of projects related to the management of data and information regarding utility assets, integration of systems like GIS and CMMS, and development and implementation of procedures and processes that support short and long term capital, operations, and maintenance programs and initiatives. She has lead and served as staff support for a variety of projects in the water, wastewater, and storm water industries.

**Project Experience**

**Special Order by Consent, City of Suffolk, VA.** Manage all GIS and data management activities for the City of Suffolk's SOBC program for sanitary sewer system. Manage the task team, communicate with the client on all GIS and data needs, customize solutions to the client needs, and advise the client on industry best practices. Perform data export, formatting, QC, and tracking of data for meter replacement project. Manage City IT and project contractor staff to complete the upgrade of the City's ArcGIS Server, ArcGIS Desktop, SQL Server and Cityworks software. Manage ongoing status updates and configuration changes for the Cityworks Asset Management system for water and wastewater. Coordinate all activities with the project consultant on the City's behalf. Advise the City on best practices to follow when creating new work flows. Provide all City Staff with technical support as needed. Write custom Crystal Reports based on the City's needs and requests. Serve as Cityworks Administrator for the Department. Coordinate all activities associated with the maintenance of the City's wastewater GIS. Research and implement metadata standards. Recommend best practices to implement to ensure data integrity of all GIS attributes and domains. Manage the City's GPS team and confirm that they are following established standards when collecting data. Support on Telog web portal and database activities. Recommend and implement data analysis capabilities. Monitor Telog data for any discrepancies or inaccuracies and resolve any



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issues. Implement the procedures in place for responding to and following up on the root cause of any Sanitary Sewer Overflows that occur within the system. Manage the pump station field curve database and all model curve records for use in compiling individual pump station operating curves.

**GIS Roadmap, Virginia Port Authority.** Create GIS Roadmap plan for the Port of Virginia. Conduct workshops and gather information from the client to advise on next steps to take to implement an enterprise GIS. Lead status update and document review meetings.

**MS4 Construction Site Inspection Program, NAVFAC Midlant.** Serve as Project Manager while a colleague was on maternity leave. Conduct team meetings and prepare monthly financials and progress reports for the client.

**CMMS Maintenance, Seminole Tribe of Florida.** Assist STOF with maximizing their use of Cityworks. Advise of best practices.

**Sewer Consent Order, City of Norwalk, CT.** Ensure data is managed for Norwalk's compliance with their Sewer Consent Order with the EPA. Compile data for monthly reports and maps. Create processes for tracking pipe repair, CCTV, cleaning, etc. activities utilizing GIS and Cityworks. Advise of best practices. Create custom reports using Crystal Reports.

**CMMS Maintenance, City of Alexander City, AL.** Assist STOF with maximizing their use of Cityworks. Advise of best practices. Create custom reports using Crystal Reports.

**MS4 Compliance Support, City of Portsmouth, VA.** Create Information Management Plan to help Portsmouth organize and maintain their data in support of complying with their MS4 permit annual reporting activities.

**NSA Naples and NAS Sigonella Water Master Plan, NAVFAC Midlant.** Convert data from multiple data sources into a water GIS. Prepare water system for use in a hydraulic model. Create QA/QC processes for GIS data. Create multiple map deliverables.

**JBAB Water Distribution System.** Support on GIS data management and automated map generation for JBAB as well as to support a unidirectional flushing plan. Create QA/QC processes for GIS data. Create multiple map deliverables





**PATRICK DANIELL, P.E.**  
**GIS & BIM**

**Education**

BS, Electrical Engineering,  
University of New Haven, 1992

**Registration**

Professional Engineer: CA  
(#E 15085, 2000); CT (#PEN  
18050,1996); FL  
(#52960, 1998)

Patrick Daniell, P.E. is responsible for GIS & BIM. He has more than 26 years of diversified electrical engineering experience in power and lighting distribution design for industrial facilities including marine, industrial, commercial, and residential projects. He is extensively involved in the design and testing of cathodic protection and grounding systems. Patrick is proficient with engineering design software including programs for data calculation and analysis, lighting systems, and power distribution.

**Project Experience**

Electrical Engineer, NAVFAC, Waterfront Inspection and Design Services, CFA Okinawa, Japan. Provided on-site design development services for the NAVFAC A/E Services for Waterfront Facilities Contract. As part of this contract, performed condition assessments and asset inventory of electrical systems, and developed the electrical design for repairs for CFA Okinawa. Provided prioritized repair recommendations for the Navy's use in preparing facility maintenance management plans. Project received Very Good CPARS rating.

Electrical Engineer, NAVFAC, YP Pier 87 Inspection and Design of Repairs, U.S. Navy Academy, Annapolis, MD. Conducted site assessments and field studies for the rehabilitation of the power shore-tie receptacles for the 120 ft YP Training Vessels at the main pier and at various berths along the wharf. Wrote specifications and designed circuit upgrades for lighting heat tracing and grounding. Project received Exceptional CPARS ratings.

Electrical Engineer, East Berth Extension, Global Container Terminal, Bayonne/Jersey City, NJ. Led the electrical design for the 900 ft extension. Developed the specifications and design for the sacrificial anode cathodic protection system for a 190-ft-long by 30-ft-deep steel truss that was designed to span over an existing storm water sewer outfall pipe and support the waterside crane rail. Received Exceptional PPQ rating.

Lead Electrical Engineer, Greenville Yard ICTF, Global Terminal & Container Services, Jersey City, NJ. Lead Electrical Engineer for an Intermodal Container Transfer Facility for transfer of containers from trucks to rail cars via rail mounted gantry cranes. Scope of work included the electrical design, including substation, lighting and electrical service for small buildings.





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**Two Container Berths, Port Newark Container Terminal, Port Newark, NJ.** Detail design of the electrical distribution for two container berths including 6 ship-to-shore cranes and the master planning for the entire wharf, which includes four berths and 12 cranes. The detailed design included 13.2 kV distribution to cranes, 480V auxiliary power to cranes, ground check and communications. Also assisted with design of new substation which serves up to six of the new cranes.

**Haifa and Ashdod Container Terminals, Israel.** Completed the design review of work performed by local electrical and communications designers for two very large container terminals. Electrical work included power, lighting, and communications, as well as underground distribution, substations and cathodic protection. Also directly prepared design for the cathodic protection of all submerged marine structures.

**Substation Design, Haifa and Ashdod Container Terminals, Israel.** Completed the design review of drawings and specifications for the design of the main electrical substations for each Port.

**NYC Ferry Facilities Engineering Services On-Call, NYCDOT, New York, NY.** Providing A/E and construction services for 16 locations consisting of ferry terminals and maintenance berthing facilities, together with their associated marine and upland structures including buildings and facilities for connecting transit modes. Lead Electrical Engineer, Rockaway Boardwalk Reconstruction, NYCEDC, Queens, NY. Lead Electrical Engineer for the reconstruction of the Rockaway Boardwalk. Designed lighting and power systems. Also designed the emergency call boxes for the police and fire departments.

**Berth 8 Reconstruction, Brooklyn Navy Yard, Brooklyn, NY.** Lead Electrical Engineer involved in the design for a new pipe pile supported reinforced concrete pier that adjoins two dry docks. Electrical design included power distribution for capstans, high mast lighting and cathodic protection for pipe piles and sheet pile bulkhead.

**Global Terminal and Container Services LLC, 26.4 kV Electrical Substation Expansion at Global Terminal, Jersey City, NJ.** Lead Electrical Engineer responsible for the design of the 26.4 kV substation expansion. Work included developing load profiles and conceptual alternatives for expanding the existing substation, load flow analysis and developing detailed drawings and specifications for the new structures and equipment including MV distribution, power transformers, overhead bus, MV switchgear and control room. Also provided bid and construction support services.

**69th Street Historic Transfer Bridge, New York City Department of Parks & Recreation, New York, NY.** Electrical Engineer responsible for the conceptual design of the historic West 69th Street transfer bridge restoration. The transfer bridge included a submarine power cable to serve the lighting on the bridge. Coordination with Park's existing distribution system was required along with voltage drop calculations to ensure that the existing circuits would not be overloaded. It also included a study to determine if solar panels and battery storage could be used to provide the necessary power.





**JORGE ABISAMBRA, P.E.  
COST ESTIMATING**

**Education**

MS, Civil Engineering, Purdue University, 1980

BS, Civil Engineering, Pontifical Xaveriana University, Colombia, 1978

**Registration**

Professional Engineer: FL (#76824, 2013); NC (#040229)

Colombia (Matriculate #25202-15548, 1984)

Jorge Abisambra, P.E. will provide cost estimating. He specializes in heavy marine and ports design and construction - structural analysis, static and dynamic equilibrium, soil mechanics and foundation analysis, concrete design, steel structures, cost analysis allocation, schedule, logistics of construction, and shop drawings. He has extensive experience as a senior estimator assisting the ports and maritime group to produce all the engineer's estimates, cost budgets and help with constructability issues. He has direct experience as client, contractor, consulting engineer, field engineering design and management; for mega projects, as well as smaller projects.

**Project Experience**

**Port of Miami Crane Rail Improvements.** Gantry crane rail and beam improvements wharves, I & V.

**Port of Galveston Cruise Terminal 2 improvements.**

**APMT Elizabeth Gate Estimate.**

**Port of Palm Beach Rail Spur Project.**

**PNCT Berth 8 & 9 Combi wall Design Estimate Updating.**

**Coco Cay Royal Caribbean Cruise Terminal Upland Facilities Estimate. Port of Miami - CT-E Waterside Improvements Cruise Terminal.**

**VIG Stack Yard Estimate and Constructability.**

**NYCDOT City Island Pier Reconstruction Cost Estimate.**

**Expansion of Marine Terminal Facility, Virginia International Gateway, Virginia Port Authority, Portsmouth, VA.** Provided an engineer's opinion of cost for the extension of an existing wharf. When complete, the wharf will be approximately 4,000 ft. The construction project included extension of the wharf, mooring bollards and breasting fenders, rip-rap shore protection, mooring dolphins, crane rails, tie downs, light poles, and utility services.

**Coco Cay Pier Development; Royal Caribbean International, Little Stirrup Cay, Bahamas.** Provided cost estimates for a 1,993 ft, dual berth to accommodate the largest Royal Caribbean



Broward County Bid #PNC2119212P1  
Consulting Services for Port Everglades



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cruise ships.

**Widening of Port Canaveral Inlet; Cape Canaveral, FL.** Project involved widening of the inlet, shoreline relocation, and slope protection. Provided construction and engineering cost estimates.

**Port Manatee, Tampa, FL.** A berth expansion project including bulkhead construction and channel shore protection. Jorge provided construction and engineering cost estimates.

**FK International Airport ALS Piers Replacement, PANYNJ, New York, NY.** Evaluated various alternatives for repair and replacement of existing piers at JFK Airport. Repairs included concrete encasements of timber piles and replacements involved steel pile supported piers. Life cycle costs were developed for all alternatives.

**On-Call Marine Engineering Services, NYCEDC, New York, NY.** Provided estimating services for recommended structural rehabilitation projects, including: Routine Inspection of Shore Parkway; Routine Inspection of Harlem River Drive (132nd to 135th Streets) (both for EDC on behalf of DPR); and Routine Inspection of South Brooklyn Marine Terminal.

**Oakland Bay Bridge Demolition Alternative Estimates, Caltran, CA.** Provided an engineer's opinion of the probable cost for the general construction necessary to perform the Demolition of the 1936 San Francisco Bay Bridge Foundations at Piers E4 to E22. The estimate included mobilization and submittal preparation; fender removals; demolition/removal of the above water piers; drilling and blasting of the below water foundations to 3 feet below the mud line; and debris removal and haul. The scope of this demolition is based on the March 2013 Multibeam Bathymetry survey prepared by Fugro Pelagos, Inc. for Caltrans and the 1936 San Francisco Oakland Bay Bridge As-built Plans.

**Seawall Feasibility Study, New York City, NY.** Performed cost estimates, constructability, and cost comparison of several alternatives for the Big U 7,000 ft flood protection seawall.

**Port Intermodal Expansion Program (PIEP), Municipality of Alaska, Anchorage, AK.** Jacobs managed the planning, design, engineering, and construction for the \$484M Port of Anchorage PIEP project. Jorge prepared Engineer's cost estimate and managed constructability issues and initial size of equipment and crews needed to properly execute the project. The estimate was prepared using HCSS HeavyBid system.

**Port of Anchorage Intermodal Expansion Study, Anchorage, AK.** Project involved an independent, in depth technical analysis for the USACE to assess the Open Cell Sheet PileR (OCSP) seawall in the north end of the Port. Jorge prepared Engineer's cost estimate and managed constructability issues.





**JANNEK CEDERBERG, M.Sc.,  
P.E.  
COASTAL  
RESILIENCE**



**EDUCATION**

M.S. Coastal  
Engineering,  
Technical University  
of Denmark

**CERTIFICATIONS**

Professional Engineer – Florida  
No. 69839

**PROFESSIONAL AFFILIATIONS**

Permanent International  
Association of Navigation  
Congress  
Member of PIANC Working  
group  
Design and Operational  
Guidelines for  
“Superyacht Facilities”  
Danish Society of Hydraulic  
Engineering



Jannek Cederberg, M.Sc., P.E. will provide Coastal Resilience assistance. Mr. Cederberg is formally trained as a coastal and marine engineer from the Technical University of Denmark. He has more than fifteen years of experience in coastal and marine engineering. Prior to relocating to Miami, he worked in the coastal and marine engineering departments for two large international consulting firms. Mr. Cederberg has served as principal engineer for numerous internationally acclaimed waterfront projects. Mr. Cederberg has been selected to participate in expert groups related to marina design and waterfront development as well as serve as an expert witness. He is a recognized speaker on coastal resiliency in Florida.

**RELEVANT EXPERIENCE**

**MSC Ocean Cay Marine Reserve, Bimini Islands, The Bahamas.** Topographic and bathymetric surveying rectified aerial photography and mapping for proposed out- island cruise destination. Environmental resource surveys and preparation of Environmental Impact Assessment (EIA) for proposed land and marine works. Detailed coastal engineering analysis, including numerical modeling of hurricane impacts. Engineering design of beach improvements and shoreline stabilization of reshaped island perimeter. Processing of EIA through government regulatory agencies.

**Matheson Hammock Park Sea Level Rise Flood Mitigation Study, Coral Gables, FL.** Mr. Cederberg served as Senior Project Manager to prepare a Sea Level Rise Flood Mitigation Study to analyze the impacts of sea level rise on the park’s infrastructure and operations, as well as develop flood mitigation concepts for planning and budgeting. Compiled existing survey data within the Park and LiDAR data for the area to prepare a general topographic map for the Park; assessed the condition of existing infrastructure to understand conditions, remaining service life and adaption feasibility relative to sea level rise; performed an assessment of the environmental conditions on site to generally understand and document current conditions, as it would relate to environmental permitting; conducted an engineering analysis to provide extreme tide water levels; developed flood



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Consulting Services for Port Everglades



mitigation concepts and preliminary cost estimates; coordinated stakeholder involvement; developed an implementation strategy; and presented the results and findings into a report.

**Port Development Feasibility, Panama.** Conducted feasibility study for the development of a port facility, including the potential for cruise operations and ship repair facility. Evaluated coastal design criteria, including wind, waves, water levels and currents. Reviewed existing water depths, navigational requirements and potential dredging. Prepared conceptual layouts of proposed facilities, and cost estimates for construction and operational equipment.

**Great Stirrup Cay, Berry Islands, The Bahamas.** Site investigations, engineering analyses and master planning for cruise ship private island destination improvements to accommodate 5,400 passenger cruise ships. Evaluated coastal processes, potential cruise ship pier island infrastructure improvements, and beach design concepts.

**Carrs & Little Bay Port and Waterfront Development, Montserrat.** Cummins Cederberg served as marine advisor for the Government of Montserrat for \$100M+ port and waterfront development. The development consists of cruise ship and cargo vessel berthing, 50+ slip marina, river stabilization, waterfront promenade and beaches. Participated and led marine engineering components of planning workshops to develop holistic master plan. Review tender documents and qualifications packages. Review of all technical analyses and designs. Assisted in navigation review and optimization through real time 360- degree simulation of cruise ships and cargo vessel. Provided recommendations to value engineer designs, reduce cost and increase efficiency.

**Port of Roatan Cruise Terminal, Roatan, Honduras.** Design of reclamation and shore protection for cruise terminal expansion. Numerical Modeling of hurricane, storm surge, and wave propagation.

**Sporting Club at Ambergris Cay, Ambergris Cay, Turks and Caicos.** Performed hydrographic and GPS control surveys for island planning and lot layouts. Provided engineering design of coastal works including entrance channel, dredging, marina and RO/RO platform for shipments to remote island.

**Crandon Park Marina, Key Biscayne, FL.** Field investigations including bathymetric surveying, tide and current measurements, marine resource survey, and sediment sampling. Tidal hydrodynamic modeling along with wave and sediment transport analyses conducted to determine source and magnitude of marina sedimentation problem. Alternatives assessment of potential coastal structures to inhibit sedimentation and need for periodic dredging.

**Costa Brava Marina, Miami Beach, FL. Costa Brava Condominium Association.** Environmental permitting for reconstruction of a 30- slip marina in Biscayne Bay through local, State, and Federal Agencies Such as Miami-Dade County Regulatory, Economical Resources Department, Florida, Department of Environmental Protection and US Army Corps of Engineers. Engineering support through construction bid process, including bid evaluation, contractor selection and construction administration.





**JASON R.  
CUMMINS,  
M.Sc., P.E.  
CONTAINER  
TERMINALS**



**EDUCATION**

B.Sc. & M.Sc. Coastal and Oceanographic Engineering, University of Florida

**CERTIFICATIONS**

Professional Engineer – Florida No. 71538  
Certified Diver  
FHWA A-NHI 130091  
Underwater Bridge Inspection – National Highway Institute and Association of Diving Contractors

**PROFESSIONAL AFFILIATIONS**

Urban Land Institute (ULI) SE Florida/Caribbean, Member  
American Society of Civil Engineers, ASCE  
American Institute of Architects  
South Florida Association of Environmental Professionals

**CUMMINS | CEDERBERG**  
Coastal & Marine Engineering

Jason Cummins, M.Sc., P.E. will assist with container terminals. He is a Coastal Engineer with significant experience in inspections, planning, engineering, regulatory permitting and construction of coastal and waterfront development and infrastructure projects in Florida, Caribbean and Latin America. He earned his Bachelor's and Master's degrees in civil and coastal engineering from the University of Florida and has been practicing in Florida since. Mr. Cummins has served as principal engineer on numerous multi-million-dollar waterfront projects in Florida and the Caribbean. He is a recognized expert in coastal and marine construction and is frequently asked to serve as expert witness. He has worked on container terminals over the last decade throughout Florida and the Caribbean.

**RELEVANT EXPERIENCE**

**MSC Cruises Ocean Cay Marine Reserve, Bimini Islands, The Bahamas.** Topographic and bathymetric surveying rectified aerial photography and mapping for proposed out-island cruise destination. Environmental resource surveys and preparation of Environmental Impact Assessment (EIA) for proposed land and marine works. Detailed coastal engineering analysis, including numerical modeling of hurricane impacts. Engineering design of beach improvements and shoreline stabilization of reshaped island perimeter. Processing of EIA through government regulatory agencies.

**Port Development Feasibility, Panama.** Conducted feasibility study for the development of a port facility, including the potential for cruise operations and ship repair facility. Evaluated coastal design criteria, including wind, waves, water levels and currents. Reviewed existing water depths, navigational requirements and potential dredging. Prepared conceptual layouts of proposed facilities, and cost estimates for construction and operational equipment.

**Port Everglades Slip 2 Expansion, Fort Lauderdale, FL.** Prepared and designed weld connection between anchor bearing plate, whalers and combi-wall system as part of marine engineering services for a new bulkhead anchor bearing plate





installation.

**Port Everglades RoRo Ramp Repair, Fort Lauderdale, FL.** Designed repairs to the existing RoRo Ramp at SEACOR Islands terminal located at Port Everglades. Repairs consisted of in-water sealing of the bulkhead, demolition of failed ramp slabs, backfill, and replacement of failed bulkhead slabs reinforced with steel. Construction administration services were provided to review in accordance with construction documents

**Great Stirrup Cay Development, Exumas, The Bahamas.** Site investigations and master planning for cruise ship private island destination improvements to accommodate 5,000 passenger cruise ships. Evaluated coastal processes, potential cruise ship pier alternative locations, and island infrastructure improvements. Numerical modeling of hurricanes, storm surge, wave propagation and hydrodynamics. Engineering design of beach expansion with use of natural breakwaters.

**Port of Roatan Cruise Terminal, Roatan, Honduras.** Design of reclamation and shore protection for cruise terminal expansion. Numerical modeling of hurricane, storm surge, and wave propagation. Site inspections and surveying.

**Sunset Harbour Yacht Club, Miami Beach, Florida.** Repairs of concrete slabs, caps and piles for 125 slip yacht marinas. Environmental permit applications were prepared and processed with the Miami Dade County Regulatory and Economical Resources Department, Florida Department of Environmental Protection and US Army Corps of Engineers. Detailed repair drawings were prepared with specific criteria to minimize impacts to adjacent structures, including the removal and replacement of severely deteriorated deck slabs. Construction administration services were provided to review in accordance with construction documents and environmental permits.

**Ambergris Cay, Turks & Caicos.** Engineering design of coastal works including entrance channel, dredging, 150-slip marina, and RO/RO platform for shipments to remote island. Performed hydrodynamic numerical modeling of flushing characteristics for a proposed marina basin.

**Cap Cana Marine Works, Punta Cana, Dominican Republic.** Coastal engineering design for the dredging of 1.25-mile canal to create basin for 500+ slip marina. Design of shoreline stabilization, beaches, entrance channel jetties, numerical modeling of coastal processes and hydrographic surveying. Water circulation analysis of marina and canal layout.

**Seahaven Superyacht Marina, Dania Beach, FL.** Engineer of Record for new marina design and construction administration services for approximately 1,200 feet of new bulkhead for a deep water yacht basin located in the Dania Cut-Off Canal. Part of the canal was excavated in order to create a new marina basin connected to the canal for this 40-slip superyacht marina. Bulkhead consists of steel sheet piling with concrete batter piles and reinforced concrete capping beams. Design criteria for a floating dock was also prepared including anticipate mooring loads.





**JASON TAYLOR,  
M.Sc., P.E.  
MARITIME  
STRUCTURAL**



**EDUCATION**

M.Sc. Structural Engineering, Stanford University  
B.Sc. Civil Engineering, Stanford University

**CERTIFICATIONS**

Professional Engineer – Florida No. 60277  
Special Inspector  
Certified Diver  
Advanced open water scuba

**PROFESSIONAL AFFILIATIONS**

American Institute of Steel Construction  
American Concrete Institute

Jason Taylor, M.Sc., P.E. is a senior project engineer responsible for the structural inspections, design and construction administration for marine structural engineering projects. Mr. Taylor holds a Master's Degree in Structural Engineering from Stanford University and has twenty-one years of experience as a structural engineer with a focus on coastal and marine structures. He will assist with Maritime Structural efforts.

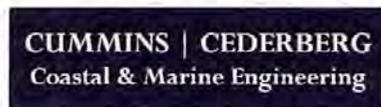
**RELEVANT EXPERIENCE**

**North Bulkhead Repair, Port of Miami, Miami, Florida.** Design of underwater repairs for steel sheet pile bulkhead. Repairs included welded steel cover plates, cement bag armoring and installation of jet filters.

**Bimini Bay Ferry Terminal, Bimini, Bahamas.** Design of 30'W x 1,600 LF access pier for new cruise terminal. Precast concrete planks, caps and steel pipe piling supporting truck traffic. Concrete topping slab pavement. Steel sheet pile abutment at island.

**Port Everglades Ship Unloader Upgrade, Fort Lauderdale, Florida.** Marine engineering and structural analyses of existing unloader foundation for gravity loads from various machines for a new unloader which required retrofit or replacement of the existing substructure at the unloader fairway. The analyses focused on a proposed retrofit and a preliminary design was conducted as a feasibility study with modifications to the wharf structure that need to be made to support its operation at the Port Everglades facility.

**Seahaven Superyacht Marina, Dania Beach, Florida.** Marina design and construction administration services for approximately 1,200 feet of new bulkhead for a deep- water yacht basin located in the Dania Cut-Off Canal. Part of the canal was excavated in order to create a new marina basin connected to the canal for this 40-slip superyacht marina. Bulkhead consists of steel sheet piling with concrete batter piles and reinforced concrete capping beams. Design criteria for a floating dock was also prepared including anticipate mooring loads. Construction





administration services included review of contractor payment, site observations with reports, pile driving logs, materials testing, final inspection, environmental permit close out services, and underwater inspections.

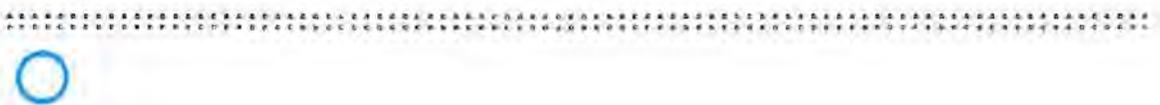
**Blue Haven Marina, Providenciales, Turks & Caicos.** Above and underwater inspection and condition assessment of the marina servicing up to 220 foot yachts including components such as floating dock units, connections, guide piling, mooring piles, dock hardware and fenders. The inspection was conducted to assess damage and impacts associated with Hurricanes Irma and Maria in 2017.

**Matheson Hammock Park, Coral Gables, Florida.** Inspection of 1,400 LF of concrete pile/panel seawall, 600 LF of concrete gravity seawall, floating docks, fixed aluminum docks, fixed timber docks, fixed concrete docks and boat ramps. Adaptability assessment for sea level rise.

**Derecktor Megayacht Yard Travel Lift Piers, Dania Beach, Florida.** Marine engineering services for the extension and relocation of existing travel lift piers located at the Derecktor shipyard. Designed pier extensions associated with 900-ton travel lift and new piers for relocation of a 200-ton travel lift. Managed the bidding process, assisted and made recommendations for contractor selection.

**Universal Marine Center, Fort Lauderdale, Florida.** Component design and inspection for yachting facility on the South Fork of the New River. Structural design plans and construction administration for new steel sheet pile bulkhead with concrete batter piles, steel pipe mooring piles for floating docks, timber dolphin clusters. 125' LOA design vessel. Following the design, Jason served as special inspector and provided construction administration throughout the duration of construction.

**Sunset Harbour Yacht Club, Miami Beach, Florida.** Repairs of concrete slabs, caps and piles for 125 slip yacht marinas. Environmental permit applications were prepared and processed with the Miami Dade County Regulatory and Economical Resources Department, Florida Department of Environmental Protection and US Army Corps of Engineers. Detailed repair drawings were prepared with specific criteria to minimize impacts to adjacent structures, including the removal and replacement of severely deteriorated deck slabs. Construction administration services were provided to review in accordance with construction documents and environmental permits.





**DANIELLE H. IRWIN, M.Sc.,  
CFM, PWS, LEED AP  
COASTAL RESILIENCE**

**EDUCATION**

M.Sc. Oceanography, Florida State University  
B.A. Environmental Studies, University of Southern California  
B.Sc. Biology, University of Southern California

**CERTIFICATIONS**

Flood Plain Manager  
Professional Wetland Scientist  
LEED Accredited Professional  
BD&C

**PROFESSIONAL AFFILIATIONS**

Florida Association of Environmental Professionals, Tallahassee Area Chapter Board Member  
Florida Floodplain Managers Association  
Association of State Floodplain Managers  
Florida Shore and Beach Preservation Association  
Society of Wetland Scientists



Danielle H. Irwin, M.Sc., CFM, PWS, LEED AP has over 18 years of experience in the field of water resource management including environmental assessment, monitoring, planning and regulatory permitting in the State of Florida. She is able to quickly evaluate complex scientific information related to wetlands, benthic ecosystems, and water quality and communicate it to the public and elected officials for decision-making purposes. She will assist with coastal resilience efforts.

She has a proven track record negotiating complex technical issues, particularly with regard to wetland, aquatic and coastal ecosystems, with a variety of stakeholders. Ms. Irwin effectively interprets and applies rules and statutes to the benefit of projects, considering scientific facts, political pressures, and development needs to achieve successful project outcomes.

Her regulatory experience includes oversight of statewide programs including Beaches, Inlets and Ports Joint Coastal Permitting, Coastal Construction Control Line Permitting, Environmental Resource Permitting, Beach Management Funding Assistance, Mitigation Banking, Mining, and Oil and Gas Regulation. Her background is key to facilitating project development from a policy, permitting, and funding perspective.

**RELEVANT EXPERIENCE**

**Hillsboro Inlet Management, Broward County, FL.** Assisted the District with their inlet management activities including their annual bypass reporting, permitting of their inlet improvements to the jetty, marine resource mapping and compliance assistance. Negotiated the sovereignty submerged lands easement for the jetty improvements. Transplanted corals from the jetty to an artificial reef and monitored.

**Hollywood Beach Nourishment, Hollywood, FL.** Provided consulting services related to the permitting and compliance assistance for the City's beach nourishment project. Services include the development of their biological monitoring plan, permit modifications at the local, state, and federal level, and compliance assistance following the biological monitoring.





**St. Lucie Inlet, Martin County, FL.** Coordinated and oversaw the FDEP review and approval of the update to the sediment budget, sand bypassing volume, and Inlet Management Plan. Negotiated agreements with the County, City of Jupiter Island, and residents on inlet dredging and beach placement frequency and locations.

**Sebastian Inlet District State Lands, Miami-Dade County, FL.** Coordinate with the FDEP Division of State Lands to reauthorize expired submerged land and upland easements, as well as adding new easement areas in the upland for pipeline staging and dredged materials management, all related to maintenance of the inlet.

**Bal Harbour Coastal Program Management, Village of Bal Harbour, FL.** Provided ongoing coastal management support for the Village including development of a Village-wide dune restoration plan, permitting and design of a beach nourishment project, providing drone aerial surveys of the Village shoreline, and representing the Village on the Bakers Haulover Inlet Technical Advisory Committee.

**Post Hurricane A1A Reconstruction, Ft. Lauderdale, FL.** Coordination of FDEP staff review for reconstruction of storm damaged North Ocean Blvd. (aka State Road A1A). The project included reconstruction of the road, dune enhancement and plantings, sidewalk, curb and gutter demolition and reconstruction, construction of a decorative and retaining wall with pedestrian cut outs, new stormwater runoff management system, hot spot nourishment, and reconstruction of street accesses, driveways and entrances.

**Summerhaven River Restoration, St. Augustine Port, Waterway & Beach District, St. Johns County, FL.** Coordinated the FDEP review and approval of the Joint Coastal Permit for restoration of a historical river in St. Johns County. Project involved shorebird mitigation coordination with FFWCC, sand excavation, and dune and beach nourishment for sand disposal.

**PortMiami Environmental Monitoring, Miami, FL.** Performed biological monitoring of the artificial reef associated with Port Deepening. Analyzed field data and drafted the monitoring report for permit compliance. Oversaw biological monitoring and reporting associated with hardbottom impacts and seagrass mitigation monitoring/reporting. Assist in environmental permit compliance efforts.

**Martin County Artificial Reefs, Marin County, FL.** Performed sidescan sonar surveys of artificial reef structure to comply with FWC grant requirements and biological assessment of the health of the artificial reef in compliance with monitoring requirements in the County's permits from the U.S. Army Corps of Engineers.





**GINA CHIELLO, B.SC.  
ENVIRONMENTAL  
COMPLIANCE  
AND  
PERMITTING**



**EDUCATION**

Graduate  
Certificate  
Geographic  
Information Systems,  
Florida Atlantic University  
B.S. Marine Biology, University  
of West Florida

**CERTIFICATIONS**

NAUI Rescue Dive Certification  
American Academy of  
Underwater Sciences (AAUS)  
Scientific Diver Certified

**PROFESSIONAL AFFILIATIONS**

America Academy of Underwater  
Sciences (AAUS)  
Florida Association of  
Environmental Professionals  
(FAEP), Treasure Coast Chapter  
(TCC), Treasurer  
Urban Land Institute (ULI) SE  
Florida/Caribbean, Member



Gina Chiello will assist on environmental compliance and permitting efforts, bring her expertise from the field with environmental biological and coastal conditions, assisting engineering and environmental permitting projects from start to finish, including all environmental fieldwork, environmental permit processing, and permit compliance. As a former reviewer with the Florida Department of Environmental Protection, she has a strong background in regulatory proceedings, including environmental and land use regulations at the local, state, and federal levels.

She has extensive experience conducting marine resource surveys and performing fieldwork throughout South Florida and the Caribbean. Ms. Chiello's professional knowledge and experience with permitting and marine resource surveys across a variety of programs and sites, have equipped her to meet the challenges of successfully regulations and permitting.

**RELEVANT EXPERIENCE**

**Port Everglades Master Plan, Fort Lauderdale, FL.** Conducted permitting and existing environmental resource research required to update the Port Everglades Master Plan for the proposed Port Expansion Project. Information was included in the Master Plan and will utilized by the Port to be considered in future project planning at the Port.

**PortMiami Terminal H Maintenance Dredging, Miami, FL.** Conducted a marine resource survey in order to assess an area of approximately 62,375 square feet of submerged bottom at the east end of Port Miami, adjacent to the Pilot Station, and determine whether significant marine resources such as seagrass or corals are growing on the substrate to evaluate impacts related to the Project. A Field Observation Report was prepared.

**Miami Harbor Phase III – Annual Monitoring, Port Miami, Miami, FL.** Established and conducted the one-year annual monitoring of 48 permanent transects along 11.6 acres of artificial reef, to be monitored for 5 years, as required by the FDEP permit. Work involved installing pins to mark the each transect





as well as installing survey nails to mark the corners of the ten (10) 1-meter square quadrat of each transect, and collecting quantitative quadrat data using BEAMR methodology on the benthic biological components of the artificial reef including identification and percent cover of functional groups (e.g. corals, octocorals, sponges, algae, etc.). Monitoring reports were prepared per the project specific permit conditions.

**Miami Harbor Phase III – Compliance Monitoring, PortMiami, Miami, FL.** Conducted compliance monitoring for 250 relocated non-Acropora coral colonies and 76 control corals for the Miami Harbor Phase III Federal Channel Expansion Project in order to evaluate impacts related to the Project. Work involved locating colonies and tagging colonies, taking photographs, measuring colony size, identifying stress indicators, and assessing tissue color and partial mortality. Monitoring reports were prepared per the project specific permit conditions.

**Miami Harbor Phase III – Post-transplantation Surveys, PortMiami, Miami, FL.** Conducted post-transplantation surveys of 38 Acropora cervicornis colonies. Work involved locating and tagging colonies, taking photographs, measuring colony size, identifying stress indicators, and assessing tissue color and partial mortality. Fragments were reattached via epoxy. Monitoring reports were prepared per the project specific permit conditions.

**Miami Harbor Phase III – Compliance Monitoring, PortMiami, Miami, FL.** Conducted compliance monitoring of 100 Acopora cervicornis colonies located adjacent to the entrance channel for the Miami Harbor Phase III Federal Channel Expansion Project in order to evaluate impacts related to the Project. Work involved locating and tagging colonies, taking photographs, measuring colony size, identifying stress indicators, and assessing tissue color and partial mortality. Monitoring reports were prepared per the project specific permit conditions.

**Miami Harbor Phase III, PortMiami, Miami, FL.** Conducted field installation of transect pins and conducted pre-construction baseline seagrass monitoring consistent with FDEP Permit requirements to determine actual amount of seagrass impacts that result from Project equilibration relative to mitigation obligations. Under contract for one year post construction biological and bathymetric surveys and reporting. Monitoring reports were prepared per the project specific permit conditions.

**U.S. Coast Guard Sector Key West, Key West, FL.** Conducted an updated marine resource assessment of the existing submerged bottom, dock and bulkhead structures, in accordance with the NMFS recommendations for sampling *Halophila johnsonii*, the Recommended Survey Protocol for *Acropora* spp., and the FKNMS Protocol for Benthic Surveys for Coral Resources in FKNMS, to document the extent, species, and density of corals, sponges, and seagrasses growing within the Project area, necessary to evaluate impacts related to the proposed marine improvements and assist with concept planning. A Field Observation Report was prepared.





**JESSICA C. WARD, M.SC.**  
**ENVIRONMENTAL COMPLIANCE AND PERMITTING**



**EDUCATION**

M.Sc. (Dual)  
Marine Biology and Coastal Zone Management, Nova Southeastern University, Oceanographic Center  
B.Sc. Marine Biology, University of West Florida

**CERTIFICATIONS**

PADI Divemaster; Drysuit Diver; Rescue Diver; Enriched Air Nitrox Diver (IAND/EANx); Specialty Diver; Open Water Diver  
TBOSET offshore safety  
NOAA/MMS Protected Species Observer for the Gulf of Mexico

**PROFESSIONAL AFFILIATIONS**

Florida Association of Environmental Professionals



Jessica C. Ward is a Marine Biologist and Project Manager with nearly 20 years of experience. She has a strong marine background and has worked both nationally and internationally. Ms. Ward has expertise in the design, oversight and conduct of habitat characterizations and surveys, impact assessments, permitting, and mitigation planning for marine environments. She has extensive experience in designing and conducting monitoring programs for marine hardbottom and coral reef habitat, placement and biological evaluation of artificial reefs, and leading offshore surveys, including deep- water surveys. She will assist with environmental compliance and permitting. Ms. Ward has expertise in the design, oversight and conduct of habitat characterizations and surveys, impact assessments, permitting, and mitigation planning for marine environments. She has extensive experience in designing and conducting monitoring programs for marine hardbottom and coral reef habitat, placement and biological evaluation of artificial reefs, and leading offshore surveys, including deep- water surveys.

**RELEVANT EXPERIENCE**

**Lake Worth Lagoon Comprehensive Seagrass Mapping Project, Palm Beach County, FL (2018).** Conducted extensive groundtruthing for seagrass distribution throughout the entire Lake Worth Lagoon resulting in comprehensive seagrass map of the Lagoon. Survey is conducted every five years for Palm Beach County.

**Beach Management Agreement (BMA), Mid-Town Beach Nourishment Project, Phipps Ocean Park Beach and Dune Restoration Project, Town of Palm Beach, FL (2018).** Conducted benthic surveys of nearshore hardbottom communities within the BMA Agreement Area in Palm Beach County, and along regulatory monitoring transects for the Mid-Town Beach Nourishment Project and Phipps Ocean Park Beach and Dune Restoration Project. Contributed to data analysis and report preparation.

**Broward County Segment III Shore Protection Project, Broward County, FL (2005- 2011; 2018).** In support of





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permitting the next County nourishment project, a baseline characterization of nearshore hardbottom resources was conducted. Benthic resources were first mapped and then characterized using an in situ quadrat-based methodology. Quantitative fish censuses were conducted at each sample location and towed video documentation of the entire project length was collected. Surveys for juvenile green sea turtles (*Chelonia mydas*) were also conducted. A comprehensive GIS deliverable was prepared along with a baseline report. Ms. Ward took part in the characterization and oversaw the production of deliverables.

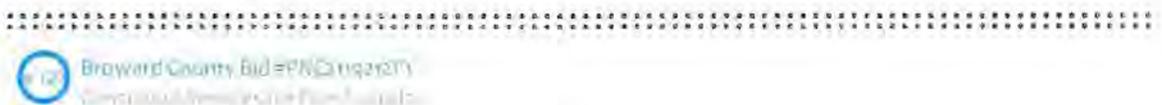
**Broward County Segment II Shore Protection Project, Broward County, FL (2011; 2018).** Extensive pre-construction and post-construction monitoring were conducted in association with the County renourishment. Fifty-two transects were monitoring using an in situ quadrat method. Sedimentation and coral health were also monitored. Data were placed into an interactive GIS deliverable for the client. Ms. Ward took part in every monitoring event for seven years, assisted in statistical analyses and write-up, and oversaw the production of later reports and deliverables. She was also responsible for attending monthly beach team meetings and coordination with the client.

**Hollywood Interim Beach Nourishment Project, Broward County, FL (2018).** Conducted benthic community biological monitoring, data analyses, impact evaluation, and permit-required reporting for nearshore hardbottom habitats for the 2017 Hollywood Interim Beach Nourishment Project.

**Town of Longboat Key Beach Renourishment Project, Longboat Key, FL (2005-2011; 2018).** Five years of post-construction monitoring of nearshore hardbottom resources was conducted to detect any unanticipated impacts associated with the 2005-06 renourishment project for the Town. An Environmental Assessment under NEPA was prepared in 2011 for the subsequent nourishment for BOEM (formerly MMS).

**Mitigation Reefs for the Town of Longboat Key Beach Renourishment Program, Longboat Key, FL (2005-2011; 2018).** Series of artificial reefs made from limestone boulders placed as compensatory mitigation for beach nourishment activities along Longboat Key. Active management techniques and coral recruitment enhancers (larval attractants, grazers) were implemented to aid in establishment of target epibenthic communities, and reduction of temporal lag in habitat function. Macroalgae, coral colonies and urchins were transplanted to designated areas of artificial reefs.

**Manatee County Artificial Reef (Enhancement Reefs) Biological Monitoring, Manatee County, FL (2011).** A series of artificial reefs constructed from multiple materials and installed in both bay and offshore areas, were placed by Manatee County for the purposes of fisheries enhancement. Ms. Ward was responsible for the design of a comprehensive monitoring program that examined the colonization of both benthos and fish to the reef installations. She also led the field surveys, conducted all statistical analyses and was responsible for the preparation of the report to the County.





**REBECAH DELP, M.P.S.**  
**ENVIRONMENTAL  
COMPLIANCE AND  
PERMITTING**



**EDUCATION**

M.P.S. Tropical  
Marine Ecosystem  
Management,  
Rosenstiel School  
for Marine and Atmospheric  
Science, University of Miami  
B.S. Biology, Minor Marine  
Science, Wittenberg University

**CERTIFICATIONS**

PADI Rescue Diver  
Nitrox Diver  
American Academy of  
Underwater Sciences (AAUS)  
Scientific Diver Certified  
Motorboat Operator  
Certification (MOCC)

**PROFESSIONAL AFFILIATIONS**

American Academy of Underwater  
Sciences (AAUS)  
Florida Association of  
Environmental Professionals  
(FAEP)



Rebekah Delp, M.P.S. is responsible for performing all aquatic and terrestrial biological assessments, writing technical and analytical reports, and assisting with local, state, and federal environmental permitting. Prior to working for Cummins Cederberg, Ms. Delp was a Research Assistant for the Lirman Lab at the University of Miami, focusing on coral restoration and performing tasks such as coral microfragmentation, coral outplanting and nursery upkeep, and scientific diving. She will assist with environmental compliance and permitting.

She has also worked as a sea turtle monitor with the North Carolina Coastal Reserve, spent a summer in Alaska working on establishing a citizen science data collection project, and volunteered with various programs such as the Nature Conservancy and FWC to assist with coral reef monitoring efforts. Ms. Delp has experience in shoreline, coral reef, seagrass, and mangrove surveying, scientific diving techniques, and scientific report writing.

**RELEVANT EXPERIENCE**

**Port Everglades Master Plan, Fort Lauderdale, FL.** Conducted permitting and existing environmental resource research required to update the Port Everglades Master Plan for the proposed Port Expansion Project. Information was included in the Master Plan and will be utilized by the Port to be considered in future project planning at the Port.

**Drive-In Boatwash, Miami and Fort Myers, FL.** Coordinated with the USACE, FDEP, and DERM to secure necessary permits for a boatwash system to be installed and operated within a marina. As a part of the permitting process, water quality monitoring was required by the agencies, Ms. Delp coordinated and managed the water quality monitoring and helped to establish procedures, reporting forms, and data logs.

**Monroe County Roads Improvements, Key Largo, FL.** Performed a wetland delineation to document the limits of the wetland habitat adjacent to the proposed Project site so that impacts could be assessed for environmental permitting.



Broward County Bid #PNC2119212P1  
Consulting Services for Port Everglades



purposes. Potential wetland areas were located based on the three wetland parameters of hydric vegetation, hydrology and hydric soil indicators. A field observation report was created to describe the site conditions, vegetation species present along the Project site, and the extent of the wetland habitat.

**US Coast Guard Benthic Survey, Key West, FL.** Conducted marine resource assessment of the existing submerged bottom, dock and bulkhead structures, in accordance with the NMFS recommendations for sampling *Halophila johnsonii*, the Recommended Survey Protocol for *Acropora* spp., and the FKNMS Protocol for Benthic Surveys for Coral Resources in FKNMS, to document the extent, species, and density of corals, sponges, and seagrasses growing within the Project area, necessary to evaluate impacts related to the proposed marine improvements and assist with concept planning. A Field Observation Report was prepared.

**Bentley Bay Marina Boatlifts, Miami Beach, FL.** Secured permits from the USACE, FDEP, and DERM, as well as sovereign submerged lands authorization via a lease for a 16 slip public docking facility, where seagrass is present, in the Biscayne Bay Aquatic Preserve.

**Crandon Park Marina North Shoreline Rip Rap, Key Biscayne, Florida.** Cummins Cederberg designed and permitted a breakwater and mangrove planter system for the Miami-Dade County Parks Recreation and Open Spaces Division. Ms. Delp created a marsh grass planting plan which was needed to stabilize the mangrove planter side slope. The plan was incorporated into the final design.

**Shake-a-Leg Miami Floating Dock Replacement, Biscayne Bay, FL.** Securing permits for the replacement of 3,840 sq. ft. of floating dock in the same footprint as existing, prior to Hurricane Irma. Shake-a-Leg Miami, a not-for-profit organization, works with children and adults with physical, developmental, and economic challenges in a marine environment, utilizing Biscayne Bay to teach environmental lessons, therapeutic sailing, swimming, and kayaking, among other watersports activities. Ongoing

**Seagull Townhome Condominiums, North Miami Beach, FL.** Performed a marine resource survey along 720 linear feet of seawall at the Project site to document seagrasses, corals, and any other resources of significance within the proposed Project footprint. The findings were summarized in a Field Observation Report and sent to permitting agencies to assist with the environmental permitting process of the proposed dock replacement.

**City of Lake Worth Outfall Projects, FDOT District 4, FL.** Conducted a marine resource survey and seagrass assessment to identify potential seagrasses growing within the project limits. Project site is located within Johnson Seagrass (*Halophila johnsonii*) Range, therefore the National marine Fisheries Service (NMFS) recommendations for sampling *Halophila johnsonii* were followed. A Field Observation Report was produced documenting the presence of seagrass, seagrass species and density, as well as the dominant species, corals, vegetation, and other marine resources of significance along the project shoreline.





**JON CUNNINGHAM, E.I.**  
**CONSTRUCTION**  
**ADMINISTRATION**

**EDUCATION**

B.Sc. Civil  
Engineering,  
Pennsylvania  
State University



**CERTIFICATIONS**

Engineer Intern, E.I.  
Advanced open Water Scuba

**PROFESSIONAL AFFILIATIONS**

American Society of Civil  
Engineers (ASCE)  
Florida Association of  
Environmental Professionals  
(FAEP)



Jon Cunningham is a Project Engineer with experience in planning, engineering analysis, structural design, inspection and construction administration for marine and waterfront projects. Jon will assist with construction administration efforts specifically with marine and waterfront projects.

He has completed and assisted with marine structure projects in the United States and Turks & Caicos Islands, including bulkheads, seawalls, docks, piles and piers.

**RELEVANT EXPERIENCE**

**MSC Cruises Ocean Cay Marine Reserve, Bimini Islands, The Bahamas.** Long term current measurements were conducted to obtain an order of magnitude current speeds for discussion with the cruise ship captain relative to operational constraints and planning. The current measurements consisted of the deployment of Acoustic Wave and Current Profiler (ADCP) units on the seabed of the proposed cruise ship berth and within the turning basin. Prior to deployment, the units were digitally set up with associated software and mounting equipment were constructed. Exact location coordinates were determined and located via handheld GPS for the ADCP units were placed on the seabed at those locations in water depths of approximately 40 feet. Upon retrieving the ADCP units, the measurement data was downloaded and processed to understand the magnitude and variation of the currents at the specified deployment locations.

**Bay Harbor Islands, Miami, FL.** Above and underwater inspection and condition assessment of approximately 20,000 feet of seawall, rock revetment and dock structures along the three Bay Harbor Islands. The focus of the inspection was to identify cracks, spalling, corrosion, deterioration, damage and/or displacement as well as excessive undermining or sediment transport along the toe of seawalls. The planning of the project includes analysis of the inspection findings to determine rehabilitation and/or replacement of the existing structures with respect to age, condition and sea level rise resiliency.

**Mariner's Cove Association, Palm Beach County, FL.** Above and underwater inspection and condition assessment of





approximately 700 feet of docking with the freshwater basin and approximately 1,475 feet of docking and shoreline along the artificial canal West of the Intracoastal Waterway. The focus of the inspection was to identify cracking, spalling and other forms of deterioration of the concrete and timber elements as well as corrosion and deterioration of steel/aluminum connections and framing members of the travel lift separating the freshwater basin from the saltwater canal. The planning of the project includes implementing inspection findings to the design of timber dock structure replacement, aluminum sheet pile seawall replacement and concrete seawall repairs.

**Blue Haven Marina, Providenciales, Turks and Caicos.** Above and underwater inspection and condition assessment of the marina servicing up to 220-foot yachts including components such as floating dock units, connections, guide piling, mooring piles, dock hardware and fenders. The inspection was conducted to assess damage and impacts associated with Hurricanes Irma and Maria in 2017.

**Peanut Island Coastal Analysis, Lake Worth Inlet, FL.** Desktop coastal analysis was conducted at Peanut Island Shoal to evaluate the governing coastal processes as part of the Peanut Island Shoal Dredging Project located in Palm Beach County, Florida. The coastal analysis consisted of the deployment of Acoustic Wave and Current Profiler (ADCP) units on the seabed of Lake Worth (Palm Beach) Inlet and on the seabed at the Blue Heron Bridge to measure current speeds throughout tidal variations. The ADCP's were placed and retrieved at the Inlet location in water depths of approximately 40 feet and at the Blue Heron Bridge location in water depths of approximately 15 feet. Upon retrieving the ADCP units, the measurement data was downloaded and processed to understand the magnitude and variation of the currents relative to the proposed dredging operation at the Peanut Island Shoal.

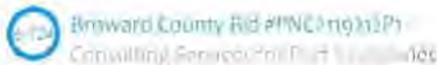
**147 Marina Ave, Key Largo, FL.** Structural design of concrete piling to support approximately 120 square foot floating dock for category 1 hurricane loading and vessel size up to 32' LOA.

**Sea Breeze RV Park, Islamorada, FL.** Structural design of concrete seawall and timber dock structures to replace existing structures which experienced damaging impacts of Hurricane Irma in 2017.

**Marine Stadium Boat Ramps, Virginia Key, FL.** Structural design of new concrete boat ramp, fixed concrete docks and concrete floating dock piles to support vessel sizes up to 40' LOA.

**Ocean Breeze RV Park, Marathon, FL.** Structural design of concrete seawall and timber dock structures to replace existing structures which experienced damaging impacts of Hurricane Irma in 2017.

**Flamenco Towers Association, Aventura, FL.** Underwater inspection and condition assessment of approximately 600 feet of concrete seawall.





**JAMES D.  
STONER, PSM  
LAND  
SURVEYING  
AND  
SUBSURFACE  
UTILITY  
ENGINEERING**



**Education**

Land Surveying, Palm Beach  
Community College

**Registration**

Professional Surveyor & Mapper,  
Florida, 4039, 1983

**Professional Affiliations**

Florida Society of Professional  
Surveyors and  
Mappers  
Broward County Chamber of the  
Florida  
Society of Professional Land  
Surveyors  
Leadership Broward  
ACSM (American Congress on  
Surveying and  
Mapping)

James Stoner, PSM has been a professional surveyor and mapper for over 38 years and is a second generation land surveyor. He founded Stoner & Associates, Inc. in 1988. Mr. Stoner has extensive experience in all phases of land surveying. Stoner & Associates, Inc., is fully-automated and employs the latest technology to provide accurate, cost-effective surveys. Mr. Stoner has supervised both small and large scale surveying projects. His firm has successfully completed numerous roadway and other various projects, while working directly with the clients and consultants. He has over two decades of experience working at Port Everglades and Fort Lauderdale Hollywood International Airport.

- Broward County - Davie Landfill Project - Provided Ground Control for Aerial Survey
- Broward County - Snyder Park - Boundary & Topographic Survey
- Broward County - Various Neighborhood Improvement Projects - (Franklin Park, Washington Park and St. George West) - Design Surveys
- Broward County Parks & Recreation - T.Y. Park - Boundary & Topographic Survey
- Broward County Parks & Recreation- Crystal Lake Environmentally Sensitive Land - Boundary and Topographic Survey
- City of Ft. Lauderdale - International Swimming Hall of Fame - Boundary & Topographic Survey
- City of Ft. Lauderdale - Woodlawn Cemetery - Boundary & Topographic Survey
- City of Hollywood - New Branch Library- Boundary & Topographic Survey
- City of Margate - New Administration Building - Topographic & Tree Survey
- City of Pembroke Pines - Charter School - Boundary & Topographic Survey
- City of Pembroke Pines - United States Post Office - Drainage As-Built Survey
- City of Plantation - Central Park - Topographic Survey of 30 Acre Addition to Parcel "X"



Broward County Bid #PNC2119212P1  
Consulting Services for Port Everglades



**RICHARD G.  
CRAWFORD, JR.,  
PSM  
LAND  
SURVEYING  
AND  
SUBSURFACE  
UTILITY ENGINEERING**



**Education**

Associates of Science in Land  
Surveying  
Palm Beach Community College in  
1994

**Registration**

Associates of Arts in Architecture  
Broward College in 1986  
State of Florida Professional  
Surveyor and Mapper  
License Number LS5371

**Professional Affiliations**

Florida Surveying and Mapping  
Society  
Florida Surveying and Mapping  
Society – Broward Chapter  
American Congress on Surveying  
and Mapping  
Leadership Broward

Richard G. Crawford, Jr., PSM has been with Stoner & Associates, Inc. for over twenty-five years, and has over thirty years of experience within our industry. During this time, his experience has grown to include all of the types of surveys performed by the firm. Mr. Crawford is well trained and proficient in the processing of survey data collection from a variety of data collection devices, such as GPS, Digital Leveling, and Conventional Total Stations. He is also proficient in the preparation of survey drawings using AutoCAD, MicroStation, and Carlson Survey.

Mr. Crawford is responsible for the day to day management and operations of the Field Crews and Office Support Staff. He is also responsible for preparing estimates for both Construction and Engineering Design Surveys.



Broward County Bid #PNC119212P1  
Consulting Services for Port Everglades



**PAUL C.  
CATLEDGE, P.E.  
GEOTECHNICAL  
ENGINEERING/  
MATERIALS  
TESTING**



**Education**

BS in Civil Engineering, 2003  
Louisiana State University-Baton  
Rouge

**Professional Registrations**

Professional Engineer  
State of Florida  
#68448

**Professional Affiliations**

FES - Florida Engineering  
Society- Broward Chapter  
Past President

ASCE



Paul Catledge, P.E. is a senior geotechnical engineer with over 15 years of engineering experience including geotechnical analysis, design and inspection of deep and shallow foundation systems, and structural design. Paul has worked on projects throughout South Florida for years, as an expert in regard to geotechnical conditions in Broward County. He has extensive experience with coastal geotechnical exploration and continues overseeing construction materials testing and structural inspections. He is registered in multiple states including Florida, New York, Indiana, Texas, Kentucky, Michigan and Louisiana.

**Project Experience**

**Miami-Dade County Airports - Runway, Taxiway and Apron Rehabilitation, Miami-Dade County.** Performed geotechnical sampling and studies at Miami International Airport, Opa Locka Airport, Tamiami Airport, Homestead Airport, and Dade Collier Airport in order to evaluate pavement condition as well as recommend repairs and/or pavement design for reconstruction of damaged structures. Included coordination of activities with airport staff for runway closures, determining necessary laboratory testing, analysis and design.

**Miami Children's Hospital Campus Expansion, Miami, FL.** Conducted soil exploration, testing and geotechnical design for the expansion of the Miami Children's Main Campus. Projects included a new central energy plant, new 7 story parking garage, new emergency room department and new bed tower. Design elements and scope were ordered to minimize disturbance to the hospital activities. Designed and inspected elements include 18 inch diameter auger cast piles and jet grout soil improvement. Materials testing and inspections during construction were also part of the scope.

**Broward College Parking Garage, Davie, FL.** Performed the site analysis and geotechnical design for the pile supported 6 story parking garage as well overseeing the pile load test, testing and inspections during construction.





**BROWARD COUNTY  
UAZ WATER SEWER  
IMPROVEMENTS  
LAUDERDALE LAKES, FLORIDA**

**Estimated Completion Date**  
2019

**Fee**  
\$3,544,729

**Client**  
Broward County  
Patrick MacGregor  
2555 West Copans Road  
Pompano Beach, FL 33069-1233  
(954) 831-0904

**Role**  
Prime; Civil engineering

**Broward County UAZ 110/111 & 113 Water Sewer Improvements 113A / Broward County UAZ 110/111 & 113 Water Sewer Improvements 113B** - The Water and Sanitary Sewer Improvements for the UAZ 110/111 & 113 Project will include the improvements to the existing water distribution system, sanitary sewer system, and transmission systems within the project area along with the restoration of surface areas disturbed for the construction of said improvements. All projects combined a total area of over 1000 acres within multiple Cities. The existing system being replaced consists of approximately 168,100LF of water mains, 122,100 LF of sanitary sewer mains and 23,600 LF force main. The existing water main consists of asbestos cement, cast iron, ductile iron, galvanized steel, polyvinyl chloride pipe ranging from 2" - 24" in diameter size. The sanitary sewer consists of vitrified clay, fold and form liner, cured in place liner and ductile iron pipe ranging from 8" - 15" in diameter size. The force main consists of asbestos cement, cured in place liner, ductile iron and polyvinyl chloride pipe ranging from 6" - 16" in diameter size. There are 8 Broward County lift stations in these UAZ areas and 1 private lift station which sanitary sewer systems will need to connect to. Two of these stations will need rehabilitation/replacement. The restoration of roadways, sidewalks, driveways, and landscape areas will need to be performed as needed for water and sanitary sewer improvement construction.



Broward County Bid #PNC2119212P1  
Consulting Services for Port Everglades



**BROADVIEW PARK NIP 20"  
WATER MAIN EXTENSION  
BROWARD COUNTY, FLORIDA**

**Estimated Completion Date**

2010

**Fee**

\$586,828

**Client**

Broward County  
Patrick MacGregor  
2555 West Copans Road  
Pompano Beach, FL 33069-1233  
(954) 831-0904

**Role**

Prime; Civil engineering

Chen Moore and Associates was responsible for the design and construction administration of the 20" Water Main Extension on SR-7 (US 441). This project is approximately 9,000 LF in length and links two previous Chen Moore and Associates projects to provide a water source for the Broadview Park Neighborhood from Broward County WTP 1A. This project involved extensive permitting and coordination with FDOT District IV as the majority of the water main falls within FDOT ROW. The permit requirement also included complex Maintenance of Traffic design. The day operations included the horizontal directional drill at Broward Boulevard, water main testing, and restoration and materials testing in association with FDOT inspectors. Night operations included open cut water main installation and roadwork after the pipe installation to allow for the roadway to be opened in the morning. The project was completed on time and under budget.



Broward County Bid #PNC2119212P1  
Consulting Services for Port Everglades



**UAZ 303, 314, 316 AND 318  
BID PACK 1  
LAUDERDALE LAKES, FLORIDA**

**Estimated Completion Date**  
2016

**Bid Pack 1:**

**Cost**

\$1,470,424

**Fee**

\$1,002,449.36

**Client**

Broward County  
Patrick MacGregor  
2555 West Copans Road  
Pompano Beach, FL 33069-1233  
(954) 831-0904

**Role**

Prime; Civil engineering

The Broward County UAZ 303, 314, 316 and 318 project was part 1 of what was projected to be an \$8.8 million project replacing existing water and providing sanitary sewer for County Service Areas in the City of Dania Beach, just east of State Road 7, north and south of Griffin Road. The main technical components included replacing 12-inch water mains on County roads, replacing the residential water distribution system, providing sanitary sewer systems to eliminate existing septic tanks, and rehabilitating or installing new lift stations. In order to obtain the necessary information, site visits concentrated on contacting residents to determine the location of existing tanks. A great deal of coordination was required to accommodate developer projects, tie into County projects and obtain easements for crossing private properties. GIS was used to keep track of all ongoing projects, log pertinent site information, determine the projected flow rates, track questions from residents of the area and track responses from utility companies regarding their existing facilities. The design of these improvements began in January 2009 and construction has been completed. Chen Moore and Associates also performed construction administration for this project.



BROWARD County UAZ 314, 316, & 318 Project Location CHEN-MOORE & ASSOCIATES



Broward County Bid #PNC2119212P1  
Consulting Services for Port Everglades



**BROWARD COUNTY  
UAZ WATER SEWER  
IMPROVEMENTS - 316  
LAUDERDALE LAKES, FLORIDA**

**Estimated Completion Date**  
2016

**Bid Pack 2:**

**Cost**  
\$1,470,424  
**Fee**  
\$903,416

**Client**

Broward County  
Patrick MacGregor  
2555 West Copans Road  
Pompano Beach, FL 33069-1233  
(954) 831-0904

**Role**

Prime; Civil engineering

The Broward County UAZ 316 project was part 2 of the estimated \$8.8 million project servicing Broward County utility zones in the City of Dania Beach which included replacing existing water and providing sanitary sewer just east of State Road 7, and south of Griffin Road. The main technical components included replacing 12-inch water mains on County Roads, replacing the residential water distribution system, providing sanitary sewer systems to eliminate existing septic tanks and rehabilitating or installing new lift stations. In order to obtain the necessary information, site visits concentrated on contacting residents to determine the location of existing tanks. A great deal of coordination was required to accommodate developer projects, tie into County projects and obtain easements for crossing private properties. GIS was used to keep track of all ongoing projects, determine the projected flow rates, track questions from residents of the area and track responses from utility companies regarding their existing facilities. Design of these improvements began in 2009 and construction was completed in 2016. Chen Moore and Associates also performed construction administration for this project.



Broward County Bid #PNC2119212P1  
Consulting Services for Port Everglades



**FKAA CUDJOE REGIONAL  
WASTEWATER COLLECTION  
KEY WEST, FLORIDA**

**Estimated Completion Date**  
2016

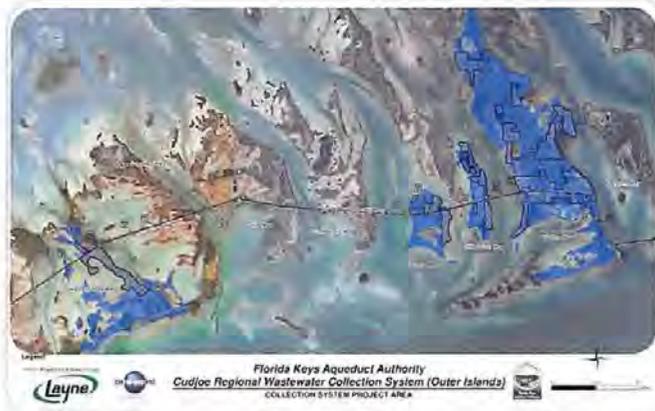
**Cost**  
\$90 million

**Fee**  
\$3,023,960

**Client**  
Reynolds Construction LLC  
Wesley Self, PE  
2003 Bluestone Circle  
Birmingham, AL 35242  
(770) 696-4040

**Role**  
Prime; Civil engineering

Chen Moore was the prime consultant responsible for the design, permitting, and construction under this \$90 million design-build utility project. The proposed utility improvements included the replacement of existing water mains and the installation of new sanitary sewer collection systems that will convey sewage from four of the Lower Keys to a transmission force main and/or master lift station located along US1/Overseas Highway. The project includes replacement of 35,579 LF of 4" C-900 water main, 21,831 LF of 6" C-900 water main and 205 LF of 8" C-900 water main. This project was the single largest in terms of value and number of customers served ever undertaken by Monroe County. The utility improvements consisted of wastewater service and water replacement to the islands of Ramrod Key, Lower Sugarloaf Key, Little Torch Key, and Big Pine Key. The wastewater collection system includes approximately 500,000 linear feet of gravity sewer and low-pressure grinder sewer with over 62 neighborhood lift stations that serve approximately 4,500 customers. The transmission system consists of four master pump stations and PVC and HDPE pipeline laid along US Highway 1. The project requires close coordination with the local, state and federal permitting agencies. Chen Moore participated in neighborhood meetings to explain the proposed improvements.



Broward County Bid #PNC2119212P1  
Consulting Services for Port Everglades



**FT LAUDERDALE FM REHAB,  
HDD & SWAGELINE (1-4)  
FORT LAUDERDALE, FLORIDA**

**Estimated Completion Date**  
2018

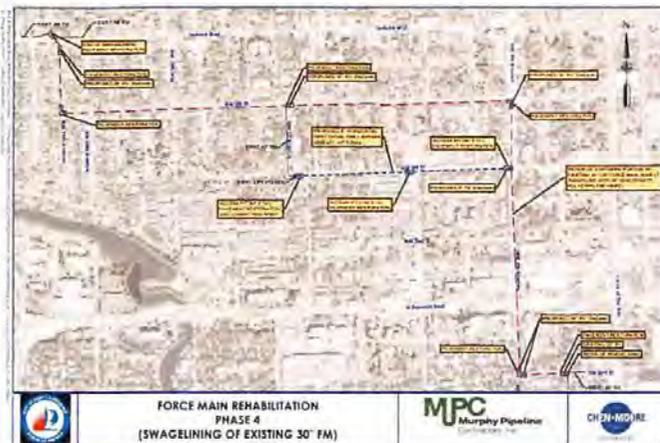
**Cost**  
\$14 million

**Fee**  
\$887,295

**Client**  
Murphy Pipeline Contractors Inc  
Richard Crow  
18503 Pines Blvd Ste 315  
Pembroke Pines, FL 33029  
(954) 842-4771

**Role**  
Subconsultant; Civil engineering

Chen Moore and Associates was the prime consultant for the 30" Emergency Force Main Rehabilitation project in the City of Fort Lauderdale. This innovative design-build project, led by Murphy Pipeline Contractors (MPC) was undertaken to provide both mainline force main replacement for aging infrastructure and to provide additional redundancy in case of future issues. The contract was divided into four (4) phases within the City of Fort Lauderdale. The nearly 20,000 linear feet of pipeline was rehabilitated through a combination of swagelining, directional drilling, and traditional open cut installation over these four phases. CMA provided planning, design, permitting and engineering services during construction. Environmental compliance, subaqueous crossing, public involvement and maintenance of traffic in the busy Sistrunk and Himmarshee Business Districts were some of the additional project complexities. CMA also provided dewatering permitting and groundwater modeling due to contaminated sites within quarter mile of the projects.



Broward County Bid #PNC2119212P1  
Consulting Services for Port Everglades



**BCWWS-POTABLE WATER  
STORAGE TANK AND  
PUMPING SYSTEM DISTRICT  
3A  
FORT LAUDERDALE, FLORIDA**

**Estimated Completion Date**  
2019

**Fee**  
\$253,265

**Client**  
Carollo Engineers  
Elizabeth Fujikawa, P.E.  
2056 Vista Parkway Suite 400  
West Palm Beach, FL 33441  
(561) 868-6409

**Role**  
Subconsultant; Civil engineering

Chen Moore and Associates is a subconsultant to Carollo Engineers for Civil Engineering, Site Planning and Landscape Architecture Services for the Broward County 3A Tank and Pumping facility. The project consists of a 4.9 acre site located in the City of Dania Beach. As part of this project, Broward County expanded the facility to add a 2.5 million gallon potable water storage tank and a High Service Pump Station (HSPS). Chen Moore provided design and permitting for the yard piping which included 24", 18" and 12" ductile iron pipeline for the tanks and pump. Chen Moore was also responsible for the water and sewer facilities which included gravity sewer lines, forcemain, a new lift station, potable water lines and fire lines. It also included a new stormwater system for the site which included the elimination of the existing lime sludge pond and creation of a dry detention system with a network of drainage pipe and storm inlets. The design also included permitting and construction documents for the removal of underground diesel fuel tanks. In addition, Chen Moore was responsible for all landscape architecture, site planning, DRC approvals and variances through the City.



Broward County Bid #PNC2119212P1  
Consulting Services for Port Everglades



**BCWWS-POTABLE WATER  
STORAGE TANK AND  
PUMPING SYSTEM DISTRICT  
1B1  
FORT LAUDERDALE, FLORIDA**

**Estimated Completion Date**  
2016

**Fee**  
\$88,216)

**Client**  
Carollo Engineers  
Elizabeth Fujikawa, P.E.  
2056 Vista Parkway Suite 400  
West Palm Beach, FL 33441  
(561) 868-6409

**Role**  
Subconsultant; Civil engineering

Chen Moore and Associates is a subconsultant to Carollo Engineers for Civil Engineering, Site Planning and Landscape Architecture Services for the Broward County 1B1 Tank and Pumping facility. The project consists of a 5.70 acre site located in the City of Fort Lauderdale. As part of this project, Broward County expanded the facility to add a 1.5 million gallon potable water storage tank and a High Service Pump Station (HSPS). Chen Moore provided design and permitting for the yard piping which included 24", 16", 12" and 10" ductile iron pipeline for the tank and pump. Chen Moore was also responsible for the water and sewer facilities which, relocation of a 16" forcemain, a new lift station, potable water lines and fire lines. It also included a new stormwater system for the site which included a dry detention system with a network of exfiltration trenches and storm inlets. In addition, Chen Moore was responsible for all landscape architecture, site planning, DRC approvals and variances through the City.



Broward County Bid #PNC2119212P1  
Consulting Services for Port Everglades



**BCWWS-POTABLE WATER  
STORAGE TANK DISTRICT 2A  
FORT LAUDERDALE, FLORIDA**

**Estimated Completion Date**  
2018

**Fee**  
\$78,916

**Client**  
Carollo Engineers  
Elizabeth Fujikawa, P.E.  
2056 Vista Parkway Suite 400  
West Palm Beach, FL 33441  
(561) 868-6409

**Role**  
Subconsultant; Civil engineering

Chen Moore and Associates is a subconsultant to Carollo Engineers for Civil Engineering, Site Planning and Landscape Architecture Services for the Broward County 2A Tank. The project consists of a 14.50 acre site located in the City of Pompano Beach. As part of this project, Broward County expanded the facility to add a 5.0 million gallon potable water storage tank. Chen Moore provided design and permitting for the yard piping which included 54", 48", 42" and 16" ductile iron pipeline for the new tank. Chen Moore was also responsible for the water and sewer facilities which included a new 6" forcemain a new dry detention area, regrading of the site and storm drain inlets and permitting through FDEP and EPGMD. Chen Moore was responsible for all landscape architecture, site planning and DRC approval through the City.



Broward County Bid #PNC2119212P1  
Consulting Services for Port Everglades



**PUNTA LIMON - PANAMA  
PHASE I  
COLON, PANAMA**

**Estimated Completion Date**  
2015

**Fee**  
\$380,000 (phases I and II)

**Client**  
Burton Hersh PA  
130 Miracle Mile Ste 200  
Coral Gables, FL 33134  
(305) 373-1961 x 701

**Role**  
Subconsultant; Civil engineering

CMA was the lead preliminary engineering phase consultant for the development of a greenfield port in Central America. The proposed uses included cargo facilities (with trade zone light manufacturing), cruise terminal facilities, fueling and salvage/repair facilities. In addition, this development included the infrastructure for supporting housing and a maritime trade school. The scope included preliminary investigation (surface and bathymetric survey, geotechnical exploration, environmental impacts and utility demand calculations), facilities and site planning (inclusive of wind/wave studies to maximize cargo loading operations, dredge and fill calculations and access roadway studies), development of options for structural systems (including foundations and bulkhead) and cost estimating. Electrical, water and sewer services were not available adjacent to the site, so preliminary plant planning was included. LNG and solid waste facilities were also considered as part of the development.

In addition to the formal due investigative reports that were presented to the client, CMA developed 30% design drawings (civil, structural, architectural, electrical and landscape architectural) for the overall development. This was inclusive access and circulation roadways, utilities (water, sewer, electrical, stormwater) and preliminary renderings for cruise terminal facilities and public amenities, such as pedestrian plazas. Structural drawings included preliminary sizing of foundation and bulkhead elements. The level of detail of these drawings greatly assisted in improving the accuracy of the cost estimating task included in the due diligence phase.



Broward County Bid #PNC2119212P1  
Consulting Services for Port Everglades



**PUNTA LIMON - PANAMA  
PHASE II  
COLON, PANAMA**

**Estimated Completion Date**  
2017

**Fee**  
\$380,000 (phases I and II)

**Client**  
Burton Hersh PA  
130 Miracle Mile Ste 200  
Coral Gables, FL 33134  
(305) 373-1961 x 701

**Role**  
Subconsultant; Civil engineering

After the preliminary engineering was accepted by the client, CMA moved into the environmental impact phase of the project. This included a desktop top and field work to determine impacts to endangered species of flora and fauna. In addition, impacts of the dredging operations were considered for impacts to the adjacent waterway. Fueling facilities, both diesel and LNG were considered, including spill prevention and cleanup planning. This task also included coordination with governmental agencies and permit applications through various departments, including environmental protection and navigation impacts.



6-170 Broward County Bid #PNC2119212P1  
Consulting Services for Port Everglades



**ISLANDS SHORELINE  
ASSESSMENT-CIVIL  
ENGINEERING  
BAY HARBOR ISLANDS,  
FLORIDA**

**Estimated Completion Date**  
2019

**Fee**  
\$96,250

**Client**  
Town of Bay Harbor Islands  
Randy Daniel, PE  
9665 Bay Harbor Terrace  
Bay Harbor Islands, FL 33154  
(305) 455-7248

**Role**  
Subconsultant; Civil engineering

CMA provided civil engineering services for the Islands Shoreline assessment for the Town of Bay Harbor Islands. CMA performed an inspection and assessment of the seawall and revetment along the perimeter of the three islands comprising the Town. CMA performed the required inspections /assessments and prepared and submitted an easement report with our findings and recommendations with our subconsultant Cummins Cederberg, Inc.



Broward County Bid #PNC2119212P1  
Consulting Services for Port Everglades



**MIAMI BEACH SUNSET ISLANDS 3 & 4 ROW IMPROVEMENT PROGRAM MIAMI BEACH, FLORIDA**

**Estimated Completion Date**  
2018

**Fee**  
\$790,154

**Client**  
Ric-Man International  
Rene Castillo, Sr.  
1545 NW 27th Avenue  
Pompano Beach, FL 33069  
(954) 426-1042

**Role**  
Subconsultant; Civil engineering

Chen Moore and Associates provided civil engineering and landscape architecture for the utility infrastructure and roadway reconstruction of this multi award-winning project consisting of two islands (Sunset Islands 3 and 4) off the Miami Beach west coast, along the inter-coastal waterway. The project was publicly bid as a design-build and funded by the City of Miami Beach. It required coordination with various



agencies including the City of Miami Beach, the Miami-Dade Water and Sewer Department (M-D WASD), the Miami-Dade Public Works Department, Army Corps. Of Engineers (ACOE), the Miami-Dade Regulatory and Economic Resources Department (RER) and others. Sunset Islands 3&4 was awarded project of the year by the Cuban-American Association of Cuban Engineers (CAACE) and was awarded the Project of the Year award by the American Society of Civil Engineers (ASCE) at the ASCE Florida Section Annual Conference on July 13, 2018. A presentation of the technical components and lessons learned from this project was presented at the conference as well as at the December 2017 Conference of the Florida Stormwater Association (FSA). CMA served as the prime consultant for civil engineering and Gregory Mendez, P.E., Branch Manager/Senior Engineer served as project manager.

The project consists of complete roadway reconstruction and grading with new pavement section and curb, the replacement of 8" potable water mains throughout, the lining of existing sanitary sewer mains, a completely new storm water drainage system, including discharge pumps and outfalls, the undergrounding of all existing overhead utilities, new service connections to all properties, landscaping, signage and striping.



Broward County Bid #PNC2119212P1  
Consulting Services for Port Everglades



**PBIA CONCEPTUAL  
STORMWATER MANAGEMENT  
MASTER PLAN (SMMP)  
WEST PALM BEACH, FLORIDA**

**Estimated Completion Date**  
2009

**Fee**  
\$275,000

**Role**  
This project represents the individual experience of Mr. Whitfield while with another firm.

Mr. Whitfield was the Lead Project Engineer responsible for developing a stormwater management system to meet the needs of PBIA and related properties over the course of the "Year 2013/2025 Future Airport Layout Plan (ALP)". The primary features of the ALP that impacted the existing stormwater management system involved significant modifications to two of the three existing runways (Runway 13/31 and Runway 9R/27L), associated changes to the taxiway system, modifying existing airside development on the south side of the airfield and the addition of the Golfview Facilities (new apron and airside development). The stormwater management system was developed using the Interconnected Channel and Pond Routing (ICPR) software. The resulting SMMP document was utilized by ADA as the basis for the DOA's Conceptual Environmental Resources Permit (ERP) application to the South Florida Water Management District. The permit application was approved and has been since utilized as the basis for subsequent construction permits, such as the stormwater management system associated with the Taxiway F Extension project.



Broward County Bid #PNC2119212P1  
Consulting Services for Port Everglades



**FORT LAUDERDALE-  
HOLLYWOOD INTERNATIONAL  
AIRPORT STORMWATER  
MASTER PLAN UPDATE  
FORT LAUDERDALE, FLORIDA**

**Completion Date**  
2009

**Fee**  
\$350,950

**Client**  
Broward County Aviation  
Department  
Carlos Hernandez  
2200 SW 45th Street  
Dania Beach, FL 33312  
(954) 359-2255

Under Phase 1 of this project, Broward County Aviation Department (BCAD) retained Chen Moore and Associates (CMA) to update the FLL Stormwater Master Plan (SWMP), which was completed by a previous consultant in 2001. CMA reviewed the data and analysis from all prior reports, converted the existing stormwater model from SWMM to ICPR, and updated the ICPR model with any new system data and new projects provided by BCAD. CMA updated the existing conditions stormwater model and created the future conditions stormwater model to assess alternative drainage improvements needed to achieve required and desired Levels of Service (LOS) for various storm events. The stormwater model was used to run rainfall scenarios for the comparison of pre-development (existing) conditions versus post-development (future) conditions from a water quantity (runoff) and water quality (storage) perspective. The stormwater model was used to analyze the performance of the existing Primary Stormwater Management System (PSMS). Phase 1 for this project included the following work items:

- Review and verify earlier work by other consultants during 2001-2005
- Convert previous SWMM stormwater model to ICPR model
- Obtain updated topographic data for TIN development
- Calculate updated hydrologic parameter for drainage basins
- Conduct analysis of various system improvement alternatives
- Prepare Stormwater Master Plan Update



6-174 Broward County Bid #PNC2119212P1  
Consulting Services for Port Everglades

Broward County Board of  
County Commissioners

PNC2119212P1



**FORT LAUDERDALE-  
HOLLYWOOD INTERNATIONAL  
AIRPORT STORMWATER  
MASTER PLAN UPDATE PHASE  
2  
FORT LAUDERDALE, FLORIDA**

**Completion Date**  
2014

**Fee**  
\$435,100

**Client**  
Broward County Aviation  
Department  
Carlos Hernandez  
2200 SW 45th Street  
Dania Beach, FL 33312  
(954) 359-2255

The purpose of Phase 2 was to provide routine updates to the stormwater model(s) based on progress design drawings of the South Runway Expansion Project and the associated future development, including but not limited to, terminal and gate area improvements. The existing stormwater model created during Phase 1 includes design assumptions based on preliminary planning documents for the South Runway Expansion Project. The updates to the stormwater model during Phase 2 were based on progress design submittals for the South Runway Expansion Project and approved design plans for other new development at FLL, which enhanced the accuracy of the stormwater model. Phase 2 for this project included the following work items:

- Prepare a Stormwater Capital Improvement Plan for FLL
- Certify existing permits at FLL
- Provide ongoing stormwater permitting assistance to BCAD
- Ongoing coordination with the design team for South Runway
- Conduct analysis of various sea level rise scenarios
- Expansion Project
- Complete drainage review of various developments throughout FLL
- Develop drainage design standards manual
- Prepare application package for stormwater conceptual permit for FLL



5-175 Broward County Bid #PNC2119212P1  
Consulting Services for Port Everglades



## C. PAST PERFORMANCE

Our record of repeat business is an indicator of the quality of the service we provide to our clients. The focus on customer satisfaction has resulted in decades of long-standing working relationships, due in part to the outstanding quality of deliverables, adherence to budget, and schedule compliance. Over 90 percent of our work is for repeat clients. Our subconsultant Jacobs has been providing planning, design, and construction phase services to Florida port clients for more than 60 years, and over 60 continuous years with Port Canaveral and the Port of Palm Beach.

The key benefits of engineering services from our proven team includes cost-effectiveness, continuity of quality, accountability, and in-house resources. This combination enables to easily coordinate the project's design phase across many disciplines.

### **Past Experience and Knowledge on Similar Type Projects**

We've selected a variety of projects that illustrate our experience across the many service areas required under this contract.

### **Port General Consultant and Civil Contracts**

The experience we have gained across ports throughout the country will be used in tackling your day to day engineering needs. We understand the nuances and the types of services required. Our goal is to develop long lasting relationships with the client and to bring the technologies to help meet their needs. We have multi-decade relationships with port authorities throughout the southeast.

Our subconsultant Jacobs has performed these services at both cruise heavy and cargo heavy ports and understands the specifics required of each. From traffic studies for cruise and cargo vehicles, to paving for cargo storage, to gate operations for cargo interchange, Jacobs has done it and done it well.

Our team has the experience and resources to successfully deliver your program. The following table demonstrates our similar projects and how they align with the required Technical Categories.





**CMA PROJECT EXPERIENCE**

CMA Project Name	Technical Category												
	Transportation Systems Design	Water/Sanitary Sewer Systems	Civil Engineering	Environmental Design	Telecommunications Systems	Drilling, Subsurface Investigations and Seismographic	Geotechnical and Materials Engineering	Stormwater Drainage Design	Structural Engineering	Mechanical Engineering	Electrical Engineering	Land Surveying	GIS/CAD/BIM
Broward County UAZ Water Sewer Improvements	•	•	•	•		•	•	•	•			•	•
Broadview Park NIP 20" Water Main Extension	•	•	•	•			•	•				•	•
UAZ 303, 314, 316 and 318 Bid Pack 1	•	•	•	•			•	•		•	•	•	•
Broward County UAZ Water Sewer Improvements - 316	•	•	•	•			•	•		•	•	•	•
FCAA Cudjoe Regional Wastewater Collection	•	•	•	•		•	•		•	•		•	•
Ft Lauderdale FM Rehab, HDD & Swageline (1-4)		•	•	•		•	•		•			•	•
BCWWS-Potable Water Storage Tank and Pumping System DISTRICT 3A		•	•	•			•		•	•	•	•	•
BCWWS-Potable Water Storage Tank and Pumping System DISTRICT 1B1		•	•	•			•		•	•	•	•	•
BCWWS-Potable Water Storage Tank DISTRICT 2A		•	•	•			•		•	•	•	•	•





CMA Project Name	Technical Category												
	Transportation Systems Design	Water/Sanitary Sewer Systems	Civil Engineering	Environmental Design	Telecommunications Systems	Drilling, Subsurface Investigations and Seismographic	Geotechnical and Materials Engineering	Stormwater Drainage Design	Structural Engineering	Mechanical Engineering	Electrical Engineering	Land Surveying	GIS/CAD/BIM
Punta Limon - Panama	■	■	■	■	■	■	■	■	■	■	■	■	■
Islands Shoreline Assessment-Civil Engineering			■	■		■	■		■			■	■
PBIA Conceptual Stormwater Management Master Plan (SMMP)			■	■			■	■	■			■	■
Fort Lauderdale-Hollywood International Airport Stormwater Master Plan Update Phase 1			■	■			■	■	■			■	■
Fort Lauderdale-Hollywood International Airport Stormwater Master Plan Update Phase 2			■	■			■	■	■			■	■





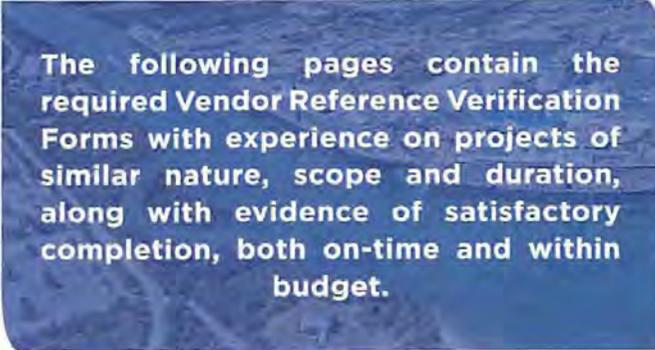
Jacobs Project Name	Technical Category																
	Cruise and Container Terminals	Marine Infrastructure and Dredging	Roadway and Utilities	Transportation Systems Design	Water/Wastewater	Civil Engineering	Environmental	Telecommunications Systems	Drilling, Subsurface Investigations and Seismographic	Geotechnical and Materials Engineering	Stormwater Drainage Design	Structural Engineering	Mechanical Engineering	Electrical Engineering	Land Surveying	GIS/CAD/BIM	Dredging
Port of Corpus Christi		•	•	•		•	•		•	•		•	•	•	•	•	•
Canaveral Port Authority	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Virginia Port Authority on-call, Virginia International Gateway Terminal	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
PortMiami on-calls	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
SSA Terminal Improvements Blount Island	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Port of Palm Beach on-call	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Royal Caribbean Coco Cay (Perfect Day)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Port of Los Angeles Civil on-call	•	•	•	•	•	•			•	•	•	•	•	•	•	•	



# **EXHIBIT 4**

**BA's Proposal Excerpt: Pages 131-159 (pdf page numbers); 135-163 (proposal page numbers)**

EVALUATION CRITERIA / PAST PERFORMANCE

<p>3. <b>Past Performance: Maximum 30 points</b></p>	
<p>Describe prime Vendor's experience on projects of similar nature, scope and duration, along with evidence of satisfactory completion, both on time and within budget, for the past five years. Provide a minimum of three projects with references.</p> <p>Vendor should provide references for similar work performed to show evidence of qualifications and previous experience. Refer to <b>Vendor Reference Verification Form</b> and submit as instructed. Only provide references for non-Broward County Board of County Commissioners contracts. For Broward County contracts, the County will review performance evaluations in its database for vendors with previous or current contracts with the County. The County considers references and performance evaluations in the evaluation of Vendor's past performance.</p> <p>a: Include active and completed projects related to cruise and/or cargo terminal expansion/construction and any other seaport transportation projects.</p> <p><b>Points Value: 15</b></p>	  
<p>b: Include active and completed projects related to marine infrastructure and dredging.</p> <p><b>Points Value: 10</b></p>	<ul style="list-style-type: none"> <li>• <b>Cruise and/or cargo terminal expansion/construction</b></li> <li>• <b>Seaport transportation</b></li> <li>• <b>Marine infrastructure and dredging</b></li> <li>• <b>Roadway and utility construction within a seaport environment</b></li> </ul>
<p>c: Include active and completed projects related to roadway and utility construction within a seaport environment.</p> <p><b>Points Value: 5</b></p>	

Broward County Board of  
County Commissioners

PNC2119212P1  
**E-3**

EVALUATION CRITERIA / PAST PERFORMANCE

**VENDOR REFERENCE VERIFICATION FORMS**



Vendor Reference Verification Form

Broward County Solicitation No. and Title:  
**Bid #PNC2119212P1 - Consulting Services for Port Everglades**

Reference for: Bermello Ajamil & Partners, Inc.

Organization/Firm Name providing reference:  
New York City Economic Development Corporation

Contact Name: Dmitri Konon Title: Former Vice President Reference date: 08/23/2019

Contact Email: dvk2001@med.cornell.edu Contact Phone: 212-746-6815

Name of Referenced Project: General Consulting Agreement for New York Terminals/Ports

Contract No. 17110002 Date Services Provided: 01/01/2005 to 01/01/2015 Project Amount: \$ 18,679,745.00

Vendor's role in Project:  Prime Vendor  Subconsultant/Subcontractor

Would you use this vendor again?  Yes  No If No, please specify in Additional Comments (below).

**Description of services provided by Vendor:**

Full Services Project Management , Master Planner and Architect for Facility Assessments and Upgrades of Terminals in Manhattan and Brooklyn.

Please rate your experience with the referenced Vendor:	Needs Improvement	Satisfactory	Excellent	Not Applicable
1. Vendor's Quality of Service				
a. Responsive	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Accuracy	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Deliverables	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Vendor's Organization:				
a. Staff expertise	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Professionalism	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Turnover	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Timeliness of:				
a. Project	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Deliverables	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Project completed within budget	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Cooperation with:				
a. Your Firm	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Subcontractor(s)/Subconsultant(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Regulatory Agency(ies)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Additional Comments: (provide on additional sheet if needed)

\*\*\*THIS SECTION FOR COUNTY USE ONLY\*\*\*

Verified via:  EMAIL  VERBAL Verified by: \_\_\_\_\_ Division: \_\_\_\_\_ Date: \_\_\_\_\_

All information provided to Broward County is subject to verification. Vendor acknowledges that inaccurate, untruthful, or incorrect statements made in support of this response may be used by the County as a basis for rejection, reassignment of the award, or termination of the contract and may also serve as the basis for disbarment of Vendor pursuant to Section 21119 of the Broward County Procurement Code.



CONSULTING SERVICES FOR PORT EVERGLADES BERMELO AJAMIL & PARTNERS

Broward County Board of  
County Commissioners

PNC2119212P1  
**E-3** a b c

EVALUATION CRITERIA / PAST PERFORMANCE

VENDOR REFERENCE VERIFICATION FORMS | CONTINUED



Vendor Reference Verification Form

Broward County Solicitation No. and Title:

Bid #PNC2119212P1 - Consulting Services for Port Everglades

Reference for: Bermello Ajamil & Partners, Inc.

Organization/Firm Name providing reference:

Port of Galveston

Contact Name: Rodger Rees Title: Port Director/CEO Reference date: 08/30/2019

Contact Email: rrees@portofgalveston.com Contact Phone: 409-766-6101

Name of Referenced Project: Port of Galveston Strategic Master Plan

Contract No.	Date Services Provided:	Project Amount:
BA-2018-MP	10/01/2018 to 08/30/2019	\$ 799,000.00

Vendor's role in Project:  Prime Vendor  Subconsultant/Subcontractor

Would you use this vendor again?  Yes  No If No, please specify in Additional Comments (below).

Description of services provided by Vendor:

Port Master Plan - infrastructure assessment, cargo and cruise business analysis and forecasts including potential commercial development and capital plan. B& A is working for Royal Caribbean on new terminal.

Please rate your experience with the referenced Vendor:	Needs Improvement	Satisfactory	Excellent	Not Applicable
1. Vendor's Quality of Service				
a. Responsive	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Accuracy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Deliverables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Vendor's Organization:				
a. Staff expertise	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Professionalism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Turnover	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Timeliness of:				
a. Project	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Deliverables	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Project completed within budget	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Cooperation with:				
a. Your Firm	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Subcontractor(s)/Subconsultant(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Regulatory Agency(ies)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Additional Comments: (provide on additional sheet if needed)

\*\*\*THIS SECTION FOR COUNTY USE ONLY\*\*\*

Verified via:  EMAIL  VERBAL Verified by: \_\_\_\_\_ Division: \_\_\_\_\_ Date: \_\_\_\_\_

All information provided to Broward County is subject to verification. Vendor acknowledges that inaccurate, untruthful, or incorrect statements made in support of this response may be used by the County as a basis for rejection, rescission of the award, or termination of the contract and may also serve as the basis for debarment of Vendor pursuant to Section 21.119 of the Broward County Procurement Code.



CONSULTING SERVICES FOR PORT EVERGLADES / BERMELLO AJAMIL & PARTNERS

Broward County Board of  
County Commissioners

PNC2119212P1  
**E-3**  
a b c

EVALUATION CRITERIA / PAST PERFORMANCE

VENDOR REFERENCE VERIFICATION FORMS | CONTINUED



**Vendor Reference Verification Form**

Broward County Solicitation No. and Title:  
**Bid #PNC2119212P1 - Consulting Services for Port Everglades**

---

Reference for: Bermello Ajamil & Partners, Inc.

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Organization/Firm Name providing reference:  
Canaveral Port Authority

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Contact Name: Bill Crowe Title: Vice President Reference date: 08/23/2019

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Contact Email: bcrowe@portcanaveral.com Contact Phone: (321) 394-3208

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Name of Referenced Project: Port Canaveral General Consulting Services

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Contract No. 17-024 Date Services Provided: 10/30/2017 to 05/30/2020 Project Amount: \$ 6,227,773.00

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Vendor's role in Project:  Prime Vendor  Subconsultant/Subcontractor

Would you use this vendor again?  Yes  No If No, please specify in Additional Comments (below).

**Description of services provided by Vendor:**  
Design, project management and document preparation for new cruise terminal (CT-03) including terminal, bag drop building, warehouse, parking garage and site / roadway improvements. BA provided Design, Architecture, PM, Landscape Architecture and Interior Design.

Please rate your experience with the referenced Vendor:	Needs Improvement	Satisfactory	Excellent	Not Applicable
1. Vendor's Quality of Service				
a. Responsive	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Accuracy	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Deliverables	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Vendor's Organization:				
a. Staff expertise	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Professionalism	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Turnover	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Timeliness of:				
a. Project	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Deliverables	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Project completed within budget	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Cooperation with:				
a. Your Firm	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Subcontractor(s)/Subconsultant(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Regulatory Agency(ies)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Additional Comments:** (provide on additional sheet if needed)

\*\*\*THIS SECTION FOR COUNTY USE ONLY\*\*\*

Verified via: EMAIL VERBAL Verified by: \_\_\_\_\_ Division: \_\_\_\_\_ Date: \_\_\_\_\_

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Broward County Board of  
County Commissioners

PNC2119212P1  
**E-3**

EVALUATION CRITERIA / PAST PERFORMANCE

VENDOR REFERENCE VERIFICATION FORMS | CONTINUED



Vendor Reference Verification Form

Broward County Solicitation No. and Title:

Bid #PNC2119212P1 - Consulting Services for Port Everglades

Reference for: Bermello Ajamil & Partners, Inc.

Organization/Firm Name providing reference:

Port of New Orleans

Contact Name: Steven Gauthier Title: Dep Director of Cruise Terminal Reference date: 08/23/2019

Contact Email: GauthierS@portno.com Contact Phone: 504-230-8120

Name of Referenced Project: Poland Avenue Cruise Terminal Professional

Contract No.	Date Services Provided:	Project Amount:
074833	12/12/2014 to 12/05/2016	\$ 2,046,000.00

Vendor's role in Project:  Prime Vendor  Subconsultant/Subcontractor

Would you use this vendor again?  Yes  No If No, please specify in Additional Comments (below).

Description of services provided by Vendor:

Cruise Terminal Facilities Planning and Architectural Design

Please rate your experience with the referenced Vendor:	Needs Improvement	Satisfactory	Excellent	Not Applicable
1. Vendor's Quality of Service				
a. Responsive	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Accuracy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Deliverables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Vendor's Organization:				
a. Staff expertise	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Professionalism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Turnover	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Timeliness of:				
a. Project	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Deliverables	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Project completed within budget	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Cooperation with:				
a. Your Firm	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Subcontractor(s)/Subconsultant(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Regulatory Agency(ies)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Additional Comments: (provide on additional sheet if needed)

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Broward County Board of  
County Commissioners

PNC2119212P1  
**E-3**

EVALUATION CRITERIA / PAST PERFORMANCE

VENDOR REFERENCE VERIFICATION FORMS | CONTINUED



Vendor Reference Verification Form

Broward County Solicitation No. and Title:  
**Bid #PNC2119212P1 - Consulting Services for Port Everglades**

Reference for: Bermello Ajamil & Partners, Inc.

Organization/Firm Name providing reference:  
City of Pompano Beach

Contact Name: Mark Beaudreau Title: Recreation Program Reference date: 08/27/2019

Contact Email: Mark.Beaudreau@copbf.com Contact Phone: 954-786-4191

Name of Referenced Project: City of Pompano Beach Continuing Services Contract

Contract No. \_\_\_\_\_ Date Services Provided: \_\_\_\_\_ Project Amount: \_\_\_\_\_  
02/01/2012 to 08/27/2019 \$ 75,000.00

Vendor's role in Project:  Prime Vendor  Subconsultant/Subcontractor  
Would you use this vendor again?  Yes  No If No, please specify in Additional Comments (below).

Description of services provided by Vendor:

Consulting Services Agreement that included: Architecture, Landscape Architecture, Urban Planning & Design, Civil Engineering, Construction Administration and Construction Management.

Please rate your experience with the referenced Vendor:	Needs Improvement	Satisfactory	Excellent	Not Applicable
1. Vendor's Quality of Service				
a. Responsive	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Accuracy	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Deliverables	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Vendor's Organization:				
a. Staff expertise	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Professionalism	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Turnover	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Timeliness of:				
a. Project	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Deliverables	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Project completed within budget	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Cooperation with:				
a. Your Firm	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Subcontractor(s)/Subconsultant(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Regulatory Agency(ies)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Additional Comments: (provide on additional sheet if needed)

BA has been terrific to work with. Very Professional, great results.

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CONSULTING SERVICES FOR PORT EVERGLADES - BERMELO AJAMIL & PARTNERS

**E-3** FLORIDA

EVALUATION CRITERIA / PAST PERFORMANCE

VENDOR REFERENCE VERIFICATION FORMS | CONTINUED

**BROWARD COUNTY FLORIDA**

**Vendor Reference Verification Form**

Broward County Solicitation No. and Title:  
**Bid #PNC2119212P1 - Consulting Services for Port Everglades**

Reference for: **Bermello Ajami & Partners, Inc.**

Organization/Firm Name providing reference:  
**Tampa Port Authority**

Contact Name: **Ram Kancharia** Title: **Vice President** Reference date: **08/23/2019**

Contact Email: **rkancharia@tampaport.com** Contact Phone: **813-905-5162**

Name of Referenced Project: **Port Tampa Bay Consulting Services**

Contract No. \_\_\_\_\_ Date Services Provided: **02/01/2012 to 08/27/2019** Project Amount: \_\_\_\_\_

Vendor's role in Project:  Prime Vendor  Subconsultant/Subcontractor

Would you use this vendor again?  Yes  No If No, please specify in Additional Comments (below).

Description of services provided by Vendor:  
**Planning - Community Outreach - Architecture - Engineering - Transportation - Landscape Architecture**

Please rate your experience with the referenced Vendor:	Needs Improvement	Satisfactory	Excellent	Not Applicable
1. Vendor's Quality of Service				
a. Responsive	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Accuracy	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Deliverables	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Vendor's Organization:				
a. Staff expertise	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Professionalism	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Turnover	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Timeliness of:				
a. Project	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Deliverables	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Project completed within budget	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Cooperation with:				
a. Your Firm	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Subcontractor(s)/Subconsultant(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Regulatory Agency(ies)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Additional Comments: (provide on additional sheet if needed)

C: 813-313-7527  
*Ram Kancharia*  
VP - Port Tampa Bay

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EVALUATION CRITERIA / PAST PERFORMANCE

**UNPARALLELED EXPERTISE IN CRUISE, CARGO AND PORT OPERATIONS**

BA's world-renowned expertise in cruise, cargo, and port operations allows it to stand as one of only a handful of firms responsible for shaping the way waterfronts and ports operate. Although BA is the worldwide leader in cruise terminal development, it understands port facilities from all facets of operations including cargo, cruise lines, labor, navigation, security, Customs & Immigration, environmental and community interests. Below is a representative list of BA's non-terminal projects completed for port authorities including: master plans, building renovations, roads modifications, security checkpoint improvements, civil facilities, environmental studies, marine structure additions, parking garages and emergency repair projects, among others.

- Bermuda Ports Dockyard Facility Master Plan*
- Bermuda Ports Master Plan*
- Boston Cruise Port Facilities Capacity and Flow Study*
- Charlottetown Seaport Cruise Strategy*
- Ensenada Cruise Port Village Waterfront Master Plan*
- Galata Port Redevelopment*
- Georgetown Port-of-Call Waterfront Development Master Plan*
- Grenada Waterfront Master Plan Port Development*
- Homeport Malaga Master Plan*
- Mumbai Port Waterfront Development*
- New York City Brooklyn Piers 7-12 Master Plan*
- New York City Port Ground Transportation Center*
- New York City Port Hudson River Park*
- New York City Port Pier 88*
- New York City Port Pier 90*
- Paardenbaai City Center Waterfront Master Plan*
- Port Canaveral Cruise Terminal 3 Parking Garage Design Criteria Package*
- Port Canaveral Ground Transportation Study of Cruise Terminals 5 & 6*
- Port Canaveral Port Master Plan*
- Port Canaveral Strategic Master Plan*
- Port Everglades 26th Street Modifications*
- Port Everglades 40-Year Recertification of 2 Terminals and 6 Buildings*
- Port Everglades Administration Office Building Modifications*
- Port Everglades Berth 24*
- Port Everglades Berths 14 & 15*
- Port Everglades Berths 18 & 29 Bulkhead Analysis & Evaluation*
- Port Everglades Crane Maintenance*
- Port Everglades Emergency Repairs for Pier 33*
- Port Everglades Fire Storage Due Diligence*
- Port Everglades FR&L Vault Adjacent to Terminal 18*
- Port Everglades Master/Vision Plan Update 2006*
- Port Everglades Master/Vision Plan Update 2009*
- Port Everglades Master/Vision Plan Update 2018*
- Port Everglades Midport Parking Study*
- Port Everglades Modification to McIntosh Roadway Security Checkpoint*
- Port Everglades Nitrification Control Plan*
- Port Everglades Northport Parking Garage*
- Port Everglades POU and LCR Monitoring Plan*
- Port Everglades Security Data Relocation Study*
- Port Everglades Security Improvements*
- Port Everglades Slip 2 Extension*
- Port Everglades Signage Load Study for Existing Light Poles*
- Port Everglades Terminal 26 Office Space*
- Port Everglades Terminal 18 Gangway Repairs Oversight*
- Port Everglades Terminal 29 Ground Transportation Area Conceptual Plan*
- Port Everglades Terminal 4 Parking Site Planning*
- Port Everglades Turning Notch Cost Estimate Review*
- Port Everglades Turning Notch Poor Review*
- Port Everglades Water Main Evaluation - Lead and Cooper Exceedance In Watermain Corrosion Control Study*
- Port of Algeciras Ferry Terminal*
- Port of Antigua Cruise Market Assessment*
- Port of Bar Harbor Cruise Ship Pier Development*
- Port of Bar Harbor Cruise Tourism Destination Management Plan*
- Port of Bar Harbor Ferry Terminal Study*
- Port of Baton Rouge River Terminal*
- Port of Calica Wastewater Treatment Plant*
- Port of Cartagena Commercial Center*
- Port of Cartagena Pedestrian Improvements*
- Port of Cartagena Retail Village*
- Port of Ceuta Cruise Market Study & Facilities Master Plan*
- Port of Cork Peer Review of Existing Berth and Proposed New Berth*
- Port of Corpus Christi Marine Cargo Terminal Master Plan*
- Port of Curacao Cruise Market Assessment*
- Port of Curacao Port Master Plan*
- Port of Dominica Market Study & Master Plan*
- Port of Dublin Cruise Tourism & Master Plan*
- Port of Dubrovnik Passenger Port Development Master Plan*
- Port of Ensenada Cruise Feasibility Study*
- Port of Galveston Strategic Master Plan*
- Port of Gibraltar Cruise Facilities Master Plan*
- Port of Halifax Cruise Market Sensing*
- Port of Halifax Mooring Study*
- Port of Hamburg Cruise Facilities Planning*
- Port of Hamilton Cargo Facility Assessment and Master Plan*
- Port of Juneau Long Range Waterfront Development Plan*
- Port of Kalundborg Cruise Market Assessment*
- Port of Ketchikan Cruise and Waterfront Master Plan*
- Port of Kusadasi Cruise Expansion Master Plan*
- Port of Long Branch Pier and Ferry Terminal*
- Port of Los Angeles Cruise Market Study*
- Port of Mindelo Cruise Tourism Market Assessment and Destination Development*
- Port of Montego Bay Cruise Planning*
- Port of Santa Marta Cruise Port Feasibility Study & Master Plan*
- Port of Panama Isla Flamenco Master Plan*
- Port of Panama Redevelopment of Pier 6*
- Port of Nice Market Analysis and City/Port Interface Plan*
- Port of Penang Malaysia Cruise Facilities Master Plan*
- Port of Puerto Rico Carnival Cruise Lines Piers 6 & 7*
- Port of Roatan Master Plan*
- Port of San Diego Cruise Market Study*
- Port of San Francisco Northeast Wharf Plaza*
- Port of San Francisco Piers 30 & 32*
- Port of San Juan Cruise Market Assessment*
- Port of San Juan Pier 3 Expansion*
- Port of San Juan Pier 4 Expansion*
- Port of Seattle Pier 65 Façade Refresh Study*
- Port of Seattle Pier 90*
- Port of Singapore Update of Cruise Projections*
- Port of Skagen Cruise Market Assessment and Business Plan*
- Port of St. Kitts Cruise Market Assessment*
- Port of St. Petersburg Ferry Port Development on Vasilevskiy Island*
- Port of St. Petersburg Pier Master Plan*
- Port of Valencia Cruise Port Master Plan*
- Port of Visby Cruise Market Assessment*
- Port Tampa Bay Channelside TIGER Grant Application*
- Port Tampa Bay Channelside Master Plan*
- Port Tampa Bay FDOT Pre-Feasibility Study*
- Port Zante Master Plan*
- PortMiami 1997 Master Plan Update*
- PortMiami 2035 Master Plan Update*
- PortMiami 2035 Master Plan Update*
- PortMiami Federal Inspection Facility*
- PortMiami Hurricane Damage Assessment*
- PortMiami Terminal 12 Parking Garage*
- PortMiami Terminal A Parking Garage*
- PortMiami Terminal B Parking Garage*
- PortMiami Terminal J Parking Garage*
- PortMiami TIGER Grant Application 2016*
- PortMiami Traffic Operations Studies*
- Ports of Aruba Master Plan*
- Puerta Maya Retail Center*
- Quebec City Cruise Business Development Study*
- St. George's Water Taxi and Cruise Port Development Plan*
- The Hague Cruise Port Market Feasibility Study and Conceptual Cruise Facilities Program*
- The International Center at the Port of Corpus Christi*
- Virgin Island Port Authority Marine Financial Report & Forecasting Model*

EVALUATION CRITERIA / PAST PERFORMANCE

**WORLDWIDE LEADERS IN CRUISE AND WATERFRONT DEVELOPMENT**

- Port Canaveral Cruise Terminals 8 & 10 Feasibility Study, Cape Canaveral, FL
- Port Canaveral Cruise Terminal 3, Cape Canaveral, FL
- Port Canaveral Cruise Facilities Master Plan and Concept Plan for New Terminal, Cape Canaveral, FL
- Port Canaveral Ground Transportation Study of Cruise Terminal 5 and 6, Cape Canaveral, FL
- PortMiami Terminal B for NCL, Miami, FL
- PortMiami 1997 Master Plan Update, Miami, FL
- PortMiami Terminal A for RCCL, Miami, FL
- PortMiami Cruise Terminals D and E Improvements, Miami, FL
- PortMiami 2035 Master Plan, Miami, FL
- PortMiami Terminal 10 Master Planning, Miami, FL
- PortMiami Terminal 8 and 9 Master Planning, Miami, FL
- PortMiami Terminals 1 - 5 Master Planning, Miami, FL
- PortMiami Terminals 1 and 2, Miami, FL
- PortMiami Terminals 6 and 7 Master Planning, Miami, FL
- Baltimore Cruise Terminal Study, Baltimore, Maryland
- Baton Rouge River Terminal, Baton Rouge, Louisiana
- Boston Cruiseport Facilities Capacity and Flow Study, Boston, Massachusetts
- PortMiami Terminal 12, Miami, FL
- Calica Ferry & Cruise Terminal, Quintana Roo, Mexico
- Durban Cruise Terminal, Province of KwaZulu-Natal, South Africa
- Mauritius Cruise Terminal, Port Louis, Mauritius
- Kai Tak Cruise Terminal, Kai Tak, Hong Kong
- Mumbai Port Cruise Terminal and Waterfront Development, Mumbai, India
- New York City Cruise Terminal Brooklyn Pier 12, Brooklyn, New York
- New York City Cruise Terminal Pier 88, New York, New York
- New York City Cruise Terminal Pier 90, New York, New York
- New York City Cruise Terminals, Brooklyn/Manhattan, New York
- New York City Cruise Terminals Ground Transportation Center & Hudson River Park, New York, New York
- Norfolk Cruise Terminal Master Plan, Norfolk, Virginia
- Passenger Terminal 4 Rehabilitation and Expansion, San Juan, Puerto Rico
- Port Everglades Cruise Terminals 2, 19, 21, and 26, Ft. Lauderdale, FL
- Port Everglades Terminal 18, Ft. Lauderdale, FL
- Port Everglades Terminal 19, Ft. Lauderdale, FL
- Port Everglades Terminal 2, Ft. Lauderdale, FL
- Port Everglades Terminal 21, Ft. Lauderdale, FL
- Port Everglades Terminal 25 Expansion, Ft. Lauderdale, FL
- Port Everglades Terminal 26, Ft. Lauderdale, FL
- Port Everglades Terminal 4 Improvements and Slip 2 Extension, Ft. Lauderdale, FL
- Port of New Orleans Poland Avenue Cruise Terminal, New Orleans, Louisiana
- Port of San Francisco Cruise Ship Terminal 27 and Northeast Wharf Plaza, San Francisco, California
- Port Tampa Bay Channelside Master Plan, Tampa, FL
- PortMiami Terminal F Expansion Design Criteria Package, Miami, FL
- PortMiami Terminal F Expansion MSC Contract, Miami, FL
- St. John Cruise Terminal Mixed-Use Facilities Development, St. John, New Brunswick, Canada
- Seaport Istanbul Marina Concept and Cruise Terminal Master Plan, Istanbul, Turkey
- Sydney Overseas Passenger Terminal Master Plan, Sydney, Australia
- Port Tampa Bay Passenger Terminal 6, Tampa, FL
- Valongo Cruise Terminal, Santos, Sao Paulo, Brazil
- Port of New Orleans - VikingRiver Cruises Terminal, New Orleans, Louisiana
- Broadway Cruise Terminal & B-Street Pier Cruise Terminal Planning, San Diego, California
- Port of San Diego B-Street Pier Cruise Terminal, San Diego, California
- Singapore Marina Bay Cruise Centre, Marina Bay, Singapore
- PortMiami Terminal H Garage, Miami, FL

**BA HAS COMPLETED OVER 250 PORT-RELATED PROJECTS**



Broward County Board of  
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**E-3**  
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EVALUATION CRITERIA / PAST PERFORMANCE

**PORT EVERGLADES CONTINUING GENERAL CONSULTING  
SERVICES CONTRACT / FT. LAUDERDALE, FL**



**CLIENT:** Broward County / Port Everglades

**COST:** \$120M+

**SCOPE:** Architecture, Planning, Engineering,  
Construction Management, Program Management,  
Feasibility Studies, Permitting

**COMPLETION:** Ongoing Since 1996

**RELEVANCY:** Continuing Consulting Services at  
Port Everglades



CONSULTING SERVICES FOR PORT EVERGLADES / BERMELO AJAMIL & PARTNERS

Broward County Board of  
County Commissioners

PNC2119212P1  
**E-3**  
abc

EVALUATION CRITERIA / PAST PERFORMANCE

**PORT EVERGLADES CRUISE TERMINAL 25 EXPANSION /  
FT. LAUDERDALE, FL**

**BA**



**CLIENT:** Broward County / Port Everglades

**COST:** \$100M

**SCOPE:** Architect of Record, Landscape Architecture, Structural Engineering, Construction Administration, LEED Administration, Master Planning

**COMPLETION:** 2018

**RELEVANCY:** Terminal Renovation, Expansion, Design & Redevelopment

Broward County Board of  
County Commissioners

PNC2119212P1  
**E-3** tab c

EVALUATION CRITERIA / PAST PERFORMANCE

**PORT EVERGLADES TERMINAL 2 REDEVELOPMENT FOR  
CARNIVAL CORPORATION / FT. LAUDERDALE, FL**



**CLIENT:** Broward County / Port Everglades

**COST:** \$6.2M

**SCOPE:** Architecture, Master Planning,  
Market Studies, Interior Design

**COMPLETION:** 2017

**RELEVANCY:** Terminal Renovation, Design &  
Redevelopment

Broward County Board of  
County Commissioners

PNC2119212P1  
**E-3** abc

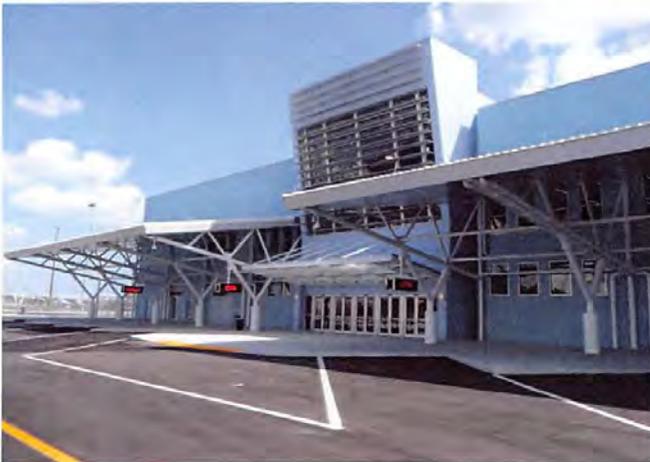
EVALUATION CRITERIA / PAST PERFORMANCE

**PORT EVERGLADES CRUISE TERMINAL 18 EXPANSION /**  
FT. LAUDERDALE, FL

**BA**



2010 "Port of Year" by Seatrade Insider Cruise Awards



**CLIENT:** Broward County / Port Everglades

**COST:** \$70M

**SCOPE:** Planning, Architecture, Civil Engineering,  
Project Management, Construction Management

**COMPLETION:** 2010

**RELEVANCY:** Terminal Renovation, Design &  
Redevelopment with New CBP

Broward County Board of  
County Commissioners

PNC2119212P1  
**E-3** abc

EVALUATION CRITERIA / PAST PERFORMANCE

**PORT EVERGLADES CRUISE TERMINAL 4 REDEVELOPMENT &  
SLIP 2 EXTENSION / FT. LAUDERDALE, FL**



**CLIENT:** Broward County / Port Everglades

**COST:** \$60M

**SCOPE:** Architecture, Master Planning,  
Engineering, Construction Management

**COMPLETION:** 2014

**RELEVANCY:** Terminal Renovation, Design &  
Redevelopment with New CBP and Slip Extension

Broward County Board of  
County Commissioners

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**E-3**  
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EVALUATION CRITERIA / PAST PERFORMANCE

**PORT EVERGLADES CRUISE TERMINALS 2, 19, 21 AND 26  
IMPROVEMENTS / FT. LAUDERDALE, FL**



**CLIENT:** Broward County / Port Everglades

**COST:** \$42.5M

**SCOPE:** Architecture, Engineering, Master Planning, Project Management, Construction Management

**COMPLETION:** 2012

**RELEVANCY:** Terminal Renovation, Expansion, Design & Redevelopment



CONSULTING SERVICES FOR PORT EVERGLADES / BERMELO AJAMIL & PARTNERS

Broward County Board of  
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PNC2119212P1  
**E-3**  
abc

EVALUATION CRITERIA / PAST PERFORMANCE

**PORT EVERGLADES BERTHS 18/29 BULKHEAD ANALYSIS & EVALUATION / FT. LAUDERDALE, FL**

**BA**



**CLIENT:** Broward County / Port Everglades

**COST:** \$70M

**SCOPE:** Marine Engineering, Transportation Systems Design, Structural Engineering, Civil Engineering, Construction Management

**COMPLETION:** 2009

**RELEVANCY:** Bulkhead Evaluation

Broward County Board of  
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PNC2119212P1  
**E-3**  
abc

EVALUATION CRITERIA / PAST PERFORMANCE

**PORTMIAMI GENERAL CONSULTANTS CONTINUING SERVICES  
CONTRACT / MIAMI, FL**



**CLIENT:** Miami-Dade County / PortMiami

**COST:** VARIES

**SCOPE:** Architecture, Planning, Construction Management, Project Management, Master Planning

**COMPLETION:** Ongoing Since Early 1990s

**RELEVANCY:** Continuing Consulting Services at PortMiami



CONSULTING SERVICES FOR PORT EVERGLADES / BERMELO AJAMIL & PARTNERS

Broward County Board of  
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EVALUATION CRITERIA / PAST PERFORMANCE

**PORT CANAVERAL CRUISE TERMINAL 3 IMPROVEMENTS /**  
CAPE CANAVERAL, FL



**CLIENT:** Canaveral Port Authority

**COST:** \$100.3M

**SCOPE:** Architecture, Landscape Architecture,  
Construction Management

**COMPLETION:** 2020 (EST.)

**RELEVANCY:** Terminal Renovation, Expansion,  
Design & Redevelopment

Broward County Board of  
County Commissioners

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EVALUATION CRITERIA / PAST PERFORMANCE

**PORT OF SEATTLE PIER 66 CRUISE TERMINAL & MULTI-USE  
FACILITY / SEATTLE, WA**

**BA**



**CLIENT:** Port of Seattle

**COST:** \$27M

**SCOPE:** Architecture, Cruise Facility Design,  
Master Planning, Project Management

**COMPLETION:** 2017

**RELEVANCY:** Terminal Renovation, Expansion,  
Design & Redevelopment

Broward County Board of  
County Commissioners

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EVALUATION CRITERIA / PAST PERFORMANCE

**PORTMIAMI CRUISE TERMINAL B FOR NORWEGIAN CRUISE  
LINE / MIAMI, FL**



**CLIENT:** Norwegian Cruise Line / PortMiami

**COST:** \$185M

**SCOPE:** Architect of Record, Civil Engineering,  
Marine Engineering, Construction Administration,  
LEED Administration, Master Planning

**COMPLETION:** 2020 (EST.)

**RELEVANCY:** New Terminal Design

Broward County Board of  
County Commissioners

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EVALUATION CRITERIA / PAST PERFORMANCE

**PORT CANAVERAL CONTINUING PLANNING, DESIGN AND  
ENGINEERING SERVICES CONTRACT / CAPE CANAVERAL, FL**



**CLIENT:** Canaveral Port Authority

**SCOPE:** Architecture, Master Planning,  
Civil Engineering, Marine Engineering

**COST:** VARIES

**COMPLETION:** Ongoing Since 2012

**RELEVANCY:** Continuing Consulting Services at  
Port Canaveral

Broward County Board of  
County Commissioners

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EVALUATION CRITERIA / PAST PERFORMANCE

**NEW YORK CITY PIERS 88 & 90 CRUISE TERMINALS /  
NEW YORK, NY**

**BA**



**CLIENT:** NYCEDC

**COST:** \$135M

**SCOPE:** Master Planning, Architecture,  
Engineering, Construction Management,  
Project Management

**COMPLETION:** 2007

**RELEVANCY:** Major Modifications/Enhancements  
to the City's International Cruise Terminals

Broward County Board of  
County Commissioners

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EVALUATION CRITERIA / PAST PERFORMANCE

**PORTMIAMI CRUISE TERMINAL D EXPANSION AND  
IMPROVEMENTS / MIAMI, FL**

**BA**



**CLIENT:** PortMiami / Miami-Dade County

**COST:** \$8.07M

**SCOPE:** Architecture, Interior Design, Civil Engineering, LEED Administration, Construction Administration

**COMPLETION:** 2012

**RELEVANCY:** New Building with Renovation, Expansion, Design & Redevelopment

Broward County Board of  
County Commissioners

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EVALUATION CRITERIA / PAST PERFORMANCE

**CAPE LIBERTY CRUISE TERMINAL FOR ROYAL CARIBBEAN  
CRUISES / BAYONNE, NJ**



**CLIENT:** Royal Caribbean Cruises Ltd.

**COST:** CONFIDENTIAL

**SCOPE:** Architecture, Construction  
Administration, Construction Documents

**COMPLETION:** 2015

**RELEVANCY:** Warehouse Conversion to Cruise  
Terminal, Renovation, Design & Redevelopment

Broward County Board of  
County Commissioners

PNC2119212P1  
**E-3**  
abc

EVALUATION CRITERIA / PAST PERFORMANCE

**PORT OF SAN FRANCISCO CRUISE SHIP TERMINAL 27 &  
NORTHEAST WHARF PLAZA / SAN FRANCISCO, CA**



*ASCE Region 9 (CA) Outstanding Airports & Ports Project of the Year Award - 2015  
ASCE San Francisco Outstanding Airports & Ports Project of the Year Award - 2015  
AIA Miami Merit Award of Excellence - 2015*



**CLIENT:** Port of San Francisco

**COST:** \$72.85M

**SCOPE:** Programming, Master Planning, Cruise Terminal Architect, Construction Administration, LEED Administration

**COMPLETION:** 2014

**RELEVANCY:** Design for a New Cruise Terminal and Wharf Plaza with New CBP

Broward County Board of  
County Commissioners

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EVALUATION CRITERIA / PAST PERFORMANCE

**PORT OF SAN DIEGO NEW BROADWAY CRUISE TERMINAL /  
SAN DIEGO, CA**

**BA**



**CLIENT:** San Diego Unified Port District

**COST:** \$27.5M

**SCOPE:** Architecture, Master Planning,  
Construction Administration, LEED  
Administration

**COMPLETION:** 2010

**RELEVANCY:** New Cruise Terminal and Associated  
Pier Improvements

Broward County Board of  
County Commissioners

PNC2119212P1  
**E-3** abc

EVALUATION CRITERIA / PAST PERFORMANCE

**PORTMIAMI CRUISE TERMINAL A FOR ROYAL CARIBBEAN  
CRUISES / MIAMI, FL**



**CLIENT:** Royal Caribbean Cruises Ltd. / PortMiami

**COST:** \$250M

**SCOPE:** Architect of Record, Civil Engineering,  
Marine Engineering, Construction Administration,  
LEED Administration, Master Planning

**COMPLETION:** 2018

**RELEVANCY:** Terminal Renovation, Expansion,  
Design & Redevelopment

Broward County Board of  
County Commissioners

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EVALUATION CRITERIA / PAST PERFORMANCE

**LONG BEACH CRUISE TERMINAL REDEVELOPMENT /**  
LONG BEACH, CA



**CLIENT:** Carnival Cruise Line

**COST:** \$1.2M (Fees)

**SCOPE:** Architecture, Cruise Facilities Master Planning, Civil Engineering, Construction Management

**COMPLETION:** 2017

**RELEVANCY:** Terminal Renovations, Design & Redevelopment

Broward County Board of  
County Commissioners

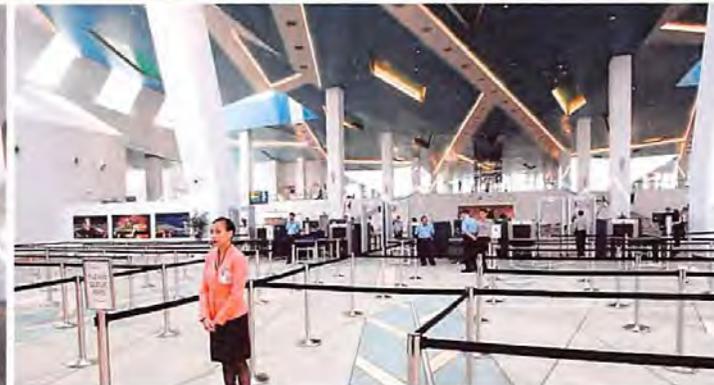
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EVALUATION CRITERIA / PAST PERFORMANCE

**SINGAPORE MARINA BAY CRUISE CENTRE / MARINA BAY,  
SINGAPORE**



*Merit Award for "Innovative, Efficient and Productive Use of Steel Structures in the Built Environment," Structural Steel Excellence Award, Singapore Structural Steel Society, 2012*



**CLIENT:** Singapore Tourism Board

**COST:** \$75M

**SCOPE:** Architecture, Programming, Master Planning, Construction Documents, Construction Administration

**COMPLETION:** 2012

**RELEVANCY:** Design for Twin Cruise Terminal