

PALM BEACH COUNTY
BOARD OF COUNTY COMMISSIONERS

AGENDA ITEM SUMMARY

Meeting Date: February 11, 2025 Consent [X] Regular []
Public Hearing []

Department: Water Utilities Department

I. EXECUTIVE BRIEF

Motion and Title: Staff recommends motion to approve: Consultant Services Authorization (CSA) No. 6 to the Consulting/Professional Services General Utility, Architectural and Value Engineering Services (Contract) with Chen Moore and Associates, Inc., (Consultant) for professional engineering services for New Force Main Pipelines along Lyons Road (Project) for a not to exceed amount of \$282,492.68.

Summary: On December 5, 2023, the Board of County Commissioners (BCC) approved the Palm Beach County Water Utilities Department (PBCWUD) Contract (R2023-1786) with Consultant. CSA No. 6 provides for professional engineering services for the design, permitting and bidding support associated with the construction of redundant 2-miles of force main along Lyons Road between Yamato Road and Lake Worth Drainage District L-38 Canal.

This Contract was presented to the Goal Setting Committee (Committee) on April 5, 2023 and the Committee established an Affirmative Procurement Initiative (API) of a minimum mandatory 20% Small Business Enterprise (SBE) subcontracting goal and up to 15 evaluation preference points based upon the relative level of dollar participation by African American (AA) owned firms. Consultant committed to 31% SBE participation, which includes 23% Minority Business Enterprise (MBE) participation, 23% MBE (AA). The SBE proposed participation for this CSA No. 6 is 38.58%, which includes 12.21% MBE participation, 12.21% MBE (AA). To date, the overall participation achieved on this Contract is 25.41% SBE participation, which includes 25.41% MBE participation, 18.61% MBE (AA) Consultant is a Palm Beach County based company. The Project is included in the PBCWUD FY 2025 budget. (PBCWUD Project No. 24-028) District 5 (MWJ)

Background and Justification: Currently the existing 36-inch force main on State Road (SR) 7 is the only pipeline that carries the wastewater from booster pump station 9N to the wastewater treatment facility. The pipeline is pre-stressed concrete cylinder built in 2001. This pipeline was ranked in the highest priority group in the recent countywide force main evaluation project because of its size, pipe material, past issues, and consequence of failure. A redundant pipeline is desired along Lyons Road to reroute the flow in the event of a failure or required maintenance on the existing 36-inch force main. There is another PBCWUD project no. 23-053 in design to install reclaimed pipeline in the same corridor. By synchronizing these two (2) projects together, a cost saving in design and construction can be expected.

Attachments:

- 1. Two (2) Originals of CSA No. 6
- 2. Location Map
- 3. Ebix Compliance Summary Report

Recommended By: Ali Boyal 1/13/25
Department Director Date

Approved By: [Signature] 1/22/25
Assistant County Administrator Date

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2025	2026	2027	2028	2029			
Capital Expenditures	<u>\$282,493</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>			
Operating Costs	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>			
External Revenues	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>			
Program Income (County)	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>			
In-Kind Match County	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>			
NET FISCAL IMPACT	<u>\$282,493</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>			
# ADDITIONAL FTE POSITIONS (Cumulative)	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>			
Budget Account No.:	Fund	4011	Dept	721	Unit	W019	Object	6547

Is Item Included in Current Budget? Yes X No

Is this item using Federal Funds? Yes No X

Is this item using State Funds? Yes No X

Reporting Category N/A

B. Recommended Sources of Funds/Summary of Fiscal Impact:

One (1) time expenditure from user fees, connection fees and balance brought forward.

C. Department Fiscal Review: Joony Soeman

III. REVIEW COMMENTS

A. OFMB Fiscal and/or Contract Development and Control Comments:

Lee Muth 1/16/25
 OFMB QA 1/16
1/16

David Mack 1/17/25
 Contract Development and Control
26 1.17.25

B. Legal Sufficiency:

 1/21/25
 Assistant County Attorney

C. Other Department Review:

 Department Director

This summary is not to be used as a basis for payment.

CONSULTANT SERVICES AUTHORIZATION NO. 6
Palm Beach County Water Utilities Department
Contract for Consulting/Professional Services
General Utility, Architectural and Value Engineering Services
Resolution No. R2023-1786 Contract Dated 12/05/2023

Project Title: Lyons Road Force Main between Yamato Road and L-38

PBCWUD Project No.: 24-028

Consultant: Chen Moore and Associates, Inc.

Address: 500 Australian Avenue South, Suite 850, West Palm Beach, FL 33401

Budget Line Item No.: 4011-721-W019-6547

District No.: 5

This Consultant Services Authorization (CSA) provides for: professional engineering services for the design, permitting and bidding support associated with the construction of approximately two (2) miles of a new force main. The project limits begin at the intersection of Yamato Road and Lyons Road. The proposed pipeline extends north along Lyons Road and terminates at the Hidden Valley (L-38) Canal. The purpose of the project is to provide redundancy for the discharge of Booster Station 9N in the event of a failure of the existing 36-inch force main on State Road (SR) 7.

Due to the overlap in project areas, the force main design will be incorporated into Palm Beach County Water Utilities Department (PBCWUD) project number 23-053, South County Reclaimed Water Transmission Pipeline Phase 2. The bid item numbers will remain separate from Project Number 23-053 for accounting and funding purposes.

(See ATTACHMENT A for detailed scope of services)

The Contract provides for 31.00% SBE participation, which includes 23.00% MBE (B) participation. This Consultant Services Authorization includes 38.58% overall participation, which includes 32.39% MBE participation and 12.21% MBE (B). The cumulative SBE participation, including this Consultant Services Authorization is 25.41%, which includes 25.41% MBE participation and 18.61% MBE (B).

1. Services completed by the Consultant to date:

See ATTACHMENT B.

2. Consultant shall begin work upon receipt of Notice to Proceed correspondence.

3. The compensation to be paid to the Consultant for providing the requested services shall be:

A. Computation of time charges plus expenses, not to exceed \$282,492.68

B. Fixed price of \$0.00

C. Total \$282,492.68

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4. This Authorization may be terminated, in whole or in part, by the County with or without cause in accordance with the Contract terms. In the event of termination not the fault of the Consultant, the Consultant shall be compensated for all services performed to termination date, together with reimbursable expenses (if applicable) then in accordance with the Contract terms. Consultant agrees to waive any and all claims for lost profits or anticipated future profits in the event of a termination with or without cause under this Contract.
5. SBE participation is included in **ATTACHMENT C** under this Authorization. The attached Schedule 1 defines the SBE applied to this Authorization and Schedule 2 establishes the SBE contribution from each Sub-Consultant (Letter of Intent).
6. This Authorization does not amend, change, or modify the Contract dated 12/05/2023, which remains in full force and effect.
7. All Attachments to this Authorization are incorporated herein and made a part of this Consultant Services Authorization.

CONSULTANT SERVICES AUTHORIZATION NO. 6
Palm Beach County Water Utilities Department
Contract for Consulting/Professional Services
General Utility, Architectural and Value Engineering Services
Resolution No. R2023-1786 Contract Dated 12/05/2023

Project Title: Lyons Road Force Main between Yamato Road and L-38

PBCWUD Project No.: 24-028

IN WITNESS WHEREOF, this Authorization is accepted, subject to the terms, conditions and obligations of the aforementioned Contract.

PALM BEACH COUNTY, A POLITICAL SUBDIVISION OF THE STATE OF FLORIDA

Joseph Abruzzo, Clerk of the Circuit Court
& Comptroller, Palm Beach County

Palm Beach County, Board
of County Commissioners

ATTEST:

Signed: _____

Signed: _____

Maria Marino, Mayor

DZ

Typed Name: _____

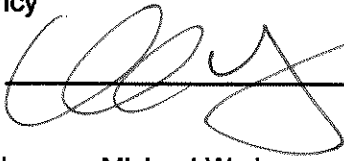
Deputy Clerk

(Date)

Approved as to Form and Legal
Sufficiency

Chen Moore and Associates, Inc.
(Consultant)

Signed: _____



Suzanne Dombrowski, P.E., ENV SP
(Print Name)

Typed Name: Michael W. Jones
County Attorney

(Signature)

Principal Engineer
(Title)

1/10/2025
(Date)

STATE OF FLORIDA
COUNTY OF Palm Beach

The foregoing instrument was acknowledged before me by means of physical presence or online notarization,
this 10 day of January, 2025, by Suzanne Dombrowski who is personally
known to me or has produced _____ as identification.



(Signature of Notary Public - State of Florida)

Natalie Titus
(Print, Type, or Stamp Commissioned Name of Notary Public)

500 S. Australian Avenue – Suite 850
West Palm Beach, Florida 33401
Office: (561) 746-6900



September 25, 2023

SENT VIA E-MAIL (jhouse@pbcwater.com)

Palm Beach County Water Utilities Department
8100 Forest Hill Boulevard
West Palm Beach, FL 33416
ATTN: Mrs. Jie "Jane" House, P.E., LEED AP
Director of Engineering

**RE: Contract for Consulting/Professional Services
General Utility, Architectural and Value Engineering Services
PBCWUD Project 23-029
Request for Signature Authority**

Dear Mrs. House:

With this letter I am allowing Suzanne Dombrowski, Principal Engineer, to have signature authority on behalf of Chen Moore and Associates, Inc. for letters, forms, contracts and other related documents under Contract WUD-23-029, Contract for Consulting/Professional Services General Utility, Architectural and Value Engineering Services.

Should you have any questions, please do not hesitate to contact me at (561) 746-6900, ext. 1002 or pmoore@chenmoore.com.

Respectfully submitted,



CHEN MOORE AND ASSOCIATES
Peter Moore, P.E., F.ASCE, ENV SP, LEED AP, President

Cc: Suzanne Dombrowski, P.E., ENV SP, Principal Engineer, Chen Moore and Associates, Inc.

chenmoore.com

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Palm Beach County Water Utilities Department
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Resolution No. R2023-1786 Contract Dated 12/05/2023

LIST OF ATTACHMENTS

ATTACHMENT A	Scope of Services
ATTACHMENT B	Summary and Status of Consultant Services Authorizations
ATTACHMENT C	OEBO Schedules 1 and 2
ATTACHMENT D	Project Schedule
ATTACHMENT E	Budget Summary
ATTACHMENT F	Summary of SBE-M/WBE Business Tracking
ATTACHMENT G	Location Map

Revised 06-12-24

ATTACHMENT A

SCOPE OF SERVICES

PBCWUD Project No.: 24-028

Project Title: Lyons Road Force Main between Yamato Road and L-38

Chen Moore and Associates, Inc. (CONSULTANT) shall perform professional engineering services for the design, permitting and bidding support associated with the construction of approximately two (2) miles of a new force main. The project limits begin at the intersection of Yamato Road and Lyons Road. The proposed pipeline extends north along Lyons Road and terminates at the Hidden Valley (L-38) Canal. The purpose of the project is to provide redundancy for the discharge of Booster Station 9N in the event of a failure of the existing 36-inch force main on State Road (SR) 7.

Due to the overlap in project areas, the force main design will be incorporated into Palm Beach County Water Utilities Department (PBCWUD) project number 23-053, South County Reclaimed Water Transmission Pipeline Phase 2. The bid item numbers will remain separate from Project Number 23-053 for accounting and funding purposes.

SCOPE OF SERVICES

The CONSULTANT shall perform the engineering Scope of Services below as described.

Task 1. Project Management and Coordination

The purpose of this task is to sustain project activities required as part of the administrative and management elements of the project, such as project planning, invoicing activities, meetings, including review and coordination meetings, quality control activities, and other informal meetings.

1.1. Project Management and Coordination

1.1.1. Coordination and General Correspondence

The CONSULTANT shall maintain ongoing coordination with the PBCWUD Project Manager regarding project progress and each issue or concern as it arises. Coordination shall also include communication with PBCWUD staff regarding feedback from stakeholders and regulatory agencies and may involve written or telephonic communication.

1.2. Progress Meetings

It is expected that the project will be reviewed at the meetings conducted under project number 23-053. This task includes additional time for the CONSULTANT to discuss items relevant to the force main design.

Task 1 Deliverables:

Meeting minutes and regular project invoicing will be incorporated into Task 1 Deliverables under project 23-053.

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Task 2. Field Services

2.1 Records Review and Site Investigation

During the design phase, additional information may be needed for specific utilities to confirm the location, acquire vertical elevations, confirm tie in locations, navigate critical crossings etc. The CONSULTANT shall prepare exhibits identifying locations of intended soft digs prior to mobilization of field crews.

2.2 Subsurface Utility Engineering (SUE)

Zeman Consulting Group LLC (ZCG) will perform Underground Utility Locator Services. The services are described as Quality Level B (QL-B) designation of target utilities to determine locations for test holes for the project limits. ZCG will perform up to twenty (20) hard dig test holes using vacuum excavation methods. The exposed utilities will be located horizontally and vertically. Further, the exposed utilities will be described by type, size, material, and depth.

Keshavarz & Associates, Inc. (KAI) will provide additional information, if needed, for specific utilities to confirm location, acquire vertical elevations, confirm tie in locations, navigate critical crossings, etc. The collected field information and data sheets will be provided to the CONSULTANT. Collected field information will be included on the detailed design drawings with an identification symbol and call-out for each location in the plan view accompanied by a referenced table specifying measured depth, size and material.

2.3 Geotechnical Investigation

The SUBCONSULTANT shall commence the geotechnical investigation, which includes the efforts associated with Palm Beach County right-of-way permitting.

Soil Borings and Geotechnical Testing

The Pacifica Engineering Services, LLC (Pacifica) will perform geotechnical investigation to collect soil borings to determine the subsurface condition. Pacifica will provide underground utility clearance prior to the start of the geotechnical testing. Four (4) Standard Penetration Test (SPT) borings will be performed at locations near the force main to a depth of forty (40) feet below grade. Field borings will be located using a handheld Global Positioning System (GPS). In addition, soil borings and laboratory testing will be performed in order to determine the soil type and corrosivity.

2.4 Survey

2.4.1 Maintenance of Traffic Coordination - the CONSULTANT shall coordinate with KAI to indicate any existing facilities that require Maintenance of Traffic (MOT) efforts to perform surveying safely within the corridor. KAI is to determine the necessity of submitting for MOT Permits from Palm Beach County, MOT plans, Law Enforcement Officer assistance, Intersection closure work, center lane and single lane closure work. CONSULTANT shall assist the KAI by providing exhibits and a Keyhole Markup Language (KML) file for coordinating locations of facilities requiring surveying within or adjacent to the roadways and possible MOT efforts. The CONSULTANT will not prepare MOT Plans or perform any MOT Plan permitting.

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Task 2 Deliverables

SUE Report: Letter sized - Electronic Portable Document Format (PDF)
Geotechnical Report: Letter sized - Electronic PDF
Survey: 22" x 34" - Electronic PDF

Task 3. Preliminary Design

The objective of this task is to assist the CONSULTANT in the hydraulic evaluation to size a new force main (FM) along Lyons Road from Yamato Road to the Hidden Valley (L-38) Canal.

3.1 Hydraulic Analysis

The hydraulic analysis will be performed by C Solutions, Inc. (SUBCONSULTANT). The SUBCONSULTANT will use the existing hydraulic wastewater model of the east system to determine the size of a redundant FM along Lyons Road from Yamato Road to the existing 36-inch FM adjacent to the Hidden Valley (L-38) Canal. In addition, it is assumed the existing 16-inch FM along Yamato Road from Lyons to SR 7 will be used in the analysis. The redundant FM will be sized to handle the wastewater flow in case of a failure of the existing 36-inch FM north of booster station 9N.

For this hydraulic analysis the scenarios included in the existing East System Wastewater Hydraulic Model completed under the 2022 Integrated Utilities Master Plan updated during project number 19-065 Integrated Utility Master Plan - Collection and Distribution Systems (IUMP) will be utilized. It is assumed the additional wastewater improvements apart from the force main on Lyons Road from Yamato Road to the Hidden Valley Canal will not be considered or completed under this scope of services. The hydraulic analysis will include the following:

- Review of background data, Geographic Information Systems (GIS) data, reports and other relevant information related to the existing wastewater system.
- Average daily flow scenarios for the current day and future design flow scenarios currently existing in the hydraulic model under extended period simulation
- Peak hour flow scenarios under steady state conditions for the current day and future design flow scenarios currently existing in the hydraulic model
- The recommended pipe size will be based on PBCWUD standards for pipeline velocities and pressures within the wastewater force main system.
- Recommendations will include tie-in location to the existing system.

3.2 30% Design Submittal

The CONSULTANT shall prepare or modify design drawings for the 30% Design Submittal including the following categories of plan sheets:

1. Summary of Quantities
2. Project Area Key Map
3. Proposed Conditions Overview Map
4. Proposed Conditions Plan Sheets (26 Sheets - 1 viewport of 1" = 20' Scale)
5. PBCWUD Standard Details (6 Sheets)

The CONSULTANT will modify the Index of Technical Specifications submitted under the project number 23-053 to outline the items pertaining to the force main. The 30% Design Submittal will also include a Class V Opinion of Probable Construction Cost (OPCC) prepared by the CONSULTANT with separate items for the force main construction. The CONSULTANT will conduct one (1) meeting with PBCWUD to discuss comments on the 30% Design Submittal.

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Task 3. Assumptions

- The SUBCONSULTANT assumes the existing model has been checked for quality assurance and quality control (QA/QC) and accepted as a final product by PBCWUD. No updates to the existing model (e.g., modification of demand data, changes to the existing network configuration) will be made as part of this Scope of Services.
- The SUBCONSULTANT assumes that no additional scenarios will be included under this scope of services besides the ones specifically stated in this scope of services.
- Hydraulic modeling will be performed in InfoWater Pro using ArcGIS Pro. All existing modeling and GIS information shall be provided in these formats.

Task 3 Deliverables:

- Hydraulic Model Native File
- Hydraulic Analysis Report
 - Plan Letter sized - Electronic PDF
- 30% Design Submittal
 - Plan Sheets: 22" x 34" Plans - Electronic PDF
 - Index of Technical Specifications: Letter sized - Electronic PDF
- Meeting Minutes: Letter sized - Electronic PDF

Task 4. 90% Design Submittal

Based on review comments from PBCWUD staff and any additional data, the CONSULTANT shall prepare design drawings for the 90% Design Submittal.

The 90% Design Submittal will also include documentation associated with the Front End specifications, Summary of Work, and Measurement and Payment for the Construction Documents, and an updated draft of all sections of the Technical Specifications. The design will include considerations for connection to the existing 36-inch force main, including pipe draining, bypassing and operations of the existing system. The 90% Design Submittal will also include a Class II Opinion of Probable Construction Cost (OPCC) prepared by the CONSULTANT to outline the cost for all pipeline facilities.

Comments on the 90% Design Submittal will be discussed with PBCWUD during the 90% review meeting for project 23-053. Therefore, a review meeting is not included in this task.

Task 4 Deliverables:

Efforts from Task 4 will be incorporated into Task 4 Deliverables under project number 23-053.

- Plan Sheets: 22" x 34" Plans - Electronic PDF, 11" x 17" Plans - Electronic PDF
- Technical Specifications: Letter Sized - Electronic PDF
- OPCC: Letter sized - Electronic PDF

Revised 06-12-24

Task 5. 100% Design Submittal

Based on review comments from PBCWUD staff, the CONSULTANT shall prepare design drawings for the 100% Design Submittal. The 100% Design Submittal will also include the full set of Construction Documents. The Construction Documents include a complete specifications package with Appendices, field service reports ready for bid, and a Class I OPCC. The OPCC will be prepared by the CONSULTANT to outline the cost for all pipeline facilities.

Task 5 Deliverables:

Efforts from Task 5 will be incorporated into Task 4 Deliverables under project number 23-053.

- Plan Sheets: 22" x 34" Plans - Electronic PDF, 11" x 17" Plans - Electronic PDF
- Technical Specifications: Letter Sized - Electronic PDF
- OPCC: Letter sized - Electronic PDF

Task 6. Permitting

6.1 Florida Department of Health - Palm Beach County (PBCHD) Permitting

Once all regulatory elements have been defined and the 90% plans have been prepared, then the necessary permit documentation will be prepared and submitted for agency review. Once the permit has been reviewed and comments from the regulatory agency have been provided, then the CONSULTANT shall attend one (1) coordination meeting to discuss the comments and provide verbal responses. Once all parties are in agreement with respect to final permit concerns, then the CONSULTANT shall prepare revised permit documentation and resubmit to the PBCHD.

6.2 Permitting for Roadway Impacts (Palm Beach County Land Development)

The CONSULTANT shall incorporate force main design into permit documentation submitted under project number 23-053. The force main design, restoration, and construction details will be included in this permit package. CONSULTANT will respond to questions from regulatory agency on the force main design.

6.3 Permitting with Lake Worth Drainage District (LWDD)

The CONSULTANT shall incorporate force main design into permit documentation submitted under project number 23-053. CONSULTANT will respond to questions from regulatory agency on the force main design.

Task 6 Deliverables:

The Task 6 Deliverables include the following: PBCHD permit documentation, meeting agenda and meeting summaries Palm Beach County Land Development permit documentation, meeting agenda and meeting summaries LWDD permit documentation, meeting agenda and meeting summaries.

Revised 06-12-24

Task 7. Bidding Support

Upon completion of the permitting phase, PBCWUD shall conduct the bidding process. The CONSULTANT shall provide bidding support services for the force main components of the project including:

- Review the advertisement for bid and provide comments, if necessary.
- Review and respond to requests for additional information. Draft addendum(s) to the bid documents, if necessary.
- Review and compile bid results and verify references and qualifications of the three (3) lowest bidder(s).
- Perform sensitivity analysis of individual line item prices between the responsive bidders and compare them with other recent pricing.
- Prepare and submit award of recommendation letter.

Task 7 Deliverables:

Draft Addendum Documentation
Conformed Documents

ASSUMPTIONS

1. For the 30%, 90% and 100% Design Submittals, the CONSULTANT will provide electronic files of the plans formatted to 22" by 34".
2. Design drawings shall be formatted to 22" by 34" or 11" x 17".
3. All review comments for each deliverable shall be coordinated by the PBCWUD Project Manager and conveyed to the CONSULTANT at one time.
4. All permitting fees will be provided by PBCWUD.
5. Construction phase support services (i.e., engineering services during construction) are not included but will be authorized, where required, as part of a separate authorization.
6. The targeting of subsurface utilities, although highly reliable, is expressly understood to represent an approximate location of the target facility as marked on the ground surface. The accuracy of this targeting is subject to certain factors beyond the CONSULTANT's control, such as limitations of available technology and field conditions that may include, but are not limited to, depth of utility, electrical conductivity of utility, site conditions and access.
7. The CONSULTANT shall satisfy all requirements from the latest edition of PBCWUD's Minimum Design and Construction Standards for Potable Water, Reclaimed Water and Wastewater Systems document.
8. The CONSULTANT shall provide all electronic files for all deliverables in native file format (for example: .docx, .xlsx, .pptx, .dwg, etc.) and in PDF file format.
9. It is assumed that the project limits on the north side will be south of the Hidden Valley Canal. Therefore, design of a crossing of the Hidden Valley Canal is not included.
10. Other canals that are crossed within the project limits are assumed to be at-grade or subaqueous, depending on regulatory requirements. Aerial crossings are not included.
11. Hydraulic analysis is limited to pipe velocities and pressure. Performance of existing lift stations is not included.

Revised 06-12-24

ATTACHMENT B

SUMMARY AND STATUS OF CONSULTANT SERVICES AUTHORIZATIONS

Auth No.	PBCWUD Project No.	Title	Status	Project Total Amount	SBE Total Amount	SBE Participation %	Approved	
							By	Date
1	20-045	Septic to Sewer Project at Okeeheelee Park, Lake Ida Park and Caloosa Park	Approved	\$473,271.87	\$169,509.12	35.81%	BCC	09/17/2024
2	19-051	Northlake Boulevard from East of Seminole Pratt Whitney Road to East of Hall Boulevard	Approved	\$58,736.49	\$0.00	0.00%	CRC	9/11/2024
2.1	19-051	Northlake Boulevard from East of Seminole Pratt Whitney Road to East of Hall Boulevard	Pending	\$22,613.76	\$0.00	0.00%	Pending	Pending
3	20-054	Forest Hill Boulevard and Military Trail Utility Relocation	Approved	\$33,393.90	\$0.00	0.00%	CRC	9/18/2024
4	24-025	County-Wide Hydraulic Modeling Evaluation and Training	Approved	\$97,543.68	\$0.00	0.00%	CRC	6/5/2024
5	24-015	Lead Service Line Inventory	Approved	\$82,835.60	\$0.00	0.00%	CRC	5/8/2024
5.1	24-015	Lead Service Line Inventory	Approved	\$67,935.60	\$0.00	0.00%	CRC	8/14/2024
6	24-028	Lyons Road Force Main between Yamato Road and L-38	Pending	\$282,492.68	\$108,991.52	38.58%	BCC	Pending

ATTACHMENT C

OEBO SCHEDULE 1

Office of Equal Business Opportunity Compliance Programs

OEBO SCHEDULE 1

SOLICITATION/PROJECT/BID NAME: Lyons Road Force Main between Yamato Road and L-38

SOLICITATION/PROJECT/BID NO.: 24-028

SOLICITATION OPENING/SUBMITTAL DATE: _____

COUNTY DEPARTMENT: Water Utilities Department

Section A PLEASE LIST THE DOLLAR AMOUNT OR PERCENTAGE OF WORK TO BE COMPLETED BY THE PRIME CONTRACTOR/CONSULTANT* ON THE PROJECT:

NAME OF PRIME RESPONDENT/BIDDER: Chen Moore and Associates, Inc.

ADDRESS: 500 Australian Avenue South, Suite 850, West Palm Beach, FL 33401

CONTACT PERSON: Suzanne Dombrowski, P.E., ENV SP

PHONE NO.: (561) 746-6900

E-MAIL: sdombrowski@chenmoore.com

PRIME'S DOLLAR AMOUNT OR PERCENTAGE OF WORK: \$173,501.16

*SMWBE Prime's must include their percentage or dollar amount in the Total Participation line under section B.

Non-SBE	MBE	WBE	SBE
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section B PLEASE LIST THE DOLLAR AMOUNT OR PERCENTAGE OF WORK TO BE COMPLETED BY ALL SUBCONTRACTORS/SUBCONSULTANTS ON THE PROJECT BELOW:

Subcontractor/Sub consultant Name	(Check all Applicable Categories)				DOLLAR AMOUNT OR PERCENTAGE OF WORK					
	Non-SBE	MBE Minority Business	WBE Women Business	SBE Small Business	Black	Hispanic	Women	Caucasian	Asian	Other
	1. C Solutions, Inc. 2890 W. State Road 84, Suite 105 Dania Beach, FL 33312	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	\$20,400.00				
2. Keshavarz & Associates, Inc. 711 North Dixie HWY., Suite 201 West Palm Beach, FL 33401	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					\$57,020.50	
3. Pacifica Engineering Services, LLC 601 N. Congress Avenue, Suite 303 Delray Beach, FL 33445	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	\$14,100.98					
4. Zeman Consulting Group 3970 RCA Blvd., Suite 7750 Palm Beach Gardens, FL 33410	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>				\$17,470.04		
5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
Total					\$34,500.98			\$17,470.04	\$57,020.50	

(Please use additional sheets if necessary)

Total Bid/Offer Price \$ 282,492.68

Total Certified S/M/WBE Participation \$ 108,991.52

I hereby certify that the above information is accurate to the best of my knowledge:


Name & Authorized Signature

Principal Engineer

Title

- Note:**
- The amount listed on this form for a Subcontractor/sub consultant must be supported by price or percentage listed on the properly executed Schedule 2 or attached signed proposal.
 - Only those firms certified by Palm Beach County at the time of solicitation due date are eligible to meet the established OEBO Affirmative Procurement Initiative (API). Please check the applicable box and list the dollar amount or percentage under the appropriate demographic category.
 - Modification of this form is not permitted and will be rejected upon submittal.
 - If a Mandatory API goal applies, failure to submit a properly executed Schedule 2 will result in a determination of non-responsiveness to the solicitation.



If you have experienced or witnessed a violation of the EBO Ordinance or would like to file a complaint, please scan the QR Code

ATTACHMENT C

OEBO SCHEDULE 2

Office of Equal Business Opportunity Compliance Programs

Revised 06-12-24

OEBO LETTER OF INTENT – SCHEDULE 2

A completed Schedule 2 is a binding document between the Prime Contractor/consultant and a Subcontractor/subconsultant (for any tier) and should be treated as such. All Subcontractors/subconsultants, including any tiered Subcontractors/subconsultants, must properly execute this document. If a Mandatory API goal applies, failure to submit a properly executed Schedule 2 will result in a determination of non-responsiveness to the solicitation. Each properly executed Schedule 2 must be submitted with the bid/proposal.

SOLICITATION/PROJECT NUMBER: 24-028

SOLICITATION/PROJECT NAME: Lyons Road Force Main between Yamato Road and L-38

Prime Contractor: Chen Moore and Associates, Inc. Subcontractor: C Solutions, Inc.

(Check box(s) that apply)

SBE WBE MBE M/WBE Non-S/M/WBE Date of Palm Beach County Certification (if applicable): 02/10/23 to 02/09/26

The undersigned affirms they are the following (select one from each column if applicable):

Column 1	Column 2	Column 3
<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	<input checked="" type="checkbox"/> African-American/Black <input type="checkbox"/> Asian American <input type="checkbox"/> Caucasian American <input type="checkbox"/> Hispanic American <input type="checkbox"/> Native American	<input type="checkbox"/> Supplier

S/M/WBE PARTICIPATION – S/M/WBE Primes must document all work to be performed by their own work force on this form. Specify in detail, the scope of work to be performed or items supplied with the dollar amount and/or percentage for each work item. When applicable, identify the line item(s) associated with the service/product being supplied. S/M/WBE credit will only be given for the areas in which the S/M/WBE is certified. A detailed quote/proposal may be attached to a properly executed Schedule 2 for additional information.

Line Item	Item Description	Unit Price	Quantity/ Units	Contingencies/ Allowances	Total Price/Percentage
1	Hydraulic Analysis	\$20,400.00	1	None	\$20,400.00

The undersigned Subcontractor/subconsultant is prepared to self-perform the above-described work in conjunction with the aforementioned project at the following total price or percentage: \$20,400.00

If the undersigned intends to subcontract any portion of this work to another Subcontractor/subconsultant, please list the business name and the amount below accompanied by a separate properly executed Schedule 2.

Name of 2nd/3rd tier Subcontractor/subconsultant _____ Price or Percentage: _____

Chen Moore and Associates, Inc.

Print Name of Prime

By: 
Authorized Signature

Suzanne Dombrowski, P.E., ENV SP

Print Name

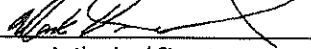
Principal Engineer

Title

Date: 01/08/2025

C Solutions, Inc.

Print Name of Subcontractor/subconsultant

By: 
Authorized Signature

Mark Drummond, P.E.

Print Name

President, Authorized Person

Title

Date: 01/08/2025



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OEBO LETTER OF INTENT – SCHEDULE 2

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SOLICITATION/PROJECT NUMBER: 24-028
 SOLICITATION/PROJECT NAME: Lyons Road Force Main Between Yamato Road and L-38

Prime Contractor: Chen Moore and Associates, Inc. Subcontractor: Keshavarz & Associates, Inc.
 (Check box(s) that apply)

SBE WBE MBE M/WBE Non-S/M/WBE Date of Palm Beach County Certification (if applicable): 10/04/2022-10/03/2025

The undersigned affirms they are the following (select one from each column if applicable):

<u>Column 1</u>	<u>Column 2</u>	<u>Column 3</u>
<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	<input type="checkbox"/> African-American/Black <input checked="" type="checkbox"/> Asian American <input type="checkbox"/> Caucasian American	<input type="checkbox"/> Supplier
	<input type="checkbox"/> Hispanic American <input type="checkbox"/> Native American	

S/M/WBE PARTICIPATION – S/M/WBE Primes must document all work to be performed by their own work force on this form. Specify in detail, the scope of work to be performed or items supplied with the dollar amount and/or percentage for each work item. When applicable, identify the line item(s) associated with the service/product being supplied. S/M/WBE credit will only be given for the areas in which the S/M/WBE is certified. A detailed quote/proposal may be attached to a properly executed Schedule 2 for additional information.

Line Item	Item Description	Unit Price	Quantity/ Units	Contingencies/ Allowances	Total Price/Percentage
1	Engineering	\$ 47,040.00	1	None	\$ 47,040.00
2	Surveying	\$ 8,607.00	1	None	\$ 8,607.00
3	Reimbursable Expenses	\$ 1,373.50	1	None	\$ 1,373.50

The undersigned Subcontractor/subconsultant is prepared to self-perform the above-described work in conjunction with the aforementioned project at the following total price or percentage: \$ 57,020.50

If the undersigned intends to subcontract any portion of this work to another Subcontractor/subconsultant, please list the business name and the amount below accompanied by a separate properly executed Schedule 2.

N/A Price or Percentage: N/A
 Name of 2nd/3rd tier Subcontractor/subconsultant

Chen Moore and Associates, Inc.
 Print Name of Prime
 By: [Signature]
 Authorized Signature
Suzanne Dombrowski, P.E., ENV SP
 Print Name
Principal Engineer
 Title
 Date: 10/31/2024

Keshavarz & Associates, Inc.
 Print Name of Subcontractor/subconsultant
 By: [Signature]
 Authorized Signature
Amir J. Keshavarz, P.E.
 Print Name
Managing Director
 Title
 Date: 10/31/2024



If you have experienced or witnessed a violation of the EBO Ordinance or would like to file a complaint, please scan the QR Code

OEBO LETTER OF INTENT – SCHEDULE 2

A completed Schedule 2 is a binding document between the Prime Contractor/consultant and a Subcontractor/subconsultant (for any tier) and should be treated as such. All Subcontractors/subconsultants, including any tiered Subcontractors/subconsultants, must properly execute this document. If a Mandatory API goal applies, failure to submit a properly executed Schedule 2 will result in a determination of non-responsiveness to the solicitation. Each properly executed Schedule 2 must be submitted with the bid/proposal.

SOLICITATION/PROJECT NUMBER: 24-028

SOLICITATION/PROJECT NAME: Lyons Road Force Main between Yamato Road and L-38

Prime Contractor: Chen Moore and Associates, Inc. Subcontractor: Pacifica Engineering Services, LLC

(Check box(s) that apply)

SBE WBE MBE M/WBE Non-S/M/WBE Date of Palm Beach County Certification (if applicable): 10/25/2024 to 10/24/2027

The undersigned affirms they are the following (select one from each column if applicable):

<u>Column 1</u>	<u>Column 2</u>	<u>Column 3</u>
<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	<input checked="" type="checkbox"/> African-American/Black <input type="checkbox"/> Asian American <input type="checkbox"/> Hispanic American <input type="checkbox"/> Native American	<input type="checkbox"/> Caucasian American <input type="checkbox"/> Supplier

S/M/WBE PARTICIPATION – S/M/WBE Primes must document all work to be performed by their own work force on this form. Specify in detail, the scope of work to be performed or items supplied with the dollar amount and/or percentage for each work item. When applicable, identify the line item(s) associated with the service/product being supplied. S/M/WBE credit will only be given for the areas in which the S/M/WBE is certified. A detailed quote/proposal may be attached to a properly executed Schedule 2 for additional information.

Line Item	Item Description	Unit Price	Quantity/ Units	Contingencies/ Allowances	Total Price/Percentage
1	Geotechnical Investigation	\$14,100.98	1	None	\$14,100.98

The undersigned Subcontractor/subconsultant is prepared to self-perform the above-described work in conjunction with the aforementioned project at the following total price or percentage: \$14,100.98

If the undersigned intends to subcontract any portion of this work to another Subcontractor/subconsultant, please list the business name and the amount below accompanied by a separate properly executed Schedule 2.

N/A Price or Percentage: N/A

Name of 2nd/3rd tier Subcontractor/subconsultant

Chen Moore and Associates, Inc.

Print Name of Prime

By: [Signature]
Authorized Signature

Suzanne Dombrowski, P.E., ENV SP

Print Name

Principal Engineer

Title

Date: 01/09/2025

Pacifica Engineering Services, LLC

Print Name of Subcontractor/subconsultant

By: [Signature]
Authorized Signature

Wesley C Foster, P.E.

Print Name

President

Title

Date: January 9, 2025



If you have experienced or witnessed a violation of the EBO Ordinance or would like to file a complaint, please scan the QR Code

OEBO LETTER OF INTENT – SCHEDULE 2

A completed Schedule 2 is a binding document between the Prime Contractor/consultant and a Subcontractor/subconsultant (for any tier) and should be treated as such. All Subcontractors/subconsultants, including any tiered Subcontractors/subconsultants, must properly execute this document. If a Mandatory API goal applies, failure to submit a properly executed Schedule 2 will result in a determination of non-responsiveness to the solicitation. Each properly executed Schedule 2 must be submitted with the bid/proposal.

SOLICITATION/PROJECT NUMBER: 24-028

SOLICITATION/PROJECT NAME: Lyons Road Force Main between Yamato Road and L-38

Prime Contractor: Chen Moore and Associates, Inc. Subcontractor: Zeman Consulting Group LLC

(Check box(s) that apply)

SBE WBE MBE M/WBE Non-S/M/WBE Date of Palm Beach County Certification (if applicable): 9/16/2024 - 9/15/2027

The undersigned affirms they are the following (select one from each column if applicable):

Column 1	Column 2	Column 3
<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	<input type="checkbox"/> African-American/Black <input type="checkbox"/> Asian American <input checked="" type="checkbox"/> Caucasian American	<input type="checkbox"/> Supplier
	<input type="checkbox"/> Hispanic American <input type="checkbox"/> Native American	

S/M/WBE PARTICIPATION – S/M/WBE Primes must document all work to be performed by their own work force on this form. Specify in detail, the scope of work to be performed or items supplied with the dollar amount and/or percentage for each work item. When applicable, identify the line item(s) associated with the service/product being supplied. S/M/WBE credit will only be given for the areas in which the S/M/WBE is certified. A detailed quote/proposal may be attached to a properly executed Schedule 2 for additional information.

Line Item	Item Description	Unit Price	Quantity/ Units	Contingencies/ Allowances	Total Price/Percentage
1	Utility Locator Services, Underground	\$17,470.04	1	None	\$17,470.04

The undersigned Subcontractor/subconsultant is prepared to self-perform the above-described work in conjunction with the aforementioned project at the following total price or percentage: \$17,470.04

If the undersigned intends to subcontract any portion of this work to another Subcontractor/subconsultant, please list the business name and the amount below accompanied by a separate properly executed Schedule 2.

N/A Price or Percentage: N/A

Name of 2nd/3rd tier Subcontractor/subconsultant

Chen Moore and Associates, Inc.

Print Name of Prime

By: 
Authorized Signature

Suzanne Dombrowski, P.E., ENV SP
Print Name

Principal Engineer

Title

Date: 01/08/2025

Zeman Consulting Group LLC

Print Name of Subcontractor/subconsultant

By: 
Authorized Signature

Michael Ross
Print Name

Vice President, MBR

Title

Date: 1/08/2025



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ATTACHMENT D

PROJECT SCHEDULE

The duration for this work will be as follows (starting from CONSULTANT'S receipt of Notice to Proceed).

Task Number	Task Description	Days
Task 1	Project Management and Coordination	444
Task 2	Field Services	150
Task 3	Preliminary Design	130
Task 4	90% Design Submittal	190
Task 5	100% Design Submittal	354
Task 6	Permitting	310
Task 7	Bidding Support	444

Revised 06-12-24

This project is related to Project 23-053, and therefore a comparison of task dates between the two projects is listed below. This schedule assumes a work directive issued on 10/1/2024 to commence work on Project 24-028.

Task Number	Task Description	24-028 (Days)	24-028 (Date)	23-053 (Date)
Task 1	Project Management	444	12/19/25	12/19/25
Task 2	Field Services	150	02/28/25	12/19/25
Task 3	Preliminary Design	130	02/08/25	11/30/24
Task 4	90% Design Submittal	190	04/09/25	04/09/25
Task 5	100% Design Submittal - Lyons Rd	354	09/20/25	9/20/2025
Task 5	Permitting - 23-053	-	-	08/07/25
Task 6	Permitting - 24-028	310	08/07/25	-
Task 6	Bidding Support - 23-053	-	-	12/19/25
Task 7	Bidding Support - 24-028	444	12/19/25	-

Revised 06-12-24

**ATTACHMENT E
BUDGET SUMMARY**

**Palm Beach County Water Utilities Department
Contract For Consulting/Professional Services
Resolution No.
Consultant Services Authorization No.:
Contract:
Sub Consultant:
Project Title:
PBCWUD Project No.:**

General Utility, Architectural and Value Engineering Services
R2023-1786 Contract Dated 12/05/2023
6
Chen Moore and Associates, Inc.
C Solutions, Inc., Keshavarz & Associates, Inc., Pacifica Engineering Services, LLC, Zeman Consulting Group LLC
Lyons Road Force Main between Yamato Road and L-38
24-028

Task Number	Task Description	Labor Classification and Hourly Rate											Total Labor	Sub Consultant Services
		Principal	Principal Engineer	Senior Engineer	Senior Constr. Specialist	Project Engineer	Associate Engineer	Senior Designer	Engineer	Senior Technician	Administrative Assistant	Intern		
	Labor Raw Costs	\$ 100.00	\$ 100.00	\$ 66.74	\$ 46.00	\$ 50.44	\$ 40.89	\$ 49.70	\$ 37.19	\$ 34.99	\$ 37.10	\$ 23.00		
1	Project Management and Coordination													
1.1	Project Management and Coordination													
1.1.1	Coordination and General Correspondence		4	24										\$ - \$ -
1.2	Progress Meetings		4	8		24								\$ 6,005.28 \$ 10,116.00
	Subtotal Task 1	0	8	32	0	24	0	0	0	0	0	0		\$ 12,438.72 \$ 13,866.00
2	Field Services													
2.1	Records Review and Site Investigation													\$ - \$ -
	Subtotal Task 2.1	0	0	0	0	0	0	0	0	0	0	0		\$ - \$ -
2.2	Subsurface Utility Engineering (SUE)													\$ - \$ 17,470.04
2.2.1	Level A - Potholes for Verification of Utility Locations		2	4										\$ 1,400.88 \$ 7,200.00
2.2.2	Level C - Design Tickets and Records Research													\$ - \$ -
	Subtotal Task 2.2	0	2	4	0	0	0	0	0	0	0	0		\$ 1,400.88 \$ 24,670.04
2.3	Geotechnical Investigation													\$ - \$ -
2.3.1	Soil Borings and Geotechnical Testing		2	4										\$ 1,400.88 \$ 9,700.98
	Subtotal Task 2.3	0	2	4	0	0	0	0	0	0	0	0		\$ 1,400.88 \$ 9,700.98
2.4	Survey													
2.4.1	Maintenance of Traffic Coordination		2	2										\$ 1,000.44 \$ 1,407.00
	Subtotal Task 2.4	0	2	2	0	0	0	0	0	0	0	0		\$ 1,000.44 \$ 1,407.00
2	Sub total Task 2	0	6	10	0	0	0	0	0	0	0	0		\$ 3,802.20 \$ 35,778.02
3	Preliminary Design													
3.1	Hydraulic Analysis		4	8										\$ 2,801.76 \$ 20,400.00
3.2	30% Design Submittal		8	32		60		12		100				\$ 30,172.44 \$ 11,202.00
	Subtotal Task 3	0	12	40	0	60	0	12	0	100	0	0		\$ 32,974.20 \$ 31,602.00
4	90% Design Submittal													
4.1	Proposed Conditions Plan Sheets (24 Sheets with 1 viewport of 1" = 20' Scale)													\$ - \$ 7,746.00
4.1.2	Proposed Conditions Plans		12	60		120		40		140				\$ 54,431.40
4.1.3	Internal Quality Assurance/Quality Control (QA/QC)		8											\$ 2,400.00 \$ 10,854.00
	Subtotal Task 4	0	20	60	0	120	0	40	0	140	0	0		\$ 56,831.40 \$ 18,600.00
5	100% Design Submittal													
	Subtotal Task 5	0	8	32	0	80	0	24	0	120	0	0		\$ 37,087.44 \$ 3,372.00

**ATTACHMENT E
BUDGET SUMMARY**

Palm Beach County Water Utilities Department
Contract For Consulting/Professional Services
Resolution No.
Consultant Services Authorization No.:
Consultant:
Sub Consultant:
Project Title:
PBCWUD Project No.:

General Utility, Architectural and Value Engineering Services
R2023-1786 Contract Dated 12/05/2023
6
Chen Moore and Associates, Inc.
C Solutions, Inc., Keshavarz & Associates, Inc., Pacifica Engineering Services, LLC, Zeman Consulting Group LLC
Lyons Road Force Main between Yamato Road and L-38
24-028

Task Number	Task Description	Labor Classification and Hourly Rate											Total Labor	Sub Consultant Services
		Principal	Principal Engineer	Senior Engineer	Senior Constr. Specialist	Project Engineer	Associate Engineer	Senior Designer	Engineer	Senior Technician	Administrative Assistant	Intern		
	Labor Raw Costs	\$ 100.00	\$ 100.00	\$ 66.74	\$ 46.00	\$ 50.44	\$ 40.89	\$ 49.70	\$ 37.19	\$ 34.99	\$ 37.10	\$ 23.00		
6	Permitting													
6.1	Florida Department of Health - Palm Beach County (PBCHD) Permitting		2	8		24								\$ 5,833.44
6.2	Permitting for Roadway Impacts (Palm Beach County Land Development)		4	16		40								\$ 10,456.32
6.3	Permitting with Lake Worth Drainage District (LWDD)		4	8		32								\$ 7,644.00
	Subtotal Task 6	0	10	32	0	96	0	0	0	0	0	0		\$ 23,933.76
7	Bidding Support		4	8		24								\$ 6,433.44
	Subtotal Task 7	0	4	8	0	24	0	0	0	0	0	0		\$ 6,433.44
	Labor Subtotal Hours	0	68	214	0	404	0	76	0	360	0	0		1,122
	Labor Raw Costs	\$ 100.00	\$ 100.00	\$ 66.74	\$ 46.00	\$ 50.44	\$ 40.89	\$ 49.70	\$ 37.19	\$ 34.99	\$ 37.10	\$ 23.00		
	Labor Multiplier	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00		
	Labor Subtotal	\$ -	\$ 20,400.00	\$ 42,847.08	\$ -	\$ 61,133.28	\$ -	\$ 11,331.60	\$ -	\$ 37,789.20	\$ -	\$ -		
	Labor Total	\$ 173,501.16												
	Sub Consultant Labor Total	\$ 103,218.02												
	Sub Consultant Multiplier	1.00												
	Sub Consultant Reimbursables	\$ 5,773.50												
	Sub Consultant Total	\$ 108,991.52												
	Project Total	\$ 282,492.68												

**EXHIBIT A-1
BUDGET SUMMARY**

Palm Beach County Water Utilities Department
Contract for Consulting/Professional Services General Utility, Architectural and Value Engineering Services
Resolution No. R2023-1786 Contract Dated December 5, 2023
Consultant Services Authorization: No. 6
Consultant: C. Solutions, Inc. (Subconsultant to Chen Moore & Associates, Inc.)
Project Title: Lyons Road Force Main between Yamato Road and I-38
WUD Project No.: WUD 24-028

BUDGET SUMMARY FOR FIRM							LABOR TOTALS			
Task Number	Task Description	Project Director	Project Manager	Engineer II	Designer	Sr. Clerical	Total Hours	Total Labor	Total Expenses	Total Labor and Expenses
	Raw Rate RANGE	\$90 - \$105	\$50 - \$75	\$36 - \$42	\$20 - \$35	\$26 - \$36				
	Raw Rate >	\$ 100.00	\$ 55.00	\$ 32.00	\$ 25.00	\$ 31.00				
	Multiplier >	3.0	3.0	3.0	3.0	3.0				
	Bill Rate >	\$ 300.00	\$ 165.00	\$ 96.00	\$ 75.00	\$ 93.00				
TASK 3	Hydraulic Analysis	13	100				113	\$ 20,400.00	\$ -	\$ 20,400.00
	Task 1 - Subtotal	13	100	0	0	0	113	\$ 20,400.00	\$ -	\$ 20,400.00
	Labor Subtotal Hours	13	100	0	0	0	113			
	Labor Raw Costs	\$ 1,300.00	\$ 5,500.00	\$ -	\$ -	\$ -		\$ 6,800.00		
	Labor Subtotal (Bill Rate * Labor Subtotal Hours)	\$ 3,900.00	\$ 16,500.00	\$ -	\$ -	\$ -		\$ 20,400.00		
	PROJECT TOTAL						113	\$ 20,400.00	\$ -	\$ 20,400.00



**ATTACHMENT E
BUDGET SUMMARY**

Palm Beach County Water Utilities Department
 Contract for Consulting/Professional Services General Utility, Architectural and Value Engineering Services
 Resolution No. R2023-1786, Contract Dated 12/05/2023
 Consultant: Keshavarz & Associates, Inc.
 Project: The LYONS ROAD FORCE MAIN BETWEEN YAMATO ROAD AND L-38
 PBCUD Project No.: 24-028

Task Number	Task Description	Hour Rate >	Multiplier >	Bill Rate >	Senior Project Manager	Senior Project Engineer / Supervisor	Project Engineer / Surveyor	Senior Designer	Designer / CAD Technician	Intern	Senior Construction Representative	Construction Representative	Survey Crew	Utility / Permit Coordinator	Project / Contract Administrator	Clerical	Total Hours	Total Labor
TASK 1																		
Project Management and Coordination																		
Subtask 1.1 - Project Meetings and Coordination		6	12	10														
1.1 - Coordination and General Correspondence		6	12	10														
Subtask 1.2 - Progress Meetings		4	10															
1.2 - Progress Meetings		4	10															
Task 1 - Subtotal		10	22	10														\$ 13,866.00
TASK 2																		
Field Services																		
Subtask 2.1 - Records Review & Site Investigation		0	0	0														
2.1 - Records Review & Site Investigation		0	0	0														
Subtask 2.2 - Surface Utility Engineering (SUE)		0	0	0														
2.2 - Level A - Pot-holes for Verification of Utility Locations		6	2	6														
2.2: Level A - Pot-holes for Verification of Utility Locations		6	2	6														
2.2: Level B - Scan and Sweep / Targeting		0	0	0														
2.2: Level B - Scan and Sweep / Targeting		0	0	0														
2.2: Level C - Design Tickets and Records Research		0	0	0														
2.2: Level C - Design Tickets and Records Research		0	0	0														
Subtask 2.3 - Geotechnical Investigation		0	0	0														
2.3 - Geotechnical Investigation		0	0	0														
Subtask 2.4 - Survey		0	0	0														
2.4: Route Survey		0	0	0														
2.4: Topographic Survey		0	0	0														
2.4: Topographic Survey		0	0	0														
2.4: Maintenance of Traffic Coordination		1	1	1														
2.4: Maintenance of Traffic Coordination		1	1	1														
Task 2 - Subtotal		7	2	7														\$ 8,607.00
SUB TOTALS																		

**ATTACHMENT E
BUDGET SUMMARY**

Palm Beach County Water Utilities Department				
Contract for Consulting/Professional Services <i>General Utility, Architectural and Value Engineering Services</i>				
Resolution No. <u>R2023-1786</u> Contract Dated <u>12/05/2023</u>				
Consultant Services Authorization No.: <u>6.0</u>				
Consultant: <u>Keshavarz & Associates, Inc.</u>				
Project Title: <u>LYONS ROAD FORCE MAIN BETWEEN YAMATO ROAD AND L-38</u>				
PBCWUD Project No.: <u>24-028</u>				
Keshavarz and Associates Reimburables		Projected Quantity	Unit Cost	Project Cost
<i>Mileage (Up to 30 trips to the project site)</i>		2050	\$0.67	\$1,373.50
PROJECT TOTAL				\$1,373.50

PACIFICA ENGINEERING SERVICES, LLC

COST BREAKDOWN

DESCRIPTION	UNIT	# OF UNITS	UNIT RATE	TOTAL
I. FIELD EXPLORATIONS				
Mobilization of Drill Equipment (50-mile travel)	each	1.0	\$400.00	\$400.00
Engineering Technician (Site Reconnaissance, Boring Layout and Underground Utility Clearance) (Raw Rate: \$21.67*3)	hour	4.0	\$65.01	\$260.04
Standard Penetration Tests - Truck Rig (0' - 50')	feet	160.0	\$16.00	\$2,560.00
Grout Bore Hole (0 to 50 Feet)	feet	160.0	\$6.00	\$960.00
Casing (0 to 50 Feet)	feet	152.0	\$10.00	\$1,520.00
II. SOIL & AGGREGATE TESTING				
Organic Content Test	each	3.0	\$55.00	\$165.00
Natural Sample Moisture Content	each	3.0	\$20.00	\$60.00
Grain size determination: Full grain size (8 sieves)	each	3.0	\$78.00	\$234.00
Grain size determination: Wash through (#200)	each	3.0	\$60.00	\$180.00
DOT Corrosivity - (pH, sulfate, chlorides & conductivity)	each	2.0	\$205.00	\$410.00
III. ENGINEERING SERVICES (MULTIPLIER: 3)				
Principal Engineer, P.E. (Raw Rate: \$66.67*3)	hour	2.0	\$200.01	\$400.02
Senior Geotechnical Engineer (Raw Rate: \$60.00*3)	hour	10.0	\$180.00	\$1,800.00
Drafter / CADD (Raw Rate: \$31.33*3)	hour	8.0	\$93.99	\$751.92
IV. REIMBERSABLE				
Maintenance of Traffic (MOT) including MOT Plan and Permitting	day	1.0	\$2,500.00	\$2,500.00
Ground Penetrating Radar (GPR)	each	1.0	\$1,200.00	\$1,200.00
Permit Fees	each	1.0	\$700.00	\$700.00
ESTIMATED GEOTECHNICAL BASIC FEE FOR THE PROJECT				\$14,100.98

**ATTACHMENT E
BUDGET SUMMARY**

Palm Beach County Water Utilities Department
Contract For Consulting/Professional Services
Resolution No.
Consultant Services Authorization No.:
Consultant:
Sub Consultant:
Project Title:
PBCWUD Project No.:

General Utility, Architectural and Value Engineering Services
R2023-1786 Contract Dated 12/05/2023
6
Chen Moore and Associates, Inc.
Zeman Consulting Group LLC
Lyons Road Force Main between Yamato Road and L-38
24-028

Task Number	Task Description	Labor Classification and Hourly Rate											Total Labor
		Senior Professional Surveyor and Mapper (\$/hr.)	Professional Surveyor and Mapper (\$/hr.)	Senior Survey Technician (\$/hr.)	Survey/CADD Technician (\$/hr.)	2-person Survey Crew (\$/hr.)	3-person Survey Crew (\$/hr.)	2-person SUE Crew (\$/hr.)	Utility Location Manager (\$/hr.)	GPS Survey Crew (\$/hr.)	3D Laser Scan Crew (\$/hr.)	Administrative Support (\$/hr.)	
	Labor Raw Costs	\$ 64.90	\$ 48.08	\$ 36.00	\$ 26.00	\$ 59.50	\$ 80.50	\$ 68.00	\$ 32.45	\$ 74.50	\$ 84.50	\$ 33.00	
2.2	Subsurface Utility Engineering (SUE)												
2.2.1	Level A - Potholes for Verification of Utility Locations												
2.2.1.1	Utility Research \ Dig Tickets			2									\$ 210.96
2.2.1.2	Utility Designating\Survey							30					\$ 5,977.20
2.2.1.3	Prepare Test Hole Reports	2							20				\$ 2,281.88
	Subtotal Task 2.2.1	2	0	2	0	0	0	30	20	0	0	0	\$ 8,470.04
	Labor Subtotal Hours	2	0	2	0	0	0	30	20	0	0	0	54
	Labor Raw Costs	\$ 64.90	\$ 48.08	\$ 36.00	\$ 26.00	\$ 59.50	\$ 80.50	\$ 68.00	\$ 32.45	\$ 74.50	\$ 84.50	\$ 33.00	
	Labor Multiplier	2.93	2.93	2.93	2.93	2.93	2.93	2.93	2.93	2.93	2.93	2.93	
	Labor Subtotal	\$ 380.31	\$ -	\$ 210.96	\$ -	\$ -	\$ -	\$ 5,977.20	\$ 1,901.57	\$ -	\$ -	\$ -	
	Labor Total	\$ 8,470.04											
	Unit Costs	\$ 450.00	\$ 400.00										
	Vacuum Excavations Soft Dig (Per Hole)		0										
	Vacuum Excavations Hard Dig (Per Hole)	20											
	Vacuum Excavations Quantity Subtotal	20	0										
	Vacuum Excavations Subtotal	\$ 9,000.00	\$ -										
	Vacuum Excavations Total	\$ 9,000.00											
	Zeman Project Total	\$ 17,470.04											

Note:
 Vacuum Excavation Soft/Hard Dig: Five (5) holes minimum. The cost includes all labor, equipment and material. Vacuum excavation will be utilized to expose the utility for the survey crew to obtain an accurate horizontal and vertical location of the subsurface utility. For "hard dig" in pavement or asphalt, the cost includes patching of the hole. The unit cost does not include associated survey support, designation, permitting or reports. No maximum depths per hole.

Exhibit A
Chen Moore & Associates, Inc.
Scope of Services – CSA No. 6
Palm Beach County Water Utilities Department
Lyons Road Force Main between Yamato Road and L-38

I. BACKGROUND

This Consultant Services Authorization (CSA) encompasses providing services for Palm Beach County Water Utilities Department (WUD) related to the Water Treatment Plant No. 2 (WTP 2) Expansion and Facility Improvements.

Chen Moore and Associates, Inc. (CONSULTANT) shall perform professional engineering services for the design, permitting and bidding support associated with the construction of approximately two (2) miles of a new force main. The project limits begin at the intersection of Yamato Road and Lyons Road. The proposed pipeline extends north along Lyons Road and terminates at the Hidden Valley Canal. The purpose of the project is to provide redundancy for the discharge of Booster Station 9N in the event of a failure of the existing 36-inch force main on State Road (SR) 7. C Solutions (SUBCONSULTANT) will assist the CONSULTANT with the scope of services as specified below.

II. SCOPE OF SERVICES

The SUBCONSULTANT will assist the CONSULTANT in the hydraulic evaluation to size a new force main (FM) along Lyons Rd from Hidden Valley canal south to Yamato Road.

Task 3.0 – Hydraulic Analysis

The SUBCONSULTANT will use the existing hydraulic wastewater model of the east system to determine the size of a redundant force main (FM) along Lyons Road from Yamato Road to the existing 36-inch FM adjacent to the Hidden Valley Canal. In addition, it is assumed that the existing 16-inch FM along Yamato Road from Lyons to SR 7 will be used in the analysis. The redundant FM will be sized to handle the wastewater flow in case of a failure of the existing 36-inch FM north of booster station 9N. For this hydraulic analysis the scenarios included in the existing East System Wastewater Hydraulic Model completed under the 2022 Integrated Utilities Master Plan updated during project number 19-065 Integrated Utility Master Plan – Collection and Distribution Systems (IUMP) will be utilized. It is assumed that additional wastewater improvements will not be considered or completed under this scope of services. The hydraulic analysis will include:

- Review of background data, Geographic Information Systems (GIS) data, reports and other relevant information related to the existing wastewater system.
- Average daily flow scenarios for the current day and future design flow scenarios currently existing in the hydraulic model under extended period simulation
- Peak hour flow scenarios under steady state conditions for the current day and future design flow scenarios currently existing in the hydraulic model
- The recommended pipe size will be based on PBCWUD standards for pipeline velocities and pressures within the wastewater force main system.
- Recommendations will include tie-in location to the existing system.

SUBCONSULTANT will prepare a technical memorandum to document the modeling methodology and results. If requested the SUBCONSULTANT shall meet with the client to review the results and obtain feedback.

III. ASSUMPTIONS

- SUBCONSULTANT will rely upon the accuracy of the data and information supplied by WUD or CONSULTANT without field confirmation.
- SUBCONSULTANT assumes the existing model has been checked for quality assurance and quality control (QA/QC) and accepted as a final product by WUD. No updates to the existing model (e.g., modification of demand data, changes to the existing network configuration) will be made as part of this Scope of Services.
- SUBCONSULTANT assumes that no additional scenarios will be included under this scope of services besides the ones specifically stated in this scope of services.
- The existing East System Wastewater Hydraulic Model completed under the 2022 Integrated Utilities Master Plan updated during project number 19-065 Integrated Utility Master Plan – Collection and Distribution Systems (IUMP) will be provided to the SUBCONSULTANT at or prior to NTP along with all background data, Geographic Information Systems (GIS) data, reports and other relevant information related to the existing wastewater system to be utilized in this hydraulic analysis.
- Hydraulic modeling will be performed in InfoWater Pro using ArcGIS Pro. All existing modeling and GIS information shall be provided in these formats.

IV. TIME OF COMPLETION

The Notice to Proceed (NTP) will be provided by the CONSULTANT and defines the official commencement of the SUBCONSULTANT's contract for this task authorization. It is assumed that all data required for the services provided herein will be received by SUBCONSULTANT at or prior to NTP. The services defined herein will be completed within 90 days from NTP. The determined size of the FM will be provided to the CONSULTANT within 60 days from NTP.

V. PROPOSED COMPENSATION

The SUBCONSULTANT shall perform the services defined in this scope of work for the not to exceed fee as shown below. The budget summary is provided in Exhibit A-1 (attached).

Task Description	Amount
Task 3.0 – Hydraulic Analysis	\$20,400
ODC's	\$ -
TOTAL	\$ 20,400



Chen Moore and Associates (CLIENT)
500 S Australian Avenue, Suite 850
Fort Lauderdale, FL 33309

Revised October 28th, 2024

Project No. 24-1484

Attention: Ms. Suzanne Dombrowski, PE, ENV SP

Reference: Lyons Road Force Main Between Yamato Road and L-38, WUD 24-028, Palm Beach County, Florida

Dear Ms. Dombrowski,

Based upon your request and with utmost pleasure, we are presenting you with this proposal for the requested services associated with the subject project.

This proposal is intended to outline Keshavarz & Associates, Inc's. (CONSULTANT'S) contributions as a team member towards the CLIENT'S overall scope in connection with the above referenced Palm Beach County Water Utilities Department (PBCWUD) project. CONSULTANT'S services throughout this project are performed under the auspices of the CLIENT.

CONSULTANT'S point of contact is CLIENT'S designated Project Manager or its designee. CONSULTANT'S direct communication with PBCWUD can occur upon notification and approval by the CLIENT except in the event of emergencies or force majeure. PBCWUD can directly communicate with CONSULTANT if deemed necessary, however, CONSULTANT will have the responsibility to inform the CLIENT of such communication, its subject matter and content within a reasonable period of time.

BACKGROUND

At the request of PBCWUD, the CLIENT assembled a team of consultants/sub-consultants to perform engineering services for the surveying, design, permitting and bidding support associated with the construction of approximately two (2) miles of new force main along Lyons Road beginning at the intersection of Yamato Road and terminating at the Lake Worth Drainage District (LWDD) Hidden Valley (L-38) Canal. The purpose of the project is to provide redundancy for the discharge of Booster Station 9N in the event of a failure of the existing 36-inch force main on State Road (SR) 7. Keshavarz & Associates was included on the team to provide Land Surveying and Civil Engineering services as outlined within the following scope of services. Due to the overlap in project areas, the force main design will be incorporated into the PBCWUD No. 23-053, South County Reclaimed Water Transmission Pipeline Phase 2 project.

SCOPE OF SERVICES

CONSULTANT shall perform the engineering Scope of Services as described herein. The proposed services will include the following tasks:

Task 1: Project Managements and Coordination

1.1. Project Coordination

1.1.1. Coordination and General Correspondence – The CONSULTANT shall maintain ongoing coordination with the CLIENT regarding project progress. Coordination will involve written (emails) and telephonic communication throughout the approximate 16 months of the project design schedule.



1.2. Progress Meetings

Upon approval, a kickoff meeting for the force main project is anticipated. The CONSULTANT shall attend this kickoff meeting with the CLIENT and PBCWUD. It is expected that the project will be reviewed at the meetings conducted under PBCWUD No. 23-053. This task includes additional time for the CONSULTANT efforts in attendance of, and in preparation for said progress and submittal review meetings.

Task 2: Field Services

2.2 Subsurface Utility Engineering (SUE)

2.2.2 Level A – Potholes for Verification of Utility Locations – During the design phase it may be determined that additional information may be needed for specific utilities to confirm the location, acquire vertical elevations, confirm tie in locations, navigate critical crossings etc. The CONSULTANT shall prepare exhibits to provide to Zeman depicting the locations of the area needing additional information for design purposes. Zeman shall provide soft digs to provide subsurface information at each of these locations and will provide exhibits for each soft dig to the CLIENT and CONSULTANT. The CONSULTANT shall field locate the soft digs both horizontally and vertically in order to identify and transfer the data to the existing/proposed conditions plan. Collected field information and soft dig data will be included on the plans with an identification symbol and call-out for each location in the plan view accompanied by a referenced table specifying measured depth, size and material. Up to 20 soft digs have been included for this effort.

2.4 Survey

2.4.3 Maintenance of Traffic Coordination – the CONSULTANT shall coordinate with the Maintenance of Traffic (MOT) Consultant, AWP Safety, to indicate any existing facilities that require MOT efforts to safely perform surveying efforts within the corridor. MOT Consultant is to determine the necessity of submitting for MOT Permits from Palm Beach County, MOT plans, Law Enforcement Officer assistance, Intersection closure work, center lane and single lane closure work. The CONSULTANT shall assist the MOT Consultant by providing exhibits and a .KML file for coordinating locations of facilities requiring surveying within or adjacent to the roadways and possible MOT efforts. The CONSULTANT will not prepare MOT Plans or perform any MOT Plan permitting.

Task 3: Preliminary Design

3.2 30% Design Submittal

The CONSULTANT's role during the 30% preliminary design phase is limited to depicting the existing conditions on the Proposed Conditions constructions plans based upon the acquired survey information, the results of the preliminary / record drawing research, findings of the utility coordination and the results of the scanning and targeting. These records are also compared to records from past PBC Land Development Utility Permits, past South Florida Water Management District permit data and past LWDD permit data collected from the respective permitting agencies. The reflected data will be labelled with references to the various permitting agencies as the source for the data. The CONSULTANT shall set up a base CAD file with the existing conditions information and shall set up the Proposed Conditions Plan for the CLIENT to begin their design. The Proposed Conditions Plans shall be on twenty-four (24) plan sheets consisting of one plan view at a scale of 1" = 20", key map, a space available for sheet notes and future profile view, north arrow, scale, title block and other pertinent data typically located on PBCWUD construction plan sheets. It is assumed these efforts will not be performed and provided to the CLIENT



at the same time as the CONSULTANT performs the same and provides the same for the rest of the Lyons Road corridor related to the proposed reclaimed water main.

The CONSULTANT shall provide a cursory peer review of the 30% design submittal as a quality assurance measure and provide comments to the CLIENT.

The CONSULTANT shall attend a preliminary design review / progress meeting with the CLIENT and PBCWUD. Refer to Task 1.2 for progress meetings.

Task 4: 90% Design Submittal

4.1 Proposed Conditions Plans: The CONSULTANT shall prepare an existing conditions digital terrain model / AutoCAD surface. The alignment of the force main shall be provided by the CLIENT. The CONSULTANT shall identify and label all existing utilities that cross the proposed force main in the plan view only. Utility conflict tables will be prepared for use by the CLIENT. Revisions to the reflected existing conditions and utilities will be made based on additional data received to date and cross-referencing all SUE pothole data collected to date. The CONSULTANT shall revise the components of the Proposed Conditions Plans, prepared by the CONSULTANT, as necessary based upon the 30% design review. It is assumed that all the described work within the Proposed Conditions Plans at the 90% design stage will be performed to two sets of plan profile sheets, one set for the proposed reclaimed water main and one set for the sanitary force main.

4.2 The CONSULTANT shall provide a peer review of the 90% construction plans and technical specifications as a quality assurance measure and provide comments to the CLIENT.

Task 5: 100% Design Submittal

The CONSULTANT shall revise the components of the Proposed Conditions Plans, prepared by the CONSULTANT, as necessary based upon the 90% design review. The CONSULTANT shall provide a peer review of the 100% construction plans and technical specifications as a quality assurance measure and provide comments to the CLIENT.

ASSUMPTIONS

1. Design drawings shall be prepared on 22" x 34" paper or half size paper (11 x 17").
2. All review comments for each deliverable shall be coordinated by the CLIENT and conveyed to the CONSULTANT at one time.
3. The targeting and potholing / soft digging of subsurface utilities, although highly reliable, is expressly understood to represent an approximate location of the target facility as marked on the ground surface. The accuracy of this targeting and potholing / soft digging is subject to certain factors beyond the CONSULTANT's control such as limitations of available technology and field conditions that may include, but are not limited to: depth of utility, electrical conductivity of utility, site conditions and access.
4. Maintenance of Traffic (MOT) shall be performed by others.
5. No surveying of the existing Booster Station 9N or any lift stations are requested or included.
6. No Sketch and Legal Descriptions for proposed Utility Easements are required or included.



COMPENSATION

CLIENT agrees to pay CONSULTANT a total compensation fee amount of Fifty-Seven Thousand, Twenty Dollars and Fifty cents (\$57,020.50) for the scope of services to be invoiced under the payment terms and conditions of the CONTRACT, by hourly not-to-exceed methods of payment, and reimbursable expenses as outlined within the enclosed manhour summary.

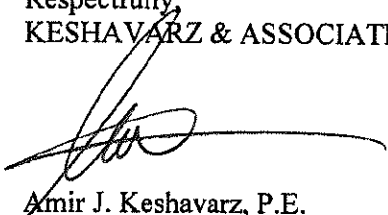
PROJECT SCHEDULE

The completion dates for this work will be as follows (starting from CONSULTANT'S receipt of Notice-to-Proceed), which is currently assumed to be received by 12/1/2024.

TASK	ENGINEERING SERVICES DESCRIPTION	COMPLETION DATE - CALENDAR DAYS FROM NTP
1	Project Management and Coordination	375
2	Field Services	90
3	Preliminary Design	60
4	90% Design Submittal	129
5	100% Design Submittal	293

We certainly appreciate the opportunity to present you with this proposal. We will do our best to be an effective member of your team of professionals.

Respectfully,
KESHAVARZ & ASSOCIATES, INC.



Amir J. Keshavarz, P.E.
Managing Director



REVISED January 7 2025
REVISED September 11, 2024
REVISED August 22, 2024
July 17, 2024

Chen Moore and Associates
500 S Australian Avenue
Suite 850
West Palm Beach, Florida 33401

Attention: Ms. Suzanne Dombrowski, P.E., ENV SP.
Email: sdombrowski@chenmoore.com
Phone: (561) 537-4578

Re: Proposal for Geotechnical Engineering Services
Lyons Road Force Main between Yamato and L38
Lyons Road between L38 and L39 Canals
Boca Raton, Florida 33496
PACIFICA Proposal No.: 610-12018726

Dear Ms. Dobrowski:

In accordance with your email dated July 12, 2024, **Pacifica Engineering Services, LLC (PACIFICA)**, is pleased to submit this proposal to perform a subsurface exploration program for the above referenced project. Included herein is our understanding of the proposed development along with a scope of services, cost estimate and anticipated schedule to conduct a geotechnical engineering study.

We understand that plans for this project include the design of a new redundant force main that runs along Lyons Road, starting at the intersection of Yamato Road and Lyons Road and ending at the Hidden Valley (L38) Canal in Boca Raton, Florida. Discussions with yourself indicates that **Chen Moore and Associates** will perform all engineering for the force main; however, some general soil parameters and other soil characteristics are needed as part of the design. If any of the above information is incorrect, please notify us so we can make any necessary changes to our proposal.

We understand that permits may be required to perform any work in Palm Beach County ROW, therefore, permit fees are included in this proposal, unless alternative locations are to be used.

GEOTECHNICAL SCOPE OF SERVICES

Based on the requested scope, PACIFICA proposes to perform the following geotechnical field services:

- four (4) Standard Penetration Test (SPT) borings to a depth of 40 feet below grade at locations near the force main.

Field boring locations will be located using handheld GPS. The SPT borings will be performed with truck-mounted machinery using rotary drilling procedures, in the approximate locations as noted by your office on the site plan forwarded to us. Samples of the in-place materials will be recovered with

a standard split barrel driven with a 140-pound hammer falling 30 inches (the Standard Penetration Test in accordance with ASTM D1586). After completion of drilling, all boreholes will be grouted and the site generally cleaned, as required.

Underground utility clearance will be required prior to commencing the drilling of the borings. Therefore, PACIFICA will contact "Sunshine One-Call" Service to obtain underground public utility clearance. **If the service is not declined, PACIFICA will conduct Ground Penetrating Radar (GPR) to identify any private utilities in the areas of the boring locations.** If private utilities are known, PACIFICA assumes that the locations of these utilities will be marked in the field prior to mobilization.

Maintenance of Traffic (MOT) will be needed to perform the geotechnical scope of work. PACIFICA will submit MOT plans with an estimated schedule in accordance with FDOT standards for FPL for approval prior to the start of fieldwork. PACIFICA will use FDOT Maintenance of Traffic (MOT) Plans Design Standards Index Series 600 when developing MOT plans.

GEOTECHNICAL REPORT DELIVERABLES

After the geotechnical field exploration is completed, a geotechnical engineer will review the soil samples and representative samples will be tested for physical properties such as gradation, moisture content and organic content, if deemed necessary. The results of our work will be transmitted in a report which will specifically contain information listed below:

1. a plan of the site showing the location of the soil borings;
2. AutoCAD soil profiles for the exploratory borings will be provided, which furnish the results of the SPT sampling;
3. the existence of organic soils or any other soil conditions;
4. groundwater readings during the time of field exploration;
5. corrosivity test results (pH, sulfate, chlorides & conductivity);
6. general soil parameters including dry unit weight in (lb/in³), saturated unit weight (lb/in³), internal friction angle and shear modulus (psi), cohesion (psi);
7. site preparation recommendations;
8. trench excavation recommendations;
9. pipe bedding and backfill recommendations (geotextile if need);
10. some construction considerations; and
11. considerations for HDD and Frac-out.

GEOTECHNICAL SCHEDULE

Our study can begin one day after we receive authorization to proceed. We will start drilling after underground utilities have been located and identified, which may take 2-4 business days/site. The field drilling should be completed within 2 workdays. The written report of the subsurface exploration will be available within two weeks following the field demobilization. We estimate that our study will be completed within 4 weeks from your notice to proceed.



PACIFICA appreciates your consideration of our firm for this project. We wish to note that PACIFICA recognizes the importance of meeting schedule deadlines, staying on budget and being responsive to your needs and those of your design team. We look forward to working with you on this project.

Respectfully submitted,

Pacifica Engineering Services

Florida Certification of Authorization License No. 32328



Marc Restrepo, E.I.
Staff Geotechnical Engineer



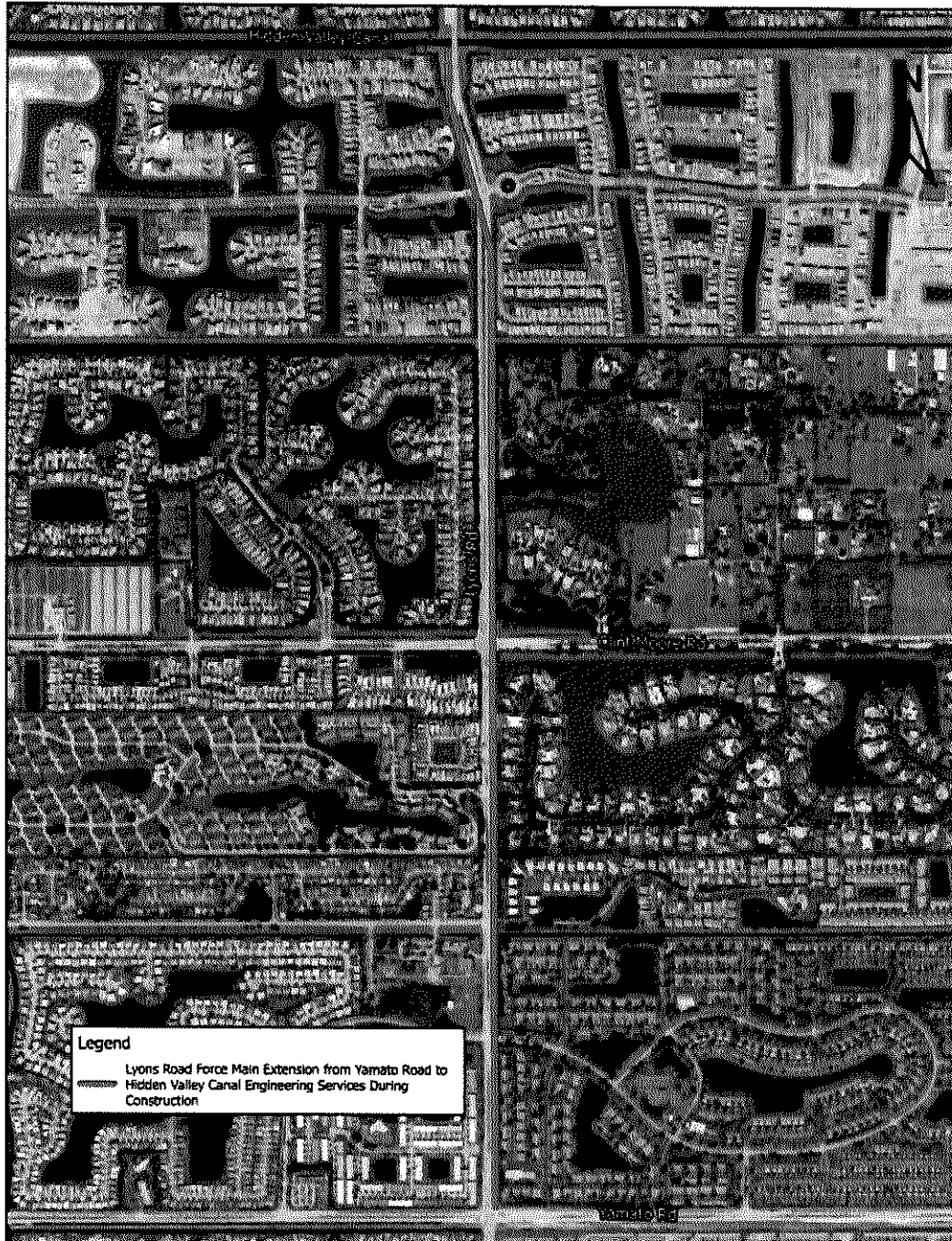
Reinaldo Villa, P.E.
Principal Engineer
FL License No. 72242

Attachments: General Conditions
 Proposed Boring Locations

ATTACHMENT G

Location Map

PBCWUD Project No. 24-028



Revised 06-12-24

November 1, 2024

Suzanne Dombrowski, PE, ENV SP
Chen Moore and Associates
500 South Australian Avenue – Suite 850
West Palm Beach, FL 33401

Subject: Subsurface Utility Engineering Support – Lyons Road Force Main

OVERVIEW:

Zeman Consulting Group shall provide subsurface utility engineering services in support of the Lyons Road Force Main Replacement between Yamato Road and L-38 Canal. Services described hereon will be performed in accordance with the ASCE Standard 38-22, Quality Level A and B, "Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data".

SCOPE OF SERVICES:

- Perform QL-B designation of target utilities to determine locations for test holes. See Exhibit "A" for project limits.
- Perform 20 QL-A (test holes) using vacuum excavation methods based on locations provided by the client.
- Obtain horizontal and vertical locations for each of the exposed utilities.
- Deliverables to include test hole reports depicting details of the exposed utility (type\size\material\depth\photo\location).

COMPENSATION:

- **Total Project Fee: \$17,470.08**

ASSUMPTIONS:

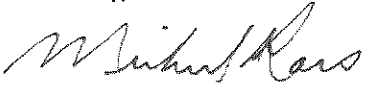
- Utility designation (QL-B) will be performed only on target utilities to determine test hole locations and will not be performed over the entire project site.
- Standard Maintenance of Traffic (MOT) is included. Extraordinary MOT such as MOT plans, lane closures, route detouring, crash trucks, off-duty police officers, railroad flagging fees, and other efforts deemed atypical are not included.
- Fieldwork will be completed within normally accepted business hours and without the need for overnight or weekend work.
- Hazardous materials, if encountered, will immediately stop work and Zeman Group will not be responsible for any disposal.
- Test holes will be backfilled, compacted, and patched with concrete or asphalt, however, Zeman Group will not be responsible for replacing sections of concrete or restoring pavers to the original condition.

CLIENT RESPONSIBILITIES:

- Provide permits as needed.
- Provide all available records depicting owned utilities in the project area.
- Assist Zeman Group in obtaining records of utilities in the project area owned by others, if available.
- Provide access to the project area. Clearing activities required for access are not included.

Thank you for the opportunity to offer a proposal as outlined above and we look forward to working with you on this project.

Sincerely,



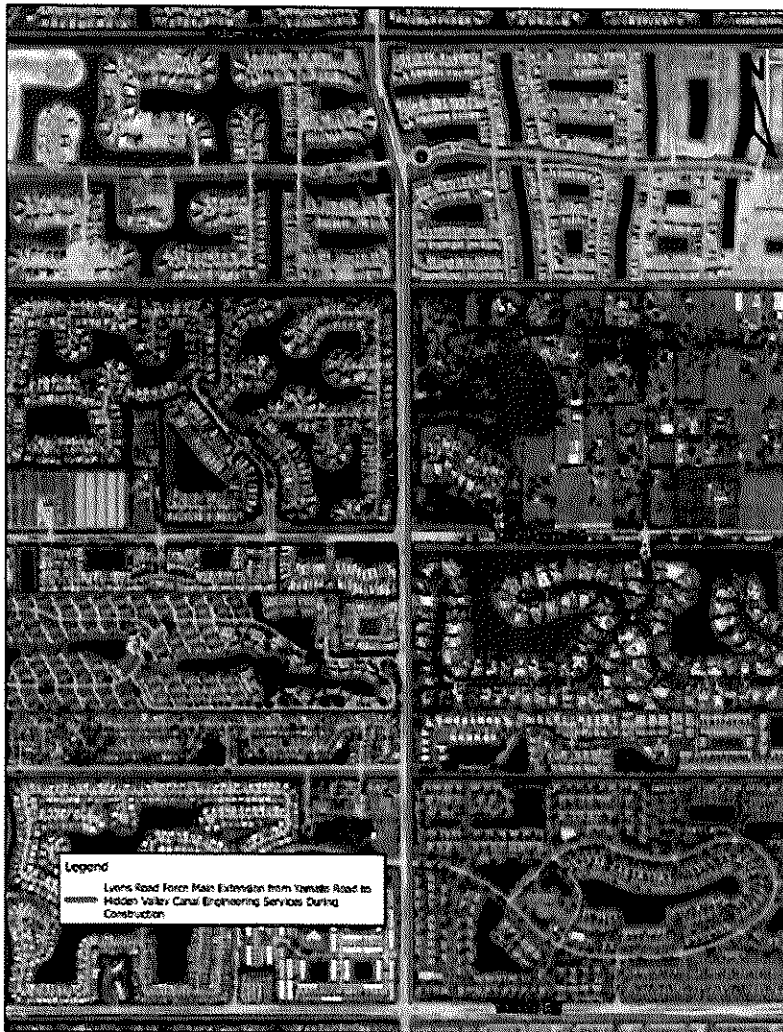
Michael Ross, PSM
Vice President - Zeman Consulting Group

Accepted By: _____

(Authorized Signature)

Print Name: _____ Title: _____

EXHIBIT "A"



ATTACHMENT F

Palm Beach County Water Utilities Department
 Contract for Consulting/Professional Services
General Utility, Architectural and Value Engineering Services
 Resolution No. R2023-1786 Contract Dated 12/05/2023

**SUMMARY OF
 SBE-M/WBE BUSINESS TRACKING**

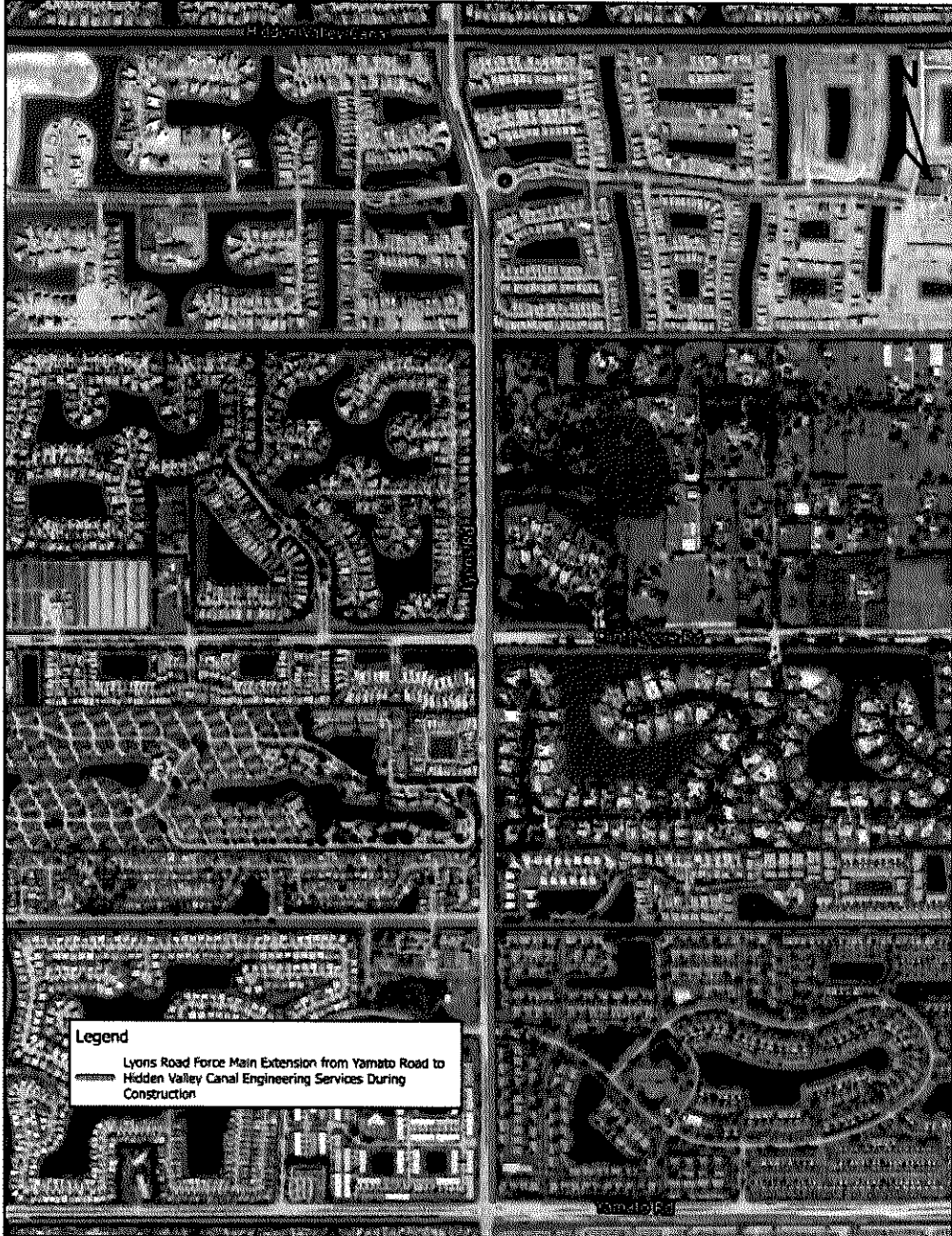
Master Contract Goals	SBE: 31.00%	MBE (B): 23.00%	
Current Proposal			
Value of Authorization No. <u>6</u>	\$282,492.68		
Value of SBE-M/WBE Letters of Intent	\$108,991.52	\$34,500.98	
Actual Percentage	38.58%	12.21%	
Signed/Approved Authorizations			
Total Value of Authorizations	\$813,717.14		
Total Value of SBE-M/WBE Signed Subcontractors	\$169,509.12	\$169,509.12	
Actual Percentage	20.83%	20.83%	
Signed/Approved Authorizations Plus Current Proposal			
Total Value of Authorization	\$1,096,209.82		
Total Value of Subcontractors & Letters of Intent	\$278,500.64	\$204,010.1	
Actual Percentage	25.41%	18.61%	

Revised 06-12-24

ATTACHMENT G

Location Map

PBCWUD Project No. 24-028



Revised 06-12-24

ATTACHMENT NO. 2

Location Map

PBCWUD Project No. 24-028



Revised 06-12-24

ATTACHMENT NO. 3

Print Date 1/9/2025 12:55:40 PM

Page 1 of 1



Palm Beach County Compliance Summary Report

Vendor Number	Vendor Name	AM Best Rating	Insurance Carrier	Policy #	Eff. Date	Exp. Date	Coverage	Contract Number	Contract Name
DX00002560	Chen Moore And Associates, Inc.	Modified	Compliant					23-029	Contract For Consulting/Professional Services General Utility, Architectural And Value Engineering Services
		A++ , XV	Travelers Casualty and Surety Company of America	BA2W150087	1/1/2025	1/1/2026	Auto Liability		
		A++g , XV	Travelers Property Casualty Company of America	CUP00A762829A	1/1/2025	1/1/2026	Excess Liability		
		A++g , XV	The Travelers Indemnity Company	660A365479A	1/1/2025	1/1/2026	General Liability		
		Ar , XV	Crum & Forster Specialty Insurance Company	PKC116934	1/1/2025	1/1/2026	Professional Liability		
		Ap , IX	American Interstate Insurance Company	AVWCFL3335872025	1/1/2025	1/1/2026	Workers Comp		

Risk Profile : Standard - Professional Services
Required Additional Insured : Palm Beach County Board of County Commissioners
Ownership Entity :