

May 13, 2022

West Villages Improvement District  
2501A Burns Road  
Palm Beach Gardens, FL 33410

**Subject: Contractor Prequalification Statement – Black & Veatch**

Black & Veatch would like to thank you for the opportunity and consideration to become a pre-approved contractor for West Villages Improvement Village. We recognize the important role WVID plays in furthering the development and growth of Southwest Florida, and we are excited at the prospect of working together to help further advance what is an already renowned community to live and work in.

Black & Veatch has been working with communities around the United States for over 100 years and has maintained strong working relationships with many of the Counties and Municipalities surrounding the District including the City of North Port, Sarasota County, Charlotte County, Pinellas County, Hillsborough County, City of Ft. Myers, and Lee County to name just a few. Although we have not yet had the opportunity to work directly with the District, we are eager to build a new relationship and provide our expertise and experience whenever and wherever needed.

**ABOUT BLACK & VEATCH**

Black & Veatch is an employee-owned engineering and consulting company with a 100-year legacy of innovations in sustainable infrastructure. Headquartered in Overland Park, KS with offices throughout Florida and around the world, Black & Veatch can provide national and global subject matter expertise, combined with local area knowledge and project delivery.

**WHY BLACK & VEATCH**

Black & Veatch offers a broad range of professional services including Program Management for large scale multi-discipline design and construction projects, Facility Design, Future Demand Modelling, Master Plan and CIP Program Development, GIS Data Collection/Mapping/Analysis, Maintenance Optimization, and Asset Management for the design and maintenance of Water/Wastewater, Reclaim, Stormwater, and ROW Facilities/Infrastructure. We are well versed and experienced in all facets of engineering design, optimizing maintenance programs to extend the useful life of assets, and data analytics which we will feel will help support the District as the demand on its Operations and Maintenance programs increase.

We look forward to the opportunity to work with and support West Villages Improvement District with its continued rapid growth. Please, feel free to contact me with any questions at (813) 207-7927.

Best regards,

BLACK & VEATCH CORPORATION



Robert Burchett, PE  
Project Manager

**WEST VILLAGES IMPROVEMENT DISTRICT**

**CONTRACTOR'S PREQUALIFICATION STATEMENT  
(CONSTRUCTION OF PUBLIC INFRASTRUCTURE IMPROVEMENTS AND  
MAINTENANCE SERVICES)**

**Black & Veatch Corporation**

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**REQUEST FOR QUALIFICATIONS  
FOR CONSTRUCTION AND MAINTENANCE SERVICES  
WEST VILLAGES IMPROVEMENT DISTRICT**

The West Villages Improvement District (“District”) requests Applications for Qualification from firms interested in providing construction and maintenance services for public infrastructure improvements. Upcoming projects include the construction of various infrastructure improvements and maintenance services in and around the District including i) earthwork/excavation and construction of roadways, stormwater management facilities, water and sewer facilities, irrigation facilities, landscape, hardscape, street lighting, and other public improvements and ii) maintenance services including exotic vegetation removal, and canal/drainage, landscaping, lake and littoral maintenance, and streetlighting.

To be eligible to submit qualifications, firms must: i) hold all required applicable licenses in good standing and ii) be authorized to do business in the Sarasota County, and the State of Florida.

For construction services, any contractor pre-qualified and considered eligible by the Department of Transportation to bid to perform the type of work the project entails shall be presumed to be qualified to perform the project.

Applicants may request an Application for Qualification from Dewberry Engineers Inc. 2201 Cantu Court, Suite 107, Sarasota, Florida 34232, or via email to [rellis@dewberry.com](mailto:rellis@dewberry.com) beginning **April 14<sup>th</sup>, 2022**, after **1:00 p.m.** Applicants must submit one (1) electronic copy (PDF format on a USB flash drive), by **4:00 p.m.** on **May 16<sup>th</sup>, 2022**. Address responses to: Mr. Richard Ellis, District Engineer, 2201 Cantu Court, Suite 107, Sarasota, Florida 34232.

Qualified firms will be selected based on experience, qualifications of personnel, and ability to perform construction or maintenance services. Packages will be reviewed and rated by a committee appointed by the District Board of Supervisors promptly after receipt of the submittals, with final selections expected to be made at a publicly noticed Board of Supervisors meeting held shortly thereafter.

At that time, all qualified firms may be assigned a project qualification and aggregate dollar limit for work under District contracts. All applicants will be promptly notified after the construction and maintenance firms are selected. The pre-qualification decisions of the Board of Supervisors shall be valid for a period of three (3) years, after which the Board of Supervisors may either extend the prequalification period for an additional two (2) years or open the prequalification process again, at its sole discretion. The District reserves the right to waive any informality in the qualifications submitted, to reject any and all qualifications submitted and to advertise for the services.

Pre-qualified firms will be eligible to bid on construction and maintenance projects subject to the applicants approved project classification and aggregate limit. Failure to pre-qualify may preclude the District from awarding contracts for construction and maintenance services to non-qualified firms.

Applicants may contact the District Engineer, Dewberry Engineers Inc., at 2201 Cantu Court, Suite 107, Sarasota, Florida 34232, or via email to [rellis@dewberry.com](mailto:rellis@dewberry.com), until the qualifications submittal deadline for further information. All requests for information shall be in writing.

Any contractor submitting a Contractor's Prequalification Statement, which in its judgment is adversely affected by the District's rating as to the contractor's qualifications and wishes to protest such decision must file with the District a notice of protest in writing within seventy-two (72) hours (excluding Saturdays, Sundays and state holidays) after receipt of the notice of the District's ranking, and shall file a formal written protest within seven (7) days (including Saturdays, Sundays and state holidays) after the date of

filing of the notice of protest. The formal written protest shall state with particularity facts and law upon which the protest is based. Failure to timely file a notice of protest or failure to timely file a formal written protest shall constitute a waiver of all further proceedings under Florida law and the District's Rules of Procedure. You may obtain a copy of the District's Rules of Procedure by contacting the District Manager's Office at 2501A Burns Road, Palm Beach Gardens, FL 33410.

William Crosley, District Manager

Publication Date: \_\_\_\_\_, 2022

## NOTICE TO PROSPECTIVE BIDDERS

The information required herein is for the purpose of fairly evaluating contractor qualifications to perform various construction and maintenance activities for the West Villages Improvement District (the "District").

**APPLICANTS FOR PREQUALIFICATION AS BIDDERS FOR THE WEST VILLAGES IMPROVEMENT DISTRICT CONTRACTS ARE HEREBY NOTIFIED THAT INCLUSION OF FALSE, DECEPTIVE OR FRAUDULENT STATEMENTS ON THIS APPLICATION CONSTITUTES FRAUD. FURTHERMORE, YOU ARE HEREWITH NOTIFIED THAT THE WEST VILLAGES IMPROVEMENT DISTRICT CONSIDERS SUCH ACTION ON THE PART OF THE APPLICANT TO CONSTITUTE GOOD CAUSE FOR DENIAL, SUSPENSION, OR REVOCATION OF THE PROSPECTIVE BIDDER'S QUALIFICATION FOR BIDDING ON ITS PROJECTS.**

Please be advised that this application must be complete within itself without reference to any other application or statement. All sections of the application shall be completed. If any of the requested information does not apply, it shall be indicated as "None" or "N.A." as applicable. Failure to make entries in every section of this application may result in a disqualification.

All financial information provided in this application and accompanying audited financial statements are exempt from public record laws pursuant to Section 119.071(1)(c), *Florida Statutes*, and will be kept confidential. District can request annual audits and annual resubmittal of any or all financial statements from any prequalified contractor.

The properly completed Contractor's Prequalification Statement shall be submitted to the District Engineer, Richard Ellis at Dewberry Engineers Inc., 2201 Cantu Court, Suite 107, Sarasota, Florida 34232. Any questions with regard to the requests for information contained herein shall be addressed to the District Engineer, Dewberry Engineers Inc., at 2201 Cantu Court, Suite 107, Sarasota, Florida 34232, or via email to [rellis@dewberry.com](mailto:rellis@dewberry.com).

### Schedule of Pertinent Dates

<b>Description</b>	<b>Date</b>
RFQ "Pickup" Date	Thursday, April 14th, 2022, after 1:00 p.m.
RFQ Due Date	Monday, May 16th, 2022, at 4:00 p.m.
Committee Meeting Date to Evaluate Qualifications Statements	Tuesday, May 17th at 11:00 a.m.
Board Meeting to Formally Approve Prequalified Contractors	Thursday, May 19th at 11:00 a.m.

## CONTRACTOR PREQUALIFICATION STATEMENT

### Application for Contractor Prequalification (Attach Additional Sheets if Necessary)

DATE SUBMITTED May 13, 2022

1. Applicant Black & Veatch Corporation / / A Partnership  
[Company Name] /X/ A Corporation  
/\_/ A Subsidiary Corporation
2. Parent Company Name Black & Veatch Corporation
3. Parent Company Address:  
Street Address 11401 Lamar Ave.  
P. O. Box (if any) \_\_\_\_\_  
City Overland Park State KS Zip Code 66224  
Telephone 913-458-2000 Fax no. \_\_\_\_\_  
1st Contact Name Robert (Bobby) Burchett Title Project Manager  
2nd Contact Name Nick Alexandrou Title Asset Management Lead
4. Applicant Company Address (if different):  
Street Address \_\_\_\_\_  
P. O. Box (if any) \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_  
Telephone \_\_\_\_\_ Fax no. \_\_\_\_\_  
1st Contact Name \_\_\_\_\_ Title \_\_\_\_\_  
2nd Contact Name \_\_\_\_\_ Title \_\_\_\_\_
5. List the location of the office from which the applicant would perform work for the West Villages Improvement District work.  
Street Address 3405 W Dr. Martin Luther King Jr. Blvd. Suite 125  
City Tampa State FL Zip Code 33607  
Telephone 813-281-0032 Fax no. \_\_\_\_\_  
1st Contract Name Robert (Bobby) Burchett Title Project Manager

6. Is the applicant Company incorporated in the State of Florida? yes ( ) no (x )

6.1 If yes, provide the following:

- o Is the Company in good standing with the Florida Department of State Division of Corporations? yes ( ) no ( )

If no, please explain \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- o Date incorporated \_\_\_\_\_ Charter No. \_\_\_\_\_

6.2 If no, provide the following:

- o The State with whom the applicant company is incorporated in? Delaware

- o Is the company in good standing with the State? yes ( x ) no ( )

In no, please explain \_\_\_\_\_  
\_\_\_\_\_

- o Date incorporated \_11/19/1998\_ Charter No. \_N/A\_

- o Is the applicant company authorized to do business in the State of Florida? yes ( x ) no ( )

7. Is the applicant company a registered or licensed contractor with the State of Florida? yes ( ) no (x )  
Provide copies of all licenses listed.

7.1 If yes, provide the following:

- Type of registration (i.e. certified general contractor, certified electrical contractor, etc.) \_\_\_\_\_  
\_\_\_\_\_
- o License No. \_\_\_\_\_ Expiration Date \_\_\_\_\_
- o Qualifying individual \_\_\_\_\_ Title \_\_\_\_\_
- o List company(s) currently qualified under this license \_\_\_\_\_  
\_\_\_\_\_

7.2 Is the applicant Company a registered or licensed Contractor with Sarasota County? yes ( ) no(X)

7.3 Has the applicant Company performed work for an independent special district previously?  
yes (X) no ( )



8. Is the applicant company prequalified by the Florida Department of Transportation? yes ( ) no (X)

If yes, provide the following:

o Work Class Ratings \_\_\_\_\_

o Maximum Capacity Rating \_\_\_\_\_

9. Name of Applicant's Bonding Company  
Federal Insurance Company (CHUBB)  
Zurich American Insurance Company (ZURICH)

Address

Federal: 202 Halls Mill Road, Whitehouse Station, NJ 08889

Zurich: 1299 Zurich Way, Schaumburg, IL 60196

Approved Bonding Capacities:	Aggregate Limit	\$ _____
	Single Project Limit	\$ _____
	Total Current Contracts Bonded	\$ _____

**\*\*\*\* Black & Veatch, together with its affiliates constitutes a large, international engineering and construction firm. Bonding quantities and values can be provided on a project-by-project basis as needed. A bonding surety letter has been provided as Attachment A \*\*\*\***

Note: All bonds and insurance policies obtained by Applicant required herein shall be issued by companies authorized to do business in the State of Florida and shall have a financial strength rating of A or better, and a financial size category of X or higher, as rated by A.M. Best Company.

Name of Applicant's Bonding Agency Lockton Companies

Address 444 West 47<sup>th</sup> Street, Suite 900, Kansas City, MO 64112

Contact Name Debra Scarborough, AFSB Phone 816-960-9000

10. List the Applicant's total annual dollar value of work completed for each of the last three (3) years starting with the latest year and ending with the most current year (2019) 3.7 billion, (2020) 3.7 billion, (2021) 3.2 billion

11. List the classification(s) (refer to attached listing) of work the applicant is applying for prequalification based on the applicant company's ability to self-perform the work (excluding general contracting).

Stormwater Mgmt. Facilities Construction  
Water and Sewer Facilities Construction  
Canal/Drainage Maintenance  
Lake/Littoral Maintenance

Irrigation Facilities Construction  
Streetlighting Maintenance  
Stormwater Mgmt. Facilities Construction  
Roadway Construction

12. What are the applicant company's current insurance limits? If contractor does not have a certain category of coverage listed below, please note none. (provide a copy of applicant's certificate of insurance)

General Liability	<u>\$ 2,000,000 per occurrence and \$4,000,000 annual aggregate</u>
Automobile Liability	<u>\$ 1,000,000 combined single limit</u>

Workers Compensation	<u>Statutory and Employer's Liability is \$1,000,000</u>
Contractor's Pollution Liability	<u>\$ 5,000,000 per occurrence and annual aggregate</u>
Umbrella Liability/Excess Liability	<u>\$ 10,000,000 each occurrence and annual aggregate</u>
Contractors Additional Insured Status	
- General Liability	<u>Yes</u>
- Auto Liability	<u>Yes</u>
Per Project Aggregate Limit	
- General Liability	<u>Yes</u>
Waiver of Subrogation in favor of District	
- General Liability	<u>Yes - Waived</u>
- Auto Liability	<u>Yes - Waived</u>
- Workers' Compensation	<u>Yes - Waived</u>
Expiration Date	<u>11/1/2022</u>

Note: Applicant must provide a certification that their insurance carrier is authorized to conduct business in Florida. Coverage must be provided on a primary, non-contributory basis.

**\*\*\*\* Included as Attachment B\*\*\*\***

13. Has the applicant company been cited by OSHA for any job site or company office/shop safety violations in the past two years? yes ( ) no (X)

If yes, please describe each violation, fine, and resolution \_\_\_\_\_

\_\_\_\_\_

13.1 What is the applicant's FA? \_\_\_\_\_

- 13.2 Has the applicant company experienced any worker injuries resulting in a worker losing more than ten (10) working days as a result of the injury in the past two years? yes ( ) no (X)

If yes, please describe each incident \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

14. Please state whether or not your company or any of its affiliates are presently barred or suspended from bidding or contracting on any state, local or federal-aid contracts in any state(s)? Yes \_\_\_\_\_ No X\_\_\_\_  
If so, state the name(s) of the company(ies) \_\_\_\_\_

the state(s) where barred or suspended \_\_\_\_\_  
and the period(s) of debarment or suspension \_\_\_\_\_

\_\_\_\_\_

15. What is the construction or maintenance experience of the principal supervisory construction or maintenance personnel of your organization? (Attach resumes here.)

**\*\*\*\* Resumes attached as Attachment F \*\*\*\***

INDIVIDUAL NAME	PRESENT POSITION OR OFFICE	MAGNITUDE AND TYPE OF WORK*	YEARS OF CONST./ MAINT. EXPERIENCE	YEARS WITH FIRM	IN WHAT CAPACITY?
Robert Burchett	Project Manager	Multi-year Program Mgmt. for Water/Sewer Utilities	22	22 Years	Project Manager
Nick Alexandrou	Asset Management Technical Lead	Enterprise GIS and Asset Management, Data Solutions, Workforce Optimization for Utilities and Government	11	1	PM & Tech Lead
Amanda Schwerman	Planning Lead	Design/Build & Master Plans for Treatment/ Distribution/ Collection Systems	15	8	PM & Tech Lead
Mark Seastead	Information Solutions Practice Lead	Multi-year Program Mgmt. for Water/Sewer/Governments – Asset Management, Data Solutions, Program Management.	24	6	PM & Practice Lead
Simon Watson	Asset Maintenance Lead	Asset Maintenance Optimization, Maintenance Planning, Asset Performance Analysis for Utilities and State Agencies	30	1	Practice Lead
Justin Mitchell	Solutions Engineer	Data and Application Solutions, Optimize asset performance and maintenance, Enterprise GIS	10	1	Senior Analyst & Technical Lead
Martin Jones	Asset Management Lead	Multi-year phased Asset Management Programs for Utilities, Local, and State Governments	24	10	PM & Practice Lead
Nick Wyatt	Solutions Engineer	Multi-year phased Asset Management Programs for Utilities, Local, and State Governments	4	3	Senior Analyst
Ravi Nalamothu	Stormwater Engineer	Stormwater program management, water quality assessments, floodplain analysis	15	1	Stormwater and Water Resources Lead
Matt Morey	Information Solutions Technical Lead	Enterprise GIS and Asset Management, Data Solutions, Workforce Optimization for Utilities and Government	18	6	Information Solutions Technical Lead

Ed Carpenetti	Condition Assessment Lead	Asset and System Condition Assessments for Water/Sewer/Stormwater Facilities	23	1	Practice Lead
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\*Give in sufficient detail for the District to evaluate your experience in the classifications of work for which you are requesting prequalification.

16. Have you ever failed to complete any work awarded to you? Yes \_\_\_\_\_ No X If so, where and why? \_\_\_\_\_

17. Has any officer or partner of your organization ever been an officer, partner, or owner of some other organization that has failed to complete a construction or maintenance contract? Yes \_\_\_\_\_ No X

If so, state name of individual, other organization and reason therefore.

18. List any and all litigation with owners or major subcontractors to which the Applicant has been a party in the last five (5) years and describe the outcome or resolution.

Black & Veatch Corporation ("BV"), together with its affiliates constitutes a large, international engineering and construction firm. Like similarly sized firms, at any given point in time, we may be involved with claims and litigation from time to time. BV maintains a program of insurance to protect against claims arising out of its work.

19. Has the Applicant or any of its affiliates ever been either disqualified or denied prequalification status by a governmental entity? No X If so, discuss the circumstances surrounding such denial or disqualification as well as the date thereof. \_\_\_\_\_

20. Within the past five (5) years, has the Applicant failed to complete a project within the scheduled contract time? Yes X No \_\_\_\_\_ If so, discuss the circumstances surrounding such failure to complete a project on time as well as the date thereof.

Black & Veatch, together with its affiliates constitutes a large, international engineering and construction firm. Like similarly sized firms, there may be instances where projects may not be completed for many reasons, including those unrelated to Black & Veatch's performance. Black & Veatch does not track all such instances, unless the matter is litigated. In the opinion of Black & Veatch management, no such instances will have a material impact on Black & Veatch's ability to execute any projects with West Villages Improvement District.

21. Does the Applicant have adequate equipment to perform normal construction or maintenance operations for each class of work for which prequalification is sought? Yes \_\_\_\_\_ No X If no, please explain:

Black & Veatch Corporation is not a licensed contractor and would not be an appropriate entity to execute any construction work. Black & Veatch is a design and professional services firm specializing in Program Management, Facility Design, Maintenance Optimization, Data Collection, GIS, Asset Management, and Technology Solutions for Water/Wastewater, Reclaim, Stormwater, and ROW Facilities/Infrastructure.

## SUPERVISORY PERSONNEL

Company Name Black & Veatch Corporation

Date 5/13/2022

What is the experience of the key management and supervisory personnel of the applicant company for both administration as well as operations? (Attach resumes of key personnel here)

INDIVIDUAL'S NAME	PRESENT TITLE	DESCRIPTION OF DIRECT JOB RESPONSIBILITIES	YEARS OF EXPERIENCE IN PRESENT POSITION	TOTAL YEARS OF RELATED EXPERIENCE
Robert (Bobby) Burchett	Project Manager	Client Director and Multi-year Program Mgmt. for Water/Sewer Utilities	10	21
Nick Alexandrou	Asset Management. Technical Lead	Enterprise GIS and Asset Management, Data Solutions, Workforce Optimization for Utilities and Government	4	11
Amanda Schwerman	Planning Lead	Design/Build & Master Plans for Treatment/ Distribution/ Collection Systems	4	15
Mark Seastead	Information Solutions Practice Lead	Multi-year Program Mgmt. for Water/Sewer/Governments – Asset Management, Data Solutions, Program Management.	20	24
Simon Watson	Asset Maintenance Lead	Asset Maintenance Optimization, Maintenance Planning, Asset Performance Analysis for Utilities and State Agencies	23	30
Martin Jones	Asset Management Lead	Data and Application Solutions, Optimize asset performance and maintenance, Enterprise GIS	14	24
Justin Mitchell	Solutions Engineer	Multi-year phased Asset Management Programs for Utilities, Local, and State Governments	6	10
Nick Wyatt	Solutions Engineer	Multi-year phased Asset Management Programs for Utilities, Local, and State Governments	4	3
Ravi Nalamothu	Stormwater Engineer	Stormwater program management, water quality assessments, floodplain analysis	1	15
Matt Morey	Information Solutions Technical Lead	Enterprise GIS and Asset Management, Data Solutions, Workforce Optimization for Utilities and Government	6	18
Ed Carpenetti	Condition Assessment Lead	Asset and System Condition Assessments for Water/Sewer/Stormwater Facilities	1	23

(Attach additional sheets if necessary)

Company Name

Black & Veatch Corporation

Date 5/13/2022

[illegible]

**STATUS OF CONTRACTS ON HAND**  
(Attach additional sheets if necessary)

Company Name Black & Veatch Corporation

Date 5/13/2022

Furnish requested information about all of applicant's active contracts, whether as prime or subcontracts; whether in progress or awarded but not yet started; and regardless of with whom contracted. All amounts to be shown to nearest \$1,000. Contractor may consolidate and list as a single item all contracts which individually do not exceed 3% of total active contracts and in total do not exceed 20% of the active total contracts.

				Applicant's Uncompleted Amount as of this Date		Completion Date		
Owner, Location and Description of Project	Current Contract Amount as Prime	Current Contract Amount as Subcontractor	Current Amount Sublet to Others	As Prime Contractor	As Subcontractor	Original Contract Date	Approved Revised Date	Current Estimate Date
VENICE, FL, CITY OF Black & Veatch PM: Emilie Moore AWIA COMPLIANCE PROGRAM SERVICES	\$523,049	\$0	\$0	\$575,876	\$0	Oct 2022		10/8/2022
CLEARWATER, CITY OF Black & Veatch PM: Rebecca Oliva Clearwater EOR WO - MS WRF THM Eval	\$85,910	\$0	\$0	\$30,456	\$0	Jun 2023		6/21/2023
CLEARWATER, CITY OF Black & Veatch PM: Rebecca Oliva Clearwater EOR WO - Residuals Handling Improvements	\$83,922	\$0	\$0	\$1,362	\$0	May 2022		5/20/2022
CLEARWATER, CITY OF Black & Veatch PM: Rebecca Oliva Clearwater EOR WO - SB64 Surface Water Discharges	\$86,576	\$0	\$0	\$33,618	\$0	Feb 2048		2/17/2048
CLEARWATER, CITY OF Black & Veatch PM: Rebecca Oliva Clearwater EOR WO - SCADA Master Plan Support	\$90,950	\$0	\$0	\$44,212	\$0	May 2022		5/19/2022
CLEARWATER, CITY OF Black & Veatch PM: Rebecca Oliva Clearwater WO - NEWRF Clarifier Splitter Box Rehab	\$183,204	\$0	\$0	\$169,141	\$0	Nov 2023		11/25/2023
Subtotal Uncompleted Work				\$13,081,413	\$0			
Total Uncompleted Work on Hand				\$13,081,413				

\*\*\*\*Please see Attachment C for full listing of On-hand Contracts



# PROJECTS APPLICANT COMPANY COMPLETED IN THE LAST TWO YEARS

Company Name \_\_\_\_\_

Black & Veatch Corporation

Date 5/13/2022

List all projects completed in the last two years for which the contract value individually exceeded 3% of the applicant's annual total work completed for the year the project was started. Include in the list projects that were started earlier than two years but were completed within the last two years.

Project Name/Location	Final Contract Amount	Prime or Sub <sup>1</sup>	Classification of Work Performed	Year Started/ Completed	Owner Name/Location <sup>2</sup>	Name & Phone Number of Owner's Representative on this Project <sup>3</sup>
182332 TBW KELLER O&M EVALUATIONMP	\$50,148	Prime	Construction - Water & Sewer Facilities	Dec 2015 - Jun 2018	TAMPA BAY WATER	TAMPA BAY WATER Black & Veatch PM: Robert Burchett (813) 207-7927
182332 TBW SCHWRF SURGE ANALYSISMP	\$64,469	Prime	Construction - Water & Sewer Facilities	Mar 2016 - Aug 2018	TAMPA BAY WATER	TAMPA BAY WATER Black & Veatch PM: Robert Burchett (813) 207-7928
184904 TBW AUDIT SERVICES FOR O&M CONTRACTS REVIEW	\$40,000	Prime	Maintenance - Exotic Vegetation Removal, Maintenance - Canal/Drainage, Maintenance - Landscape and Irrigation, Maintenance - Lake and Littoral	Mar 2016 - Feb 2018	TAMPA BAY WATER	TAMPA BAY WATER Black & Veatch PM: Robert Burchett (813) 207-7929
2020 GRU Gmrl Eng Consultant - AWIA ERP Phase III	\$97,103	Prime	Construction - Stormwater Mgmt Facilities, Construction - Water & Sewer Facilities, Construction - Irrigation Facilities, Maintenance - Landscape and Irrigation	Apr 2020 - Dec 2020	GAINESVILLE REGIONAL UTILITIES (GRU)	GAINESVILLE REGIONAL UTILITIES (GRU) Black & Veatch PM: Rebecca Oliva (813) 282-4189
City of Tampa AWIA Support	\$107,455	Prime	Construction - Water & Sewer Facilities	Sep 2019 - Mar 2021	TAMPA, FL, CITY OF	TAMPA, FL, CITY OF Black & Veatch PM: Rebecca Oliva (813) 282-4189
Clearwater AWIA Support Svc Ph I	\$13,315	Prime	Construction - Water & Sewer Facilities	Oct 2019 - Apr 2022	CLEARWATER, CITY OF	CLEARWATER, CITY OF Black & Veatch PM: Rebecca Oliva (813) 282-4189

\*\*\*\* Please see Attachment D for full listing of Closed Contracts in the Last 2 Years

<sup>1</sup> 'Prime or Sub' should indicate whether applicant performed the work as a prime contractor or as a subcontractor.

<sup>2</sup> 'Owner Name/Location' should indicate the Owner of the project if the applicant performed the work as a prime contractor or the general contractor if the applicant performed the work as a subcontractor.

<sup>3</sup> 'Name & Phone Number of Owner's Representative on this Project' should list a reference from the business entity listed in the previous column familiar with applicant's contract performance.



## **LIST OF ADDITIONAL DOCUMENTS FOR INCLUSION IN APPLICATION**

**Please include the following additional information with this application:**

1. Applicants shall provide letters of recommendation from at least two agencies or firms with direct knowledge of the applicant's key personnel and work performance in sufficient detail to assist in rating the applicant's ability to perform the classification of work for which the applicant is applying for prequalification. The letters must contain specific information regarding the following:
  - (a) Specific projects, including project numbers and location.
  - (b) Size of projects by dollar value.
  - (c) Description of projects and classes of work performed with applicant's own employees and equipment.
  - (d) Whether projects were timely completed.
  - (e) Whether the applicant was cooperative and facilitated changes to the project when required.

**\*\*\*\*Included as Attachment E\*\*\*\***

2. Applicants shall list the name of any subcontractor(s) that may be utilized to complete any work falling within the scope of the Contractor Classification Listing(s) for which the Applicant is submitting its Application for Qualification.

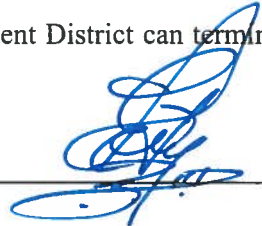
(Continued on Next Page)

The undersigned hereby authorize(s) and request(s) any person, firm or corporation to furnish any pertinent information requested by the West Villages Improvement District, or their authorized agents, deemed necessary to verify the statements made in this application or attachments hereto, or necessary to determine whether the West Villages Improvement District should prequalify the applicant for bidding on its construction or maintenance projects, including such matters as the applicant's ability, standing, integrity, quality of performance, efficiency and general reputation.

The undersigned acknowledges and consents to the use of the evaluation criteria set forth under the Section herein titled "Determination of Qualified Prospective Bidder."

The undersigned acknowledges that the West Villages Improvement District can terminate its use of the prequalification list for bidding purposes at any time.

Black & Veatch Corporation  
Name of Applicant Company

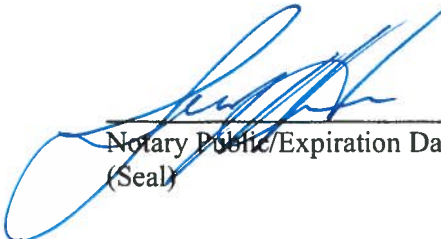
By: 

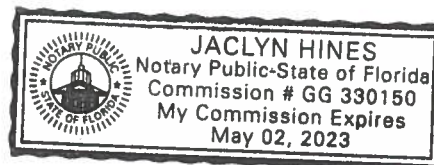
Rafael E. Frias III, Associate Vice President  
[Type Name and Title of Person Signing]

This 15th day of May, 2022



Sworn to before me this 15th day of May, 2022.

 May 2, 2023  
Notary Public/Expiration Date  
(Seal)



Applicant acknowledges receipt of the following addenda:

Addendum No. \_\_\_\_\_

Date \_\_\_\_\_

Addendum No. \_\_\_\_\_

Date \_\_\_\_\_

## AFFIDAVIT FOR INDIVIDUAL

State of \_\_\_\_\_

ss:

County of \_\_\_\_\_

\_\_\_\_\_, being duly sworn, deposes and says that the statements and answers to the questions concerning experience contained herein are correct and true as of this date; and that he/she understands that intentional inclusion of false, deceptive or fraudulent statements on this application constitutes fraud; and, that the District considers such action on the part of the applicant to constitute good cause for denial, suspension or revocation of a certificate of qualification for bidding on West Villages Improvement District projects.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Print Name

Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 2022.

\_\_\_\_\_  
Notary Public/Expiration Date:

(SEAL)

## AFFIDAVIT FOR PARTNERSHIP

State of \_\_\_\_\_

SS:

County of \_\_\_\_\_

\_\_\_\_\_, is a member of the firm of \_\_\_\_\_, being duly sworn, deposes and says that the statements and answers to the questions of the foregoing experience questionnaire are correct and true as of the date of this affidavit; and, that he/she understands that intentional inclusion of false, deceptive or fraudulent statements on this application constitutes fraud; and, that the District considers such action on the part of the applicant to constitute good cause for denial, suspension or revocation of a certificate of qualification for bidding on West Villages Improvement District projects.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Print Name

Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 2022.

\_\_\_\_\_  
Notary Public/Expiration Date:

(SEAL)

# AFFIDAVIT FOR CORPORATION

State of Florida  
County of Broward

SS:

Rafael E. Frias III, PE  
(title) Associate Vice President  
of the Black & Veatch Corporation  
(a corporation described herein) being duly sworn, deposes and says that the statements and answers to the questions in the foregoing concerning experience are correct and true as of the date of this affidavit; and, that he/she understands that intentional inclusion of false, deceptive or fraudulent statements in this application constitutes fraud; and, that the District considers such action on the part of the applicant to constitute good cause for denial, suspension or revocation of a certificate of qualification for bidding on West Villages Improvement District projects.

  
(Officer must sign here)

Rafael E. Frias III, PE

Print Name

Sworn to before me this 15th day of May, 2022.

  
Notary Public/Expiration Date: May 2, 2023

(SEAL)



**SWORN STATEMENT UNDER SECTION 287.133(3)(a),  
FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES**

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICER  
AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement is submitted to West Villages Improvement District for Prequalification of Construction and/or Maintenance Contractors.
2. This sworn statement is submitted by Black & Veatch  
[Print Name of Entity Submitting Sworn Statement]  
whose business address is 3405 W Dr. Martin Luther King Jr Blvd. Suite 125 Tampa, FL 33607  
and (if applicable) its Federal Employer Identification Number (FEIN) is 43-1833073  
(If the entity has no FEIN, include the Social Security Number of the individual signing this  
sworn statement: \_\_\_\_\_.)
3. My name is Rafael E. Frias III and my relationship to the  
entity named above is Associate Vice President.
4. I understand that a "public entity crime" as defined in Section 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including, but not limited to, any bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.
5. I understand that "convicted" or "conviction" as defined in Section 287.133(1)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.
6. I understand that an "affiliate" as defined in Section 287.133(1)(a), Florida Statutes, means:
  1. A predecessor or successor of a person convicted of a public entity crime; or,
  2. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.
7. I understand that a "person" as defined in Section 287.133(1)(e), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

8. Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement. (Please indicate which statement applies.)

X Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor any affiliate of the entity, have been charged with and convicted of a public entity crime subsequent to July 1, 1989.

\_\_\_\_\_ The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members or agents who are active in management of the entity or an affiliate of the entity, has been charged with and convicted of a public entity crime subsequent to July 1, 1989, AND (please indicate which additional statement applies):

\_\_\_\_\_ There has been a proceeding concerning the conviction before an Administrative Law Judge of the State of Florida, Division of Administrative Hearings. The final order entered by the Administrative Law Judge did not place the person or affiliate on the convicted vendor list. (Please attach a copy of the final order.)

\_\_\_\_\_ The person or affiliate was placed on the convicted vendor list. There has been a subsequent proceeding before an Administrative Law Judge of the State of Florida, Division of Administrative Hearings. The final order entered by the Administrative Law Judge determined that it was in the public interest to remove the person or affiliate from the convicted vendor list. (Please attach a copy of the final order.)

\_\_\_\_\_ The person or affiliate has not been placed on the convicted vendor list. (Please describe any action taken by or pending with the Florida Department of Management Services.)

Signature

Rafael E. Frias III, PE

Print Name

Date:

5/15/2022

STATE OF

COUNTY OF

Florida  
Broward

PERSONALLY APPEARED BEFORE ME, the undersigned authority, \_\_\_\_\_

Rafael E. Frias III

(name of individual signing)

space provided above on this 15th day of May 2022.

NOTARY PUBLIC

My commission expires: May 2, 2023



## CONTRACTOR CLASSIFICATION LISTING

### Construction

1. Excavation/Earthwork
2. Roadways, including Paving, Repair and Resurfacing
3. Stormwater Management Facilities
4. Water and Sewer Facilities
5. Irrigation Facilities
6. Landscape Installation
7. Hardscape Facilities
8. Streetlighting

### Maintenance

1. Exotic Vegetation Removal
2. Canal/Drainage Maintenance
3. Landscape and Irrigation Maintenance
4. Lake and Littoral Maintenance
5. Streetlighting



## **DETERMINATION OF QUALIFIED PROSPECTIVE BIDDER**

The West Villages Improvement District ("District") is authorized to maintain a list of qualified contractors ("Qualified Prospective Contractors") to submit bids for the procurement of District construction and maintenance projects. Any Qualified Prospective Contractor desiring to submit a bid to provide work for the District must submit a properly completed Contractor's Prequalification Statement to the District Engineer for review and evaluation.

The District shall evaluate the Contractor's Prequalification Statement and based on the District's judgment of the information provided, shall issue in writing to the contractor, the District's rating as to the classification(s) of the Work and the maximum Bid dollar amount for which the Qualified Prospective Contractor can submit a Bid to the District.

A Qualified Prospective Contractor shall mean a prospective contractor which in the sole judgment of the District has the capability, in all respects, to perform fully the contract requirements, and the business integrity and reliability which will assure good faith performance. In determining the Qualified Prospective Contractor's qualifications, the following criteria will be considered:

- The ability, capacity, and skill of the contractor to perform the contract or provide the work required;
- Whether the contractor can perform the contract or provide the work promptly, or within the time specified, without delay or interference;
- The character, integrity, reputation, judgment, experience, and efficiency of the contractor;
- The quality of performance of previous contract or work. For example, the following information will be considered:
  - o The cost overrun incurred by owners on previous contracts with contractor;
  - o The contractor's compliance record with contract general conditions on other projects;
  - o The contractor's record for completion of the work within the Contract Time or within Contract Milestones and contractor's compliance with scheduling and coordination requirements on other projects;
  - o The quality, availability, and adaptability of the goods or work to the particular use required;
  - o The contractor's demonstrated cooperation with owners, architects, engineers, and others on previous contracts; and;
  - o Whether the work performed and materials furnished on other contracts were in accordance with the contract documents; and
  - o Whether contractor has performed previous work for an independent special district.
- The previous and existing compliance by the Prospective Bidder with laws and ordinances relating to contracts or work;

- The sufficiency of the financial resources and ability of the contractor to perform the contract or provide the work;
- The ability of the contractor to fulfill its guarantee and warranty period;
- Such other information as may be secured by the Board having a bearing on the decision to award a contract to include, but not be limited to:
  - o The ability, experience, and commitment of the contractor to properly and reasonably plan, schedule, coordinate, and execute the work; and,
  - o Whether the contractor has ever been debarred from bidding or found ineligible for bidding on any other projects.
- The District will make such inquiries and investigations as deemed necessary to verify and evaluate the applicant's statements regarding:
  - o The necessary organization and management including experience possessed by the applicant's employees;
  - o Adequate equipment, as shown on the equipment list, to perform normal operations for each class of work in the industry such as that called for in the contract documents in force at the time of application;

For construction services, any contractor pre-qualified and considered eligible by the Department of Transportation to bid to perform the type of work the project entails shall be presumed to be qualified.

If herein required, or if requested by the District at any time after the conclusion of the initial pre-qualification process, the Qualified Prospective Contractor shall submit a certified financial statement(s) in a form acceptable to the District, prepared no later than the past 180 days, indicating current financial resources, current bonding capacity, liabilities, capital equipment, in its sole discretion, may adjust the Qualified Prospective Contractor's Prequalification contract limits

Furthermore, a Qualified Prospective Contractor acknowledges the right of the District to determine a Qualified Prospective Contractor to be not qualified to submit a Bid in response to the District's Advertisement for Bids at the sole determination of the District for, but not necessarily limited to, any of the following specific reasons:

- Failure to submit a properly completed Contractor's Prequalification Statement in accordance with the above requirements;
- Failure of the Qualified Prospective Contractor's rating by the District as to classification of the Work and the maximum Bid dollar amount to meet the requirements of the Bid;

- Reason to believe that collusion exists among Bidders;
- Determination of lack of competency as may be revealed by qualification statements, financial statements, experience records, or other sources;
- The Qualified Prospective Contractor's uncompleted work load which, in the judgment of the Board, may cause detrimental impact on timely completion of the project being bid; or
- The Qualified Prospective Contractor's Surety is unacceptable to District.
- Submission of excessive or unreasonable suggested modifications to the District's Standard Form of Construction or Maintenance Contract.

Any contractor submitting a Contractor's Prequalification Statement, which in its judgment is adversely affected by the District's rating as to the contractor's qualifications and wishes to protest such decision must file with the District a notice of protest in writing within seventy-two (72) hours (excluding Saturdays, Sundays and state holidays) after receipt of the notice of the District's ranking, and shall file a formal written protest within seven (7) days (including Saturdays, Sundays and state holidays) after the date of filing of the notice of protest. The formal written protest shall state with particularity facts and law upon which the protest is based. **Failure to timely file a notice of protest or failure to timely file a formal written protest shall constitute a waiver of all further proceedings under Florida law and the District's Rules of Procedure.** You may obtain a copy of the District's Rules of Procedure by contacting the District Manager's Office at 2501A Burns Road, Palm Beach Gardens, FL 33410.



UNCOMMONLY INDEPENDENT

January 5, 2021

**RE: Black & Veatch and its Affiliated Companies**

To Whom It May Concern:

We are pleased to provide this letter on behalf of Black & Veatch and its affiliated companies. Black & Veatch is a highly valued client of Lockton Companies, who serves as their bonding agent.

Bonding is provided in a co-surety arrangement by Federal Insurance Company (Chubb), together with Zurich American Insurance Company and/or its subsidiary Fidelity and Deposit Company of Maryland (Zurich). Federal Insurance Company is rated A++/XV by *A.M. Best*, and Zurich American Insurance Company, and Fidelity and Deposit Company of Maryland are both rated A+/XV by *A.M. Best*.

Chubb and Zurich have supported single project bonds in excess of \$500,000,000 on an aggregate bonded work program of \$1,000,000,000. They will give positive consideration to provide customary performance and payment bonds subject to their review of acceptable contract terms and conditions, bond forms, confirmation of adequate financing, as well as other underwriting conditions that may exist at the time such bonds are requested.

This letter is not to be construed as an agreement to provide surety bonds, but is offered as an indication of our past experience with this firm. Any request for bonds in this case and in other cases is a matter solely between Black & Veatch, its affiliated companies and its sureties, and they assume no liability to you or any third party if for any reason they do not execute said bonds.

Please consider this letter as a reference of this highly regarded client. In the event you have any questions or need additional information, please feel free to contact me at (816) 960-9155.

Sincerely,

KANSAS CITY SERIES OF  
LOCKTON COMPANIES, LLC

Debra J. Scarborough, AFSB  
Vice President/Senior Surety Specialist  
Surety Operations

## Attachment C – Full List of Open Contracts

				Applicant's Uncompleted Amount as of this Date		Completion Date		
Owner, Location and Description of Project	Current Contract Amount as Prime	Current Contract Amount as Subcontractor	Current Amount Sublet to Others	As Prime Contractor	As Subcontractor	Original Contract Date	Approved Revised Date	Current Estimate Date
VENICE, FL, CITY OF Black & Veatch PM: Emilie Moore AWIA COMPLIANCE PROGRAM SERVICES	\$235,049	\$0	\$0	\$75,876	\$0	Oct 2022		10/8/2022
CLEARWATER, CITY OF Black & Veatch PM: Rebecca Oliva Clearwater EOR WO - MS WRF THM Eval	\$85,910	\$0	\$0	\$30,456	\$0	Jun 2023		6/21/2023
CLEARWATER, CITY OF Black & Veatch PM: Rebecca Oliva Clearwater EOR WO - Residuals Handling Impvts	\$83,922	\$0	\$0	\$1,362	\$0	May 2022		5/20/2022
CLEARWATER, CITY OF Black & Veatch PM: Rebecca Oliva Clearwater EOR WO - SB64 Surface Wtr Discharges	\$86,576	\$0	\$0	\$33,618	\$0	Feb 2048		2/17/2048
CLEARWATER, CITY OF Black & Veatch PM: Rebecca Oliva Clearwater EOR WO - SCADA Master Plan Support	\$90,950	\$0	\$0	\$44,212	\$0	May 2022		5/19/2022
CLEARWATER, CITY OF Black & Veatch PM: Rebecca Oliva Clearwater WO - NEWRF Clarifier Splitter Box Rehab	\$183,204	\$0	\$0	\$169,141	\$0	Nov 2023		11/25/2023
CLEARWATER, CITY OF Black & Veatch PM: Rebecca Oliva	\$49,000	\$0	\$0	\$17	\$0	Jun 2022		6/10/2022

Clearwater Work Order - ESCO Data Rvw & Wrkshp								
CLEARWATER, CITY OF Black & Veatch PM: Rebecca Oliva Clearwater WRF Master Plan	\$2,498,271	\$0	\$0	\$2,353,234	\$0	May 2027		5/2/2027
PASCO COUNTY, FL Black & Veatch PM: Mike Tache Factory Talk (AssetCentre) Integration	\$125,486	\$0	\$0	\$83,662	\$0	Sep 2022		9/8/2022
HILLSBOROUGH FL, COUNTY OF Black & Veatch PM: Emilie Moore Hillsborough - Project Management Support Services	\$478,792	\$0	\$0	\$467,749	\$0	Dec 2025		12/8/2025
TAMPA BAY WATER Black & Veatch PM: Emilie Moore HSW TBW TBC SOURCE WATER PROTECTION PLAN	\$127,264	\$0	\$0	\$29,733	\$0	Oct 2022		10/12/2022
JEA Black & Veatch PM: Mike Tache JEA PDB Water Purification Plant	\$2,517,602	\$0	\$0	\$1,537,848	\$0	Mar 2023		3/21/2023
LAKELAND, CITY OF Black & Veatch PM: Emilie Moore LAKELAND RECLAIMED WATER BENEFICIAL REUSE STUDY	\$97,646	\$0	\$0	\$36,007	\$0	Aug 2022		8/6/2022
LAKELAND, CITY OF Black & Veatch PM: Mike Tache LAKELAND REGIONAL BIOSOLIDS STUDY	\$49,986	\$0	\$0	\$0	\$0	May 2022		5/21/2022
MANATEE COUNTY Black & Veatch PM: Mike Tache MANATEE NO SVC AREA FORCE MAIN REPLACEMENT PROJECT	\$115,548	\$0	\$0	\$9,741	\$0	Jul 2022		7/2/2022
MANATEE COUNTY Black & Veatch PM: Mike Tache MASTER WW LIFT STATION ELECTRICAL IMPROVEMENTS	\$768,482	\$0	\$0	\$373,112	\$0	May 2024		5/25/2024

PINELLAS COUNTY, FL Black & Veatch PM: Mike Tache Modeling Support for Pinellas Park Master Plan	\$17,400	\$0	\$0	\$7,424	\$0	Aug 2022		8/9/2022
VENICE, FL, CITY OF Black & Veatch PM: Emilie Moore NEW WATER BOOSTER PS	\$2,000,091	\$0	\$0	\$515,384	\$0	Mar 2024		3/18/2024
ST. PETERSBURG, CITY OF Black & Veatch PM: Rebecca Oliva NEWRF ELECTRICAL DIST - DESIGN & CPS	\$2,233,460	\$0	\$0	\$1,071,813	\$0	Apr 2023		4/16/2023
HILLSBOROUGH FL, COUNTY OF Black & Veatch PM: Rebecca Oliva NWRWRF Construction Phase Services	\$388,699	\$0	\$0	\$169,576	\$0	Sep 2023		9/22/2023
HILLSBOROUGH FL, COUNTY OF Black & Veatch PM: Emilie Moore NWRWRF Gas Turb Gen Elect Feeder	\$97,791	\$0	\$0	\$60,874	\$0	Nov 2022		11/2/2022
PASCO COUNTY, FL Black & Veatch PM: Mike Tache PASCO CNTY EMBASSY HILLS WWTF IMPROVEMENTS PROJECT	\$3,836,195	\$0	\$0	\$2,389,658	\$0	Dec 2026		12/27/2026
PASCO COUNTY, FL Black & Veatch PM: Mike Tache PASCO CNTY LACOOCHEE WELL DESIGN & CPS	\$121,108	\$0	\$0	\$0	\$0	May 2022		5/30/2022
PINELLAS COUNTY, FL Black & Veatch PM: Mike Tache PINELLAS COUNTY NORTH BOOSTER VALVE REPL STUDY	\$18,908	\$0	\$0	\$12,725	\$0	Sep 2023		9/5/2023
PINELLAS COUNTY, FL Black & Veatch PM: Mike Tache PINELLAS COUNTY WATER QUALITY DASHBOARD TOOL	\$34,861	\$0	\$0	\$5,989	\$0	Jun 2022		6/2/2022
PINELLAS COUNTY, FL Black & Veatch PM: Mike Tache	\$705,236	\$0	\$0	\$1,247	\$0	Dec 2022		12/22/2022

PINELLAS WATER SYSTEM MASTER PLAN								
PLANT CITY, FL, CITY OF Black & Veatch PM: Rebecca Oliva Plant City GES WO - WW Modeling Support Svs	\$49,918	\$0	\$0	\$21,761	\$0	Feb 2023		2/2/2023
PLANT CITY, FL, CITY OF Black & Veatch PM: Andy Westfall PLANT CITY WASTEWATER MASTER PLAN	\$451,591	\$0	\$0	\$11,492	\$0	May 2022		5/13/2022
PLANT CITY, FL, CITY OF Black & Veatch PM: Rebecca Oliva Plant City WO - Lift Station 2 Design	\$199,845	\$0	\$0	\$162,012	\$0	Jan 2023		1/25/2023
TAMPA BAY WATER Black & Veatch PM: Emilie Moore REISS ENG TBW BRANDON BOOSTER PUMP STATION	\$473,455	\$0	\$0	\$150,344	\$0	Jul 2025		7/23/2025
SARASOTA COUNTY, FL Black & Veatch PM: Mike Tache Sarasota County Wastewater Master Plan	\$198,323	\$0	\$0	\$160,462	\$0	May 2023		5/12/2023
MANATEE COUNTY Black & Veatch PM: Mike Tache SEWRF New Plant Drain PS	\$288,138	\$0	\$0	\$0	\$0	May 2022		5/25/2022
MANATEE COUNTY Black & Veatch PM: Mike Tache SEWRF RAS WAS Pump Station	\$385,896	\$0	\$0	\$2	\$0	Jun 2022		6/7/2022
HILLSBOROUGH FL, COUNTY OF Black & Veatch PM: Emilie Moore SOUTH CO. REPUMP STATION EXPANSION	\$397,890	\$0	\$0	\$43,992	\$0	Jan 2023		1/7/2023
TAMPA, FL, CITY OF Black & Veatch PM: Emilie Moore TAMPA POTABLE WATER HYD MODEL UPD	\$68,251	\$0	\$0	\$7,603	\$0	Sep 2023		9/14/2023



TAMPA BAY WATER Black & Veatch PM: Emilie Moore TBW CHEMICAL SYSTEMS MASTER PLAN	\$191,900	\$0	\$0	\$90,534	\$0	Sep 2022		9/15/2022
TAMPA BAY WATER Black & Veatch PM: Robert Burchett TBW DESAL LIFT STATION & FORCEMAIN IMP	\$81,701	\$0	\$0	\$5,684	\$0	May 2022		5/13/2022
TAMPA BAY WATER Black & Veatch PM: Robert Burchett TBW DESALINATION TRTMNT PLANT EXP FEASIBILITY STDY	\$2,759,980	\$0	\$0	\$352,000	\$0	May 2022		5/21/2022
TAMPA BAY WATER Black & Veatch PM: Emilie Moore TBW ELDRIDGE-WILDE WF PUMPS & MOTOR REPLACEMENTMP	\$2,982,743	\$0	\$0	\$1,062,006	\$0	Nov 2035		11/2/2035
TAMPA BAY WATER Black & Veatch PM: Emilie Moore TBW IPMC - Task 7 - 2022 Master Wr Plan Sel Proc	\$275,000	\$0	\$0	\$236,810	\$0	Feb 2023		2/19/2023
TAMPA BAY WATER Black & Veatch PM: Emilie Moore TBW IPMC WA 003 S COUNTY PIPELINE PROG MGT	\$550,000	\$0	\$0	\$473,113	\$0	Mar 2024		3/23/2024
TAMPA BAY WATER Black & Veatch PM: Emilie Moore TBW IPMC WA 004 DESAL INTAKE PH 2 DCP	\$380,130	\$0	\$0	\$273,496	\$0	Oct 2022		10/22/2022
TAMPA BAY WATER Black & Veatch PM: Emilie Moore TBW IPMC WA 005 FY-22 STAFF AUGMENTATION	\$250,000	\$0	\$0	\$122,803	\$0	Aug 2022		8/12/2022
TAMPA BAY WATER Black & Veatch PM: Emilie Moore	\$124,892	\$0	\$0	\$89,545	\$0	Oct 2022		10/7/2022

TBW IPMC WA-006-Screening Eval of Tampa RCW Opt								
TAMPA BAY WATER Black & Veatch PM: Emilie Moore TBW IPMC-WA 2 PROGRAM INITIATION SERVICES	\$249,997	\$0	\$0	\$119,363	\$0	Apr 2024		4/28/2024
TAMPA BAY WATER Black & Veatch PM: Emilie Moore TBW WA 001 REAL ESTATE GUIDELINES SUPPORT	\$55,998	\$0	\$0	\$5,783	\$0	Oct 2023		10/19/2023
HILLSBOROUGH FL, COUNTY OF Black & Veatch PM: Emilie Moore Valrico WRF Stormwater Improvements	\$58,965	\$0	\$0	\$50,222	\$0	May 2023		5/10/2023
VENICE, FL, CITY OF Black & Veatch PM: Mike Tache VENICE WWTP MASTER PLAN	\$198,747	\$0	\$0	\$109	\$0	Jun 2022		6/9/2022
HILLSBOROUGH FL, COUNTY OF Black & Veatch PM: Andy Westfall WELLHEAD PROTECTION	\$110,270	\$0	\$0	\$467	\$0	May 2022		5/21/2022
VENICE, FL, CITY OF Black & Veatch PM: Emilie Moore WTP SWITCHGEAR REPLACEMENT	\$373,452	\$0	\$0	\$161,352	\$0	Jun 2026		6/4/2026
<b>Subtotal Uncompleted Work</b>				<b>\$13,081,413</b>	<b>\$0</b>			
<b>Total Uncompleted Work on Hand</b>				<b>\$13,081,413</b>				



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

11/1/2022

10/20/2021

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

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

<b>PRODUCER</b> Lockton Companies 444 W. 47th Street, Suite 900 Kansas City MO 64112-1906 (816) 960-9000	<b>CONTACT NAME:</b> <b>PHONE</b> (A/C. No. Ext): <b>E-MAIL</b> <b>ADDRESS:</b>	<b>FAX</b> (A/C. No):
	<b>INSURER(S) AFFORDING COVERAGE</b>	
<b>INSURED</b> 1482177 BLACK & VEATCH CORPORATION 11401 LAMAR OVERLAND PARK KS 66211	<b>INSURER A:</b> Zurich American Insurance Company	
	<b>INSURER B:</b> Lexington Insurance Company	
	<b>INSURER C:</b>	
	<b>INSURER D:</b>	
	<b>INSURER E:</b>	
<b>INSURER F:</b>		<b>NAIC #</b> 16535 19437

**COVERAGES** **CERTIFICATE NUMBER:** 17033388 **REVISION NUMBER:** XXXXXXXX

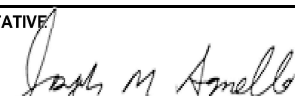
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE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

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> <b>COMMERCIAL GENERAL LIABILITY</b>	N	N	GLO 4641358	11/1/2021	11/1/2022	EACH OCCURRENCE \$ 2,000,000
A	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR			GLO 1365630	11/1/2021	11/1/2022	DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000
							MED EXP (Any one person) \$ 10,000
							PERSONAL & ADV INJURY \$ 2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE \$ 4,000,000
	<input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC						PRODUCTS - COMP/OP AGG \$ 4,000,000
	OTHER:						\$
A	<b>AUTOMOBILE LIABILITY</b>	N	N	BAP 4641355 (AOS)	11/1/2021	11/1/2022	COMBINED SINGLE LIMIT (Ea accident) \$ 2,000,000
	<input checked="" type="checkbox"/> ANY AUTO						BODILY INJURY (Per person) \$ XXXXXXXX
	<input checked="" type="checkbox"/> OWNED AUTOS ONLY						BODILY INJURY (Per accident) \$ XXXXXXXX
	<input checked="" type="checkbox"/> HIRED AUTOS ONLY						PROPERTY DAMAGE (Per accident) \$ XXXXXXXX
	<input checked="" type="checkbox"/> SCHEDULED AUTOS NON-OWNED AUTOS ONLY						\$ XXXXXXXX
	<b>UMBRELLA LIAB</b>			NOT APPLICABLE			EACH OCCURRENCE \$ XXXXXXXX
	<b>EXCESS LIAB</b>						AGGREGATE \$ XXXXXXXX
	DED <input type="checkbox"/> RETENTION \$ <input type="checkbox"/>						\$ XXXXXXXX
A	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b>	Y/N	N	WC 4641353 (AOS)	11/1/2021	11/1/2022	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER
A	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	<input checked="" type="checkbox"/> N	N/A	WC 4641354 (ID, MA, WI)	11/1/2021	11/1/2022	E.L. EACH ACCIDENT \$ 1,000,000
A	If yes, describe under DESCRIPTION OF OPERATIONS below			WC 1365632	11/1/2021	11/1/2022	E.L. DISEASE - EA EMPLOYEE \$ 1,000,000
				WC 1365631 (NE)	11/1/2021	11/1/2022	E.L. DISEASE - POLICY LIMIT \$ 1,000,000
B	<b>PROFESSIONAL LIABILITY</b>	N	N	026030198	11/1/2021	11/1/2022	\$10,000,000 PER CLAIM \$10,000,000 ANNUAL AGGREGATE

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

**CERTIFICATE HOLDER**

**CANCELLATION** See Attachments

<b>17033388</b> SAMPLE	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE 

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## Robert (Bobby) Burchett, P.E., ENV SP

Client Services Director

Mr. Burchett has over 20 years of experience focused on designing and managing water treatment and pumping facility projects in Florida. This includes: planning studies; detailed design; permitting; and construction phase services. He has extensive experience with the planning, design and construction of large pumping facilities, including hydraulic and surge pressure modeling; energy efficiency assessments, and optimizing pump sizing and operational control systems for pumps with VFDs. He has led pump station performance and efficiency assessments for numerous large pumping facilities throughout Florida, including for Tampa Bay Water, Peace River, Hillsborough County, Pinellas County, and the cities of St Petersburg, Tampa, Lakeland, Hollywood, and Marco Island.

### PROJECT EXPERIENCE

[Tampa Bay Water | Seawater Pump Station Replacement Project; Apollo Beach, FL | 2015-2016](#)

**Design Manager.** Responsible for the field assessments, design, permitting, and construction phase support for a progressive design build project that involved a replacement of a pump station facility that delivers supply to the Tampa Bay Seawater Desalination Facility. The project included new large diameter pump station suction and discharge header piping systems, re-conditioning and re-installation of four 26 mgd vertical turbine pumps and motors (two equipped with VFDs), and associated electrical and controls improvements.

[Tampa Bay Water | Eldridge-Wilde H2S Removal Facility and Pinellas County Points of Connection Updates; Tarpon Springs, FL | 2012-2015](#)

**Project Manager.** Responsible for the design, permitting, bidding and construction phase services for a variety of improvements to an existing 45 mgd groundwater supply and treatment facility and a new 60-inch diameter pipeline section to meter wholesale water supply flowrates up to 93 mgd. Improvements at the treatment facility include: process control enhancements for a packed tower aeration treatment process; four new pumps with variable speed drives; SCADA and instrumentation and controls improvements to support remote monitoring and control capabilities; 36-inch and 42-inch diameter yard piping improvements; and miscellaneous electrical and civil site improvements.

[Hillsborough County | Lake Park and Fawn Ridge WTPs – Pump Station Energy Efficiency Improvements Project; Tampa, FL | 2013](#)

**Project Manager.** Lake Park and Fawn Ridge WTPs – Pump Station Energy Efficiency Improvements Project, Hillsborough County, FL. Project Manager. Responsible for conceptual planning, design and supporting the implementation of energy use and efficiency monitoring enhancements for the Lake Park and Fawn Ridge WTPs and Pumping Stations. The project included an energy efficiency assessment of the pump stations, new power meters, and programming work that provided a display of real-time pump station energy



### OFFICE LOCATION

Tampa, FL

### EDUCATION

BS, Civil Engineering,  
Georgia Institute of  
Technology, 2000

### PROFESSIONAL REGISTRATION

PE – 2006, FL, 64762  
Envision™ Sustainability  
Professional

### PROFESSIONAL ASSOCIATIONS

American Water Works  
Association

YEAR CAREER STARTED  
2000

YEAR STARTED WITH B&V  
2000

## Attachment F – Black & Veatch Team Member Resumes

efficiency, and notifications on the operator screens to support avoidance of setting high energy demand charges and a reduction of energy use during on-peak billing periods.

[Tampa Bay Water | System Configuration II Program; Pinellas, Pasco and Hillsborough Counties, FL | 2006-2012](#)

**Engineering Manager.** Participated in a variety of planning, engineering analyses and program management support activities for the development and implementation of the System Configuration II Program. The System Configuration II Program includes ten projects that provided Tampa Bay Water with an estimated 25 mgd of additional supply capacity during a median year. Five of these projects increased the yield from Tampa Bay Water's existing Enhanced Surface Water System, and the other 5 projects involved improvements to increase the hydraulic capacity of Tampa Bay Water's finished water transmission system.

[City of Lakeland | Northeast Wellfield Energy Efficiency Project, Lakeland, FL | 2010](#)

**Engineering Manager.** Evaluated an existing wellfield supply system to identify pump and operational modifications to improve energy efficiencies. The evaluation resulted in low capital cost improvements that immediately provided a 30% improvement in the energy efficiency of the well pumps. The energy cost savings achieved provided a 1 year payback period on the capital costs for the well pump modifications that were made.

[Tampa Bay Water | Morris Bridge Booster Station Expansion; Tampa, FL | 2007-2010](#)

**Project Manager.** Responsible for planning, permitting, design, and construction phase services for improvements to an existing 45 mgd pump station and groundwater treatment facility. Improvements include the addition of a 1,000 HP vertical turbine pump with VFD, two additional 600 HP VFDs, yard piping and flow-metering improvements, and numerous upgrades to the electrical, instrumentation and controls, and chemical feed systems.

[City of New Port Richey | Maytum WTP Transfer Pumping Station Improvements; New Port Richey, FL | 2009](#)

**Project Manager.** Responsible for the planning, permitting, design and construction phase services for improvements to increase the hydraulic capacity of an existing 9 mgd transfer pump station system.

[Tampa Bay Water | System Engineer; Pinellas, Pasco and Hillsborough Counties, FL | 2000-2017](#)

**Project Engineer** for the following tasks:

- Planning – Developed and participated in a variety of planning efforts for Tampa Bay Water including System Configuration II/III analyses, SC Hillsborough Mid and Long-Term Water Supply Plan, Master Water Plan, Water Quality Master Plan, 2025 System Analysis Update, Emergency Outage Planning, and Standby Power Capacity Planning.
- Hydraulic Modeling – Participated in several hydraulic and transient/surge pressure modeling tasks involving current and projected future system conditions. Also participated in monthly water quality modeling tasks which used SCADA data to determine the blend of surface water, groundwater, and desalinated supply delivered to system demand locations.
- Engineering Analysis and Design – Provided engineering analyses for several facilities including Regional High Service Pump Station, Cypress Creek Pump Station, Morris Bridge Booster Pump Station, and Keller WTP.
- Piloting Trials – Participated in piloting trials at the Maytum WTP and the Tampa Bay Water Desalination Plant.
- Public Information – Participated in public meetings to present results of various system analyses including South Central Hillsborough Mid- and Long-Term Water Supply Plan, 2025 System Analysis Update, Emergency Outage Planning, Long Term Water Supply Planning, and Standby Power Capacity Planning.

## Attachment F – Black & Veatch Team Member Resumes

City of St Petersburg | Oberly and Washington Terrace Pumping Station Improvements; St Petersburg, FL | 2005-2009

**Project Engineer.** Responsible for the design of improvements at two high service pumping stations. Engineering tasks

included: existing facility assessment, field pump testing, hydraulic modeling, defining recommended improvements, and development of preliminary and detailed design documents.

South Florida Water Management District | Everglades Agricultural Area EAA A-1 Reservoir; West Palm Beach, FL | 2005

**Project Engineer.** Assisted with planning and design for Phase I of the Everglades Agricultural Area Reservoir Project (EAA), which is an above-ground reservoir for water storage, with a capacity of 190,000 acre-feet at a maximum depth of 12 feet. This project included design of a pump station with capacity up to 5,000 cfs (3,200 mgd), and design of modifications to existing pump stations and canals.

## Nick Alexandrou, GISP, IAM

### Asset Management Implementation Lead

Nick is an Asset Management Lead and GIS Professional with 10 years of experience in the Water Industry. His areas of expertise include CMMS Implementation, Cityworks platform optimizations, ArcGIS enterprise deployments and administration, system integrations with financial billing, permitting, and sewer CCTV. He has also implemented organization-wide asset management programs and strategies and performed large-scale data analysis for phased capital expenditure replacement plans for aging infrastructure. Nick recognizes the benefit a strong Asset Management Program, Data Analytics, and GIS can provide to organizations.

#### PROJECT EXPERIENCE

[City of Hollywood, FL Public Works | Cityworks Implementation; Hollywood, FL | 2020-2021](#)

**Project Technical Lead.** Nick was responsible for overseeing the design, development, implementation, and training of Cityworks for the City of Hollywood's Public Works Department. This project expanded on an existing Cityworks site in-use by the City's Public Utilities Department, and included the migration of historical work activity data from AssetWorks and Opra, as well as configuring Cityworks for Fleet Management, Roads, Facilities, Stormwater, and Parks & Rec.

[Charlotte Water and Sewer | Lead Copper Ruling Compliance Platform Development; Charlotte, NC | 2021-2022](#)

**Project Technical Lead.** Nick was responsible for overseeing the design and development of Black & Veatch's Lead Copper Ruling Compliance Platform. This Platform utilizes the Esri platform for Experience Pages, Dashboards, Survey123, Python API, and JavaScript API for a comprehensive system that is used for initial desktop discovery, field investigations, customer and contractor coordination, construction tracking, public engagement, water filter distribution, and full EPA compliance reporting.

[Sioux City | Sewer/Stormwater Risk and Criticality Assessment; Charlotte, NC | 2021-2022](#)

**Project Technical Lead.** Nick was responsible for developing the consequence and likelihood of failure scoring matrices for the City's Stormwater and Sewer systems as well as oversaw the analysis to determine at-risk and critical infrastructure. All data from the analysis was summarized and visualized in a series of web applications built around Esri's Experience Builder and Dashboards to help assist with CIP prioritization, master plan coordination, and City board and Public Engagement presentations.

[City of Marshall, MI | Cityworks Implementation; Marshall, MI | 2019-2020](#)

**Project Technical Lead.** Nick was responsible for overseeing the design, development, implementation, and training of Cityworks Online for the City of Marshall. The project involved water, wastewater collection, and wastewater



OFFICE LOCATION  
Tampa, FL

EDUCATION  
MS, Geographic  
Information Science

PROFESSIONAL  
REGISTRATION  
GISP Cert. #160706  
*GIS Certification Institute*

Asset Management  
Certification #6127217  
*Institute of Asset  
Management*

YEARS OF EXPERIENCE  
10

YEAR STARTED WITH B&V  
2021

## Attachment F – Black & Veatch Team Member Resumes

treatment. Nick's primary focus was on horizontal and vertical assets, routine inspections, preventative maintenance, and reducing the number of reactionary work orders. Development included integrations with the financial billing system and CCTV software and focused heavily on deployment of Cityworks Mobile and Cityworks Respond for field staff. This effort also involved a custom reporting task that involved a combination of Crystal Reports, Python reporting, Microsoft Power BI, and Cityworks, and ArcGIS Online Dashboards.

### Collier County | Utility Network Pilot Implementation; Naples, FL | 2020-2021

**Implementation Lead.** Nick served as Technical Lead for a feasibility study and pilot implementation of Esri's Utility Network across Collier County's Water, Sewer, and Reclaim networks. This effort involved a discovery phase to outline the schema transformations and requirements for each system as well as the development of Containers and vertical assets to be converted from related non-spatial records to diagrammed assets or non-spatial network objects for network flow modeling and tracing. It also included an IT infrastructure review and software update for Esri software version parity, the development of the Utility Networks for a subsection of the County that included a Water Treatment Plant and Sewer Liftstations as well as the distribution and collection assets, the publishing of the networks to ArcGIS Enterprise, and user training for branch version editing in ArcGIS Pro and network modelling/tracing via web services.

### City of Hallandale Beach, FL | Sea-level Rise Stormwater Resiliency Plan; Hallandale Beach, FL | 2020

**Technical Lead.** Nick led a team that incorporated surveyed elevations of Stormwater structures and top of pipe depths to develop a 3-dimensional model of the City of Hallandale Beach's Stormwater Infrastructure. This model was then analyzed against NOAA's 1, 3, and 5ft Sea-level rise projections to identify at-risk critical stormwater infrastructure that would sustain inundation in each scenario. This study then ranked the City's infrastructure considering age, consequence of failure, criticality, and sea-level rise impact to identify "hot-spots" that will require storm hardening in the future. This study was documented in a Sea-level Rise Stormwater Resiliency Plan that included findings and recommendations. A 3-dimensional viewer of the City was developed and shared publicly to show potential Sea-level rise impacts for citizen engagement during public workshops and presentations.

### Boston Water and Sewer Commission | Illicit Discharge Detection and Elimination Program; Boston, MA | 2018-2021

**Technical Lead.** In this multi-year study, Nick served as the technical lead overseeing a dedicated field team of 20 staff members and 3 office staff specifically for the investigation, detection, elimination, and reporting of illicit discharges through the entire Boston Water and Sewer Commission's network. This effort involved multiple custom Survey123 forms used by field staff with automated nightly python scripts that would perform Data Quality Checks on that day's field collected data and return an automated email to the field staff if any flags were identified. This project also involved numerous SQL functions and triggers to automatically update upstream assets status and findings depending on the water sample test results of downstream assets as well as nightly automated python scripts that would generate pre-formatted .docx reports of all the inspections performed that day (including image attachments) and email to the client for review and submittal to state and federal regulatory agencies. All data captured was tied to GIS assets that were used to develop a web app dashboard for use by Commission leadership for monitoring project progress and results of daily tests. An integration was developed between the field data that was captured and the Client's Cityworks environment so the building dye tests, manhole, and outfall sample and screening investigations performed would be imported into Cityworks as Inspections.

### Sarasota County | Stormwater Master Plan Level of Service Assessment; Sarasota, FL | 2020-2021

**Technical Lead.** In this effort, Nick served as the technical lead overseeing the data analytics and visualization for measuring and quantifying the Stormwater Level of Service throughout Sarasota County for roadway flooding, structure flooding, and water quality. Utilizing the most current Lidar data, Nick and his team developed a current DEM of the County to capture roadway elevations and interpolate finished floor elevations of structures. These elevations were then analyzed and compared to their stormwater sub-basin's 100-year flood elevation to identify



## Attachment F – Black & Veatch Team Member Resumes

individual structures and specific sections of roadways that did not meet the County's adopted Level of Service Standards. These areas were ranked and prioritized in conjunction with sub-optimal water quality hotspots to identify 15 individual target areas throughout the County that were prime candidates for Stormwater improvement projects that would address and improve roadway/structure flooding and water quality issues within the same project.

### [FEMA COR3 - Puerto Rico Electrical Power Authority—| FEMA EHP/Section 106 Compliance - PREPA Emergency Management Condition Assessment and Capital Funding Program Management; San Juan, PR | 2017-2019](#)

**Technical Lead.** This was an inter-governmental project supporting both FEMA, for FEMA EHP (Environment and Historical Preservation) FEMA Section 106 of the National Historic Preservation Act, and the Puerto Rico Electrical Power Authority for assessing, documenting, and updating their asset inventory to reflect the nearly 80% of assets that were destroyed and or repaired during Emergency Response efforts. Nick was the technical lead and managed a team of 5 in-office and 25 field staff to document emergency repairs, damage, and total replacement to the electrical infrastructure. This was to support the Puerto Rico Electrical Power Authority (PREPA) update their asset inventory and formulate individual infrastructure storm hardening and redundancy projects for Federal funding. In addition to the support for PREPA, Nick and his teams efforts were used by FEMA to document and measure the impacts to environmental or historically sensitive sites for the entire island of Puerto Rico. This involved the development of field collection applications, standardized collection forms, ArcGIS Enterprise platform for real-time monitoring and dashboarding for status and findings. Automated reports were also generated in FEMA's required report template formats to be submitted for compliance.

### [Los Alamos County | GIS System and Asset Management Enhancements; Los Alamos, NM | 2018-2020](#)

**Technical Lead.** Nick served as Technical Lead for this multi-year project which involved heavy data clean-up, including using Extract, Transform, and Load processes to merge multiple disparate data sources and integrate sewer main (PACP) CCTV videos to GIS. This project also consisted of financial system integration, assessing the value for all assets, using Python to develop a tool that recalculates depreciated value on a yearly/semi-yearly basis, financial report development using Python and Microsoft Power BI, and mobile application development for routine maintenance tasks and asset information collection.

### [City of Sarasota | ArcGIS Enterprise Deployment; Sarasota, FL | 2017-2018](#)

**Technical Lead.** Nick Designed and Implemented a multi-machine, high-availability ArcGIS Enterprise distributed across two physical data centers. This platform had redundancy at the database, ArcGIS Server, ArcGIS Portal, and Load Balancer level spread between two different data centers with scheduled nightly automated server and portal management tasks, automated data E,T,L and QC checks, as well as database backups and Emergency roll-up to Azure. Integrations were developed with CMMS and ERP, and the platform served as the central information hub for real-time data, mapping, and analysis during hurricane and other emergency operations.

### [City of Sarasota | GIS Integration with Water Meter Readings; Sarasota, FL | 2017-2018](#)

**GIS Coordinator.** Nick oversaw the integration between two disparate data storage systems so that Utilities managers could view meter readings via web-maps in ArcGIS Online. The city at the time did not have an AMI or AMR system deployed and was relying on manual meter reads performed bi-monthly. Water meter reading data was not being stored in an RDBMS so real-time readings and integrations could not be established, so the process involved automated python scripting that handled nightly exports and imports into SQL, SQL view layer development, publishing the ArcGIS Portal, and the development of an Operations Dashboard for Leadership to use which provided a quick, system-wide view of daily, weekly, monthly, and quarterly water usage.

### [City of Sarasota Utilities Department | Mobile Fire Hydrant Inspection Application; Sarasota, FL | 2016-2017](#)

**GIS Coordinator.** Nick analyzed workflows and designed, deployed, and trained Utility employees in the use of a mobile field inspection app for mandatory, yearly fire hydrant inspections. The application was a combination of

## Attachment F – Black & Veatch Team Member Resumes

Collector for ArcGIS with a custom HTML pop-up that would open a Survey123 form for each hydrant. The survey123 form would be pre-populated with relevant information about that hydrant required for yearly reporting so users did not have to repetitively enter information every visit, and was also included multi fields that would auto-calculate flow GPM and estimated flow GPM at baseline 20 psi given the readings taken by staff on residual, pitot, outlet diameter, etc. Nick also created an Operations Dashboard to provide management with a high-level overview of the progress and status of inspections to make sure field crews remained on schedule each year. All data collected was written to SQL-based SDE with custom SSRS reports that generated pdf's outputs.

### [City of Tamarac | Tamarac GIS Data and Environment Upgrades; Tamarac, FL | 2018](#)

**Technical Lead, Task Manager.** Performed an extensive Extract, Transform, and Load process to combine the data; merged it into an industry standard schema; and loaded it. The output was then evaluated with the client through a series of workshops to fine-tune each individual asset type. The result was a Tamarac-specific database that contained both industry standard information and information specific to Tamarac's work order processes and future asset management needs. Once the GIS data could be considered a single, authoritative source, Stantec then designed and implemented a new ArcGIS Enterprise platform for use and integration with Lucity as the City's preferred CMMS.

## Mark Thomas Seastead

### Information Solutions Principle

Mr. Seastead has over 20 years of program management, consulting, and system implementation and integration experience on projects for private entities, municipal government and water, wastewater, and transportation focused clients. He specializes in work and asset management program development, CMMS solution selection, business process mapping, systems implementation and refinement, systems integration, and end user training and support. Having led both large enterprise and small departmental efforts to both private and public-sector clients, Mark provides a unique experience in leading asset management and IT program development that focuses on practical usage measurable performance.

#### PROJECT EXPERIENCE

[Milwaukee Metropolitan Sewer District | Asset Management Plan; Milwaukee, W | 2019](#)

**Technical Specialist, Information Technology.** Developed data management strategies for implementation of an enterprise asset management program that integrates several technologies including: AssetView – data warehouse and analysis software, Power BI – Asset Management analytics platform, Esri GIS, Oracle WAM (CMMS), Bio-WIN, SCADA, CCTV, Oracle CC&B (finance system).

[Lansing Board of Water and Light | Well Management Enterprise Solution Review; Lansing, MI | 2019](#)

**Technical Advisor.** Mr. Seastead worked with the Lansing BWL team to review their current data sources, applications and collection processes and begin planning a path forward for the legacy Wellstat system. Ms. Hill was able to build a proof-of-concept ESRI enterprise database and determine that many of the board's needs could be met within a well-designed GIS-based solution without a large amount of custom application development.

#### Cityworks Experience

[Delray Beach | EAMS Implementation - Phase 1; Delray Beach, FL | 2018-2018](#)

**Project Manager.** Leading the migration of a legacy Computerized Maintenance Management System (CMMS), off Cartegraph and onto Cityworks AMS, for the City of Delray Beach Utilities and Parks & Recreation Department. This included developing an asset hierarchy, inventorying assets, defining business processes associated with maintenance management, EAMS system configuration, end user training, support and deployment of more than 40 tablets to the field for the first time. This project also included migration of the City's geodatabase to the Esri Local Government Information Model.

[Hollywood | EAMS Implementation - Phase 1; Hollywood, FL | 2018-Ongoing](#)

**Project Manager.** Leading the migration of a legacy Computerized Maintenance Management System (CMMS), off Accela and onto Cityworks AMS, for the City of Hollywood Utilities Department. This included developing an asset hierarchy, defining business processes associated with maintenance management, data



OFFICE LOCATION  
Charlotte, NC

EDUCATION  
MS, Resource Planning,  
Missouri State University,  
1996  
BS, Geology, The State  
University of New York at  
Fredonia, 1994

PROFESSIONAL  
ASSOCIATIONS  
American Water Works  
Association

YEAR CAREER STARTED  
1994

YEAR STARTED WITH B&V  
2016

## Attachment F – Black & Veatch Team Member Resumes

migration of strategic work and asset history, EAMS system configuration, end user training, support and deployment of tablets to the field.

### [Salt Lake City | EAMS Implementation - Phase 2; Salt Lake City, UT | 2016- Ongoing](#)

**Project Manager.** Leading the full implementation of an enterprise asset management system for the Salt Lake City Water Reclamation Facility (SLCWRF). This included developing an asset hierarchy, inventorying assets, defining business processes associated with maintenance management, EAMS system configuration, end user training and support. This project also includes integration with the GE Proficy iFix and iHistorian SCADA system.

### [Jackson Energy Authority | EAMS Implementation; Jackson, TN | 2016- Ongoing](#)

**Asset Management Lead.** This project is assisting the JEA Water and Sewer Departments with the implementation of a new Cityworks EAMS. Services include defining key business processes, asset hierarchy development, system configuration, integration with JEA CRM, testing, and system support. When completed the system will support field operations and maintenance of water and wastewater systems managed by JEA and provide them with real-time work and asset management performance, more effective work planning, and compliance for federally mandated wastewater asset management.

### [Forsyth County | EAMS/CMMS Selection; Forsyth County, GA | 2016- Ongoing](#)

**Asset Management Advisor.** This project is assisting the Water and Sewer Department with the creation of a CMMS selection RFP. Services include defining system requirements, assistance with development of RFP language, demonstration script development, RFP evaluation ranking criteria, and assisting client with submittal evaluations and system selection.

### [City of Greenville | EAMS Training; Greenville, SC | 2016-Ongoing](#)

**Project Manager.** This project provides ongoing EAMS training on the Cityworks platform for Public Works users. Mr. Seastead is also leading asset management workshops to gather requirements for system expansion, document business processes to be incorporated into the EAMS and provide an implementation plan for system expansion

### [City of Greenville | CMOM Self-Audit; Greenville, SC | 2018-2019](#)

**Asset Management Lead.** This project provided a CMOM self-audit to comply with regulatory requirements and to facilitate identification of needs for an ongoing asset management effort within the City's Public Works Department. Mr. Seastead led asset management workshops to gather requirements for system expansion, document business processes to be incorporated into the EAMS and provide recommendations to integrate an asset management focus as part of the City's CMOM program.

### [City of Rock Hill | CMMS Request Portal | Rock Hill, SC | 2017](#)

**Project Manager.** Development and deployment of a custom intranet based Service Request portal for all city employees to request facilities work. The portal takes advantage of the Cityworks Service Request API and generates a Cityworks Service Request for completion.

### IBM Maximo Experience

#### [Gwinnett County | IBM Maximo Upgrade; Lawrenceville, GA | 2018- Ongoing](#)

**Project Manager.** Leading the migration, testing, and validation of upgrading the Department of Water Resources Maximo implementation from version 7.5.0.5 to 7.6.3. Specific work tasks included an infrastructure assessment to verify Maximo v7.6.0.9 requirements are met, creation and migration of new BIRT reports from existing reports; Remediate existing custom database triggers as required; Configure Single-Sign-On (SSO); Work Center Jump Start Orientation – including installation and initial web-based training for standard Work Centers. Additional tasks included researching feasibility of utilizing existing Syclo Mobile Inventory Manager to operate against the Maximo v7.6.3 environment; and evaluate current Maximo user licenses relative to new licensing options from IBM.

## Attachment F – Black & Veatch Team Member Resumes

### Winston-Salem/Forsyth County Utilities | IBM Maximo Upgrade; Winston-Salem, NC | 2018-Ongoing

**Project Manager.** Leading the migration, testing, and validation of upgrading the Utilities Department Maximo implementation from version 7.3 to 7.6.3. Specific work tasks included developing a new asset hierarchy from the existing location only based hierarchy and mapping legacy work history to new assets infrastructure assessment to verify Maximo v7.6.0.9 requirements are met, migration of Cognos reports; Additional tasks included development of a utility wide strategic asset management policy, defining levels of service, risk factors, and translation of those factors into the Maximo configuration.

### Lucity Experience

#### Lee County | Asset Management Assistance (Lucity Reports); Lee County, FL | 2017-2018

**Project Manager.** Responsibilities include reviewing Lucity reports in Crystal Reports and documentation of the issues with the reports and Lucity data and recommending solutions to resolve.

#### Sea Coast Utilities | Lucity EAMS Implementation; Palm Beach Gardens, FL | 12/2018-Ongoing

**Project Manager.** Responsibilities include managing implementation of Lucity/Central Squared EAMS system, migration of assets from legacy CMMS, and providing departmental staff with initial user training.

#### Gwinnett County | SAP Barcoding Implementation; Lawrenceville, GA | 3/2018-Ongoing

**Project Manager.** Leading business process mapping efforts to define and document functional and technical requirements to implement a SAP based barcoding system for the Department of Water Resources warehouse management group. Phase 1 activities included identifying appropriate technology options, and developing a business case for approval from the County Finance Department. Phase 2 will include overseeing the implementation of the selected barcoding solution.

#### Unified Port District of San Diego | Phase 2 Enterprise Asset Management Program; San Diego, CA | 2016-Ongoing

**IT Technical Lead.** This project is building upon the Phase 1 initiative that Mr. Seastead while employed by another company. Mr. Seastead is leading requirements gathering, business process mapping and conceptual architecture design for a new Enterprise Asset Management System (EAMS). This includes defining requirements, preparing an RFP for system selection, and assisting the client with selecting, procuring and implementing the EAMS. The results of this effort will be a new EAMS that integrates with the existing SAP ERP system and deployed to over 150 new users with mobile technology.

#### City of Charlotte – DOT | EAMS Implementation; Charlotte, NC | 2016-Ongoing

**Project Manager.** This project is migrating CDOT from Hansen to Cityworks Enterprise Asset Management (EAM). Mr. Seastead is leading existing business process mapping, asset hierarchy development, requirements gathering for integration with the City's CRM program along with configuration, testing, and training. The results of this effort will be a fully implemented EAMS compliant with the rest of the City, improved business processes, and deployed EAMS to over 100 new users.

#### City of Greenville | CMOM Self Audit; Greenville, SC | 2017-2018

**Asset Management Specialist.** Led development of asset management approach and integration of asset management framework. Developed recommendations to improve CMOM compliance through an asset management framework. Developed CMMS system improvements to more effectively monitor CMOM related maintenance management activities.

#### City of Rock Hill | CMMS Support - Facilities Management; Rock Hill, SC | 2016

**Project Manager.** This project is assisting the City with implementing a facilities management focused computerized maintenance management system (CMMS). Services include defining key business processes and leading the system configuration, testing, training, and support for the client.

## Attachment F – Black & Veatch Team Member Resumes

### [Palm Beach County | Smart Integrated Infrastructure and GIS Technology Assessment; Palm Beach County, FL | 2016](#)

**GIS Advisor.** This project is assessing existing conditions related to GIS management for the utility. Mr. Seastead is evaluating existing business processes, staffing and expertise, systems architecture, and data quality. The results of this effort will be an implementation plan with prioritized strategic GIS process improvements to allow GIS to become a core data sharing platform throughout the Utility.

### **Prior Experience**

#### [Salt Lake City | EAMS Implementation; Salt Lake City, UT | 2014-2016](#)

**Project Manager - GHD, Inc.** Led the pilot implementation of an enterprise asset management system for the Salt Lake City Water Reclamation Facility (SLCWRP). This included developing an asset hierarchy, inventorying assets, defining business processes associated with maintenance management, EAMS system configuration, end user training and support.

#### [City of Rock Hill | EAMS Implementation; Rock Hill, SC | 2015-2016](#)

**Project Director - GHD, Inc.** Leading tasks associated with Cityworks upgrade, support and expansion. Upgrade of Cityworks from a desktop environment into a Cityworks Server AMS environment; creating custom training materials and “cheat sheets” for quick reference and the training of key staff.

#### [City of Fargo | EAMS Implementation; Fargo, ND | 2014-2016](#)

**Project Manager - GHD, Inc.** Senior Technology Consultant of the CMMS implementation for the City’s Public Works department, with responsibilities that include business process analysis and development, asset data collection planning, configuration design, GIS planning workshops, CMMS configuration, training, report development, and system integration design.

#### [City of Columbia | Metro Wastewater Treatment Plant EAMS Implementation; Columbia, SC | 2013-2016](#)

**Project Manager - GHD, Inc.** Project manager in charge of overseeing the successful implementation of Cityworks Server AMS within the plant environment. Responsibilities included management and deployment of a small-scale pilot, facilitating business process workshop, asset register and geodatabase development and validation, Cityworks system design and configuration, end-user training, and go-live support.

#### [Unified Port District of San Diego | Phase 1 Asset Management Program; San Diego, CA | 2014-2016](#)

**Technical Lead IT - GHD, Inc.** As a technical advisor, Mr. Seastead helped guide a late effort to migrate facilities asset data into a GIS format. Additionally, Mr. Seastead provided technical recommendations to relate the parks and facilities asset data to a GIS centric CMMS solution that are currently under advisement.

#### [Rural Water Association | Asset Management Training; Statewide, NC | 2012-2016](#)

**Instructor - GHD, Inc.** Mr. Seastead has provided Asset Management training to certified water and wastewater operators through participation in the NCRWA and NCAWWA training programs. These training programs typically consist of a three (3) hour workshop that covers the fundamental aspects of asset management including definitions of concepts such as level of service, probability of failure, asset registers, etc. At the end of the workshop participants have an understanding of the fundamental requirements that make up an asset management plan focused on utility infrastructure.

#### [Charlotte Area Transportation Services | Work and Asset Management Program; Charlotte, NC | 2014-2016](#)

**Project Director - GHD, Inc.** As a Project Director and Senior Technical Consultant leading effort to implement a CMMS and asset management program for facilities management to meet federal MAP-21 requirements. This project requires development of a CMMS capable of tracking and managing work for 13 facilities and all light rail platforms and bus stops throughout Mecklenburg County.

## Attachment F – Black & Veatch Team Member Resumes

### Charlotte - Solid Waste Services Department | Work and Asset Management Program; Charlotte, NC | 2014-2016

**Project Director - GHD, Inc.** As a Project Director and Senior Technical Consultant leading effort to migrate the Department away from a home-grown work management solution. This project included documenting more than 50 workflows, integration with 4 major applications including master address management, Lagan Public Sector (for 311), Emerald, and Tyler Munis (ERP). Also implemented was a materials management module, custom SSRS reporting and third-party accessibility for cart maintenance contractors.

### Charlotte Water | Work and Asset Management Program; Charlotte, NC | 2011-2016

**Project Director - GHD, Inc.** As a Project Director and Senior Technical Consultant, responsibilities include defining configuration requirements, GIS integration, and system deployment for web and desktop users of Azteca Cityworks, which is being utilized as the primary work management application. The WAM application was deployed using ArcGIS Server 2010 and Azteca AMS Server 2012, and is currently being accessed by more than 250 regular users. The application is managing more than \$2,000,000 in active inventory for over 8,000 miles of pipe and 200,000+ point assets; eight treatments plants, including five wastewater treatment plants and three water treatment plants; and more than 1.52 million square feet of facilities. All asset data is stored inside the geodatabase environment to limit asset hierarchies to no more than three levels deep. A portion of this project includes the migration of legacy work orders from Datastream MP2 into the Cityworks database. Key integrations occur with Oracle PeopleSoft, Emerald/311, ITPipes, and FireRMS.

### Union County, NC | EAMS Selection & Asset Management Framework; Monroe, NC | 2015-2016

**Technical Lead EAMS - GHD, Inc.** As a technical advisor Mr. Seastead assisted with the development of CMMS system functional and technical requirements, assisting with the development of RFP language, creation of vendor scripting and evaluation processes.

### Water Reclamation District of Southern California | Asset Management Program; Lakewood, CA | 2015-2016

**Technical Lead IT - GHD, Inc.** As a Technical Advisor Mr. Seastead assisted with the ISO 55001 based Asset Management GAP assessment. Mr. Seastead also led the CMMS selection task that included developing functional requirements, assisting with the development of RFQ language, creation of vendor scripting and evaluation processes, and assistance with developing consensus from WRD staff on final selection. Mr. Seastead also developed the framework for an Information Management Master Plan (IMMP) framework that is currently being implemented.

### Winston-Salem Forsyth County Utilities Commission | EAMS Planning; Winston- Salem, NC | 2014-2015

**Project Manager - GHD, Inc.** As Project Director Mr. Seastead oversaw an initial study that assessed the feasibility and identified needs associated with implementing an Enterprise Asset Management System (Cityworks). This study addressed data migration, GIS development, high level asset management needs, and provided recommendations to migrate select data that exists in IBM Maximo CMMS information into Cityworks.

### OWASA | EAMS Upgrade; Carrboro, NC | 2013

**Project Director - GHD, Inc.** Project Director for this project which assisted OWASA in the upgrade of Cityworks from a desktop environment to Server AMS 2012. GHD assisted with workflow mapping and modifications; updating Cityworks from Desktop 2012 to Cityworks AMS Server 2012; migration of materials warehouse items from MP2 to Cityworks Storeroom; and developing a solution to load North Carolina One Call Center (NCOCC) tickets directly into Cityworks Service Requests.



## Matt G Morey, GISP

### Solutions Lead

Mr. Morey is a Solutions Lead that supports Black & Veatch's Water Division. He has over 15 years of program management, consulting, and system implementation and integration experience on projects for municipal government public works and water, wastewater, and stormwater utilities clients. He specializes in CMMS solution requirements development, systems implementation and refinement, report writing, and systems integration requirements development.

#### PROJECT EXPERIENCE

##### [City of Hollywood; CMMS Implementation; Hollywood, Florida; 2018-In-Progress](#)

Asset Management and Information Systems Lead - Black & Veatch. Leading the implementation of the City's CMMS for Utilities. Implementation focused on the migration from the City's legacy system for linear and facility assets, and included historic data migration for all past work. Tasks included data migration design and development, designing and configuration of the CMMS, integration design and development, report design and creation, end-user training, and implementation planning.

##### [Gwinnett County Utilities; Maximo Enhancements; Gwinnett County, Georgia; 2018-In-Progress](#)

Asset Management and Information Systems Lead - Black & Veatch. Lead task for Maximo system updates including merging organizational data into a single utility-wide organization. This task included merging all groups warehouse materials into a single master list, standardizing commodity codes for all items to the UNSPSC standard, and providing end-user training for the updated system.

##### [City of Delray Beach; CMMS Implementation; Delray Beach, Florida; 2018-In-Progress](#)

Asset Management and Information Systems Lead - Black & Veatch. Leading the implementation of the City's CMMS for Utilities, Parks and Recreation, and Right-of-Way divisions. Implementation focused on the migration from the City's legacy system and included historic data migration for all past work. Tasks included data migration design and development, designing and configuration of the CMMS, report design and creation, end-user training, and implementation planning.

##### [Salt Lake City Utilities; CMMS Implementation for WRRF; Salt Lake City, Utah, United States; 2016-2018](#)

Asset Management and Information Systems Lead - Black & Veatch. Responsibilities include leading the implementation of the City's CMMS for the water reclamation facility. Primary tasks include geodatabase design for vertical assets, supporting and QAQC of field data collection, supporting an integration to the City's SCADA system, designing and configuration of the CMMS,



OFFICE LOCATION  
Charlotte, NC

EDUCATION  
BS, Marine Science,  
Coastal Geology, Coastal  
Carolina University, 2003

PROFESSIONAL  
REGISTRATION  
GIS – 2010, #00066654

YEAR CAREER STARTED  
2003

YEAR STARTED WITH B&V  
2016



## Attachment F – Black & Veatch Team Member Resumes

preventive maintenance task collection, report design and creation, business process analysis, and end-user training.

### [City of Charlotte Department of Transportation; CMMS Implementation; Charlotte, North Carolina, United States; 2016-In-Progress](#)

Asset Management and Information Systems Lead - Black & Veatch. Leading the CMMS implementation for the Departments Streets Maintenance, Traffic Operations, Public Service, and Planning Divisions. Responsibilities include business process analysis, system installation, system design and configuration, system integration design, report design and creation and training of key staff.

### [Jackson Energy Authority; CMMS Implementation; Jackson, Tennessee, United States; 2016-2017](#)

Asset Management and Information Systems Lead - Black & Veatch. Leading the CMMS implementation for the Authorities Water and Wastewater divisions. Responsibilities include business process analysis, system installation, system design and configuration, customer billing integration design, and training of key staff.

### [City of Mesa; Cityworks Implementation for Signal Butte Water Treatment Plant; Mesa, Arizona, United States; 2017-In-Progress](#)

Asset Management and Information Systems Lead - Black & Veatch. Leading implementation tasks of Cityworks Asset Management System (AMS) for Signal Butte Water Treatment Plant. Project tasks include asset registry and geodatabase design for facilities/vertical assets, asset data development from BIM and construction documentation, asset data loading, Cityworks software configuration, system testing, end-user training, go-live support, SCADA integration planning, and integration with SharePoint content and document management platform for maintenance plans and O&M manuals.

### [Charlotte Area Transit System; Implementation Support for Customer Service; Charlotte, North Carolina, United States; 2016-2017](#)

Asset Management and Information Systems Lead - Black & Veatch. Supported City staff with the implementation of the Service Request module for their existing CMMS to transition users off a home grown CRM system. Tasks included caller and call history data migration, user-interface customization including a bus driver lookup plugin, advanced database support, and reporting support.

### [Forsyth County Utilities; CMMS Selection Support ; Cumming, Georgia, United States; 2016-2017](#)

Asset Management and Information Systems Lead - Black & Veatch. Provided assistance to the County's staff for selection of a new CMMS system. Responsibilities included the development and review of system requirements, procurement documentation, demonstration script, evaluation criteria, and coordination of final selection.

### [City of Greenville; Asset Management Training & CMMS Gap Analysis; Greenville, South Carolina, United States; 2016](#)

Asset Management and Information Systems Lead - Black & Veatch. Provided the City's engineering staff with an asset management workshop to educate key staff on asset management concepts. Engineering and public works field staff was also provided training on their existing CMMS system to better understand the capabilities of the system. A gap analysis was performed to determine how the City could better utilize their CMMS to provide better cost accounting and other efficiencies.

### [City of Rock Hill; CMMS Implementation; Rock Hill, South Carolina, United States; 2016](#)

Asset Management and Information Systems Lead - Black & Veatch. Assisting with the upgrade of Cityworks from a desktop environment into a Cityworks Server AMS environment; updating existing configuration; creating custom training materials and "cheat sheets" for quick reference and the training of key staff.

## **Attachment F – Black & Veatch Team Member Resumes**

### **Buffalo Sewer Authority; Treatment Plant Expansion Maximo Updates; Buffalo, New York, United States; 2015-2016**

Sr. Technology Consultant - GHD Inc.. Senior Technology Consultant worked with the Engineering staff to define new assets and maintenance plans to be entered into the plant's CMMS, Maximo. Once the new assets and maintenance plans were defined, the updates were entered into Maximo to use by plant staff.

### **City of Rock Hill, SC; CMMS Upgrade and Support Services; Rock Hill, South Carolina, United States; 2014-2016**

Project Manager/Sr. Technology Consultant - GHD Inc.. Responsibilities included: assisting with the upgrade of Cityworks from a desktop environment into a Cityworks Server AMS environment; creating custom training materials and "cheat sheets" for quick reference and the training of key staff.

### **Boston Water Sewer Commission; CMMS Implementation; Boston, Massachusetts, United States; 2014-2016**

Sr. Technology Consultant - GHD Inc.. In collaboration with another Cityworks implementation partner, worked to implement Cityworks for the commission. Project tasks included assistance with system configuration, geodatabase design, training documentation, and system integration design and development.

### **City of Columbia, SC; Metro Treatment Plant CMMS Implementation; Columbia, South Carolina, United States; 2013-2016**

Sr. Technology Consultant - GHD Inc.. Lead the implementation of a GIS based EAMS within the plant environment. Responsibilities included management and deployment of a small-scale pilot, facilitating business process workshop, asset register and geodatabase development and validation, EAMS system design and configuration, end-user training, and go-live support.

### **Charlotte Area Transit System; Asset Management System Implementation; Charlotte, North Carolina, United States; 2013-2016**

Project Manager/Sr. Technology Consultant - GHD Inc.. Project manager and technical lead for the implementation of the Facilities division's asset management system, which is used to manage work for the division's buildings, light rail stations, and bus stops. Responsibilities include leading the implementation of the asset management system, developing business process workflows, using the ESRI BISDM template to design the asset registry geodatabase, system design and configuration, developing reporting requirements, and leading training efforts.

### **City of Charlotte, NC - Charlotte Water; Work and Asset Management (WAM) Program; Charlotte, North Carolina, United States; 2013-2016**

Sr. Technology Consultant - GHD Inc.. As Senior Technical Consultant, responsible for defining configuration requirements, GIS design, and system deployment for users of an EAMS, which is being utilized as the organization's primary work management application. The WAM application was deployed using an EAMS that is accessed by over 250 regular users and manages over \$2,000,000 in active inventory for 8,400+ miles of pipe, 400,000+ point assets, and eight treatment plants, including five waste water treatment plants and three water treatment plants.

### **Town of Chapel Hill; CMMS Implementation; Chapel Hill, North Carolina, United States; 2015**

Sr. Technology Consultant - GHD Inc.. Lead implementation and deployment of a service request component of an EAMS for the town's Public Works Department. Responsible for the overall project delivery including business process analysis, configuration design, deployment, training and support.

### **City of Fargo, ND; CMMS Implementation; Fargo, North Dakota, United States; 2013-2015**

Sr. Technology Consultant - GHD Inc.. Senior Technology Consultant of the CMMS implementation for the City's Public Works department, with responsibilities that include business process analysis and development, asset data collection planning, configuration design, GIS planning workshops, CMMS configuration, training, report development, and system integration design.

## **Attachment F – Black & Veatch Team Member Resumes**

### **City of Raleigh, NC; CMMS Implementation; Raleigh, North Carolina, United States; 2012-2013**

Technical Lead - Woolpert. Assisted in the implementation of the City's CMMS system for the Solid Waste Services, CIP Construction, Streets, and Stormwater divisions of Public Works. Implementation tasks included system design and implementation, system upgrade, report development, and training.

### **Oakland County Water Resources Commission; Collaborative Asset Management System (CAMS) Implementation; Waterford, Michigan, United States; 2009-2013**

Technical Lead - Woolpert. Technical lead for the implementation of a Collaborative Asset Management System (CAMS) for the Commission's water, wastewater, and stormwater assets. Implementation tasks included CMMS system design and implementation, hardware and software requirement development, geodatabase design, system installation, system upgrade, report development, historic data migration, and. Also supported the development of system integrations to County's utility billing, human resources, and financial systems.

### **City of Suffolk, VA; CMMS Implementation; Suffolk, Virginia, United States; 2007-2013**

Project Manager/Technical Lead - Woolpert. Assist with City-wide implementation of a the City's CMMS. Implementation tasks included system design and implementation, training, report writing, geodatabase design, development of hardware and software requirements, GIS and CMMS upgrade, and best practices consulting. The system has been implemented for the City's Traffic Engineering, Streets Maintenance, Stormwater, Solid Waste, Assessor, and Utility departments.

### **Metropolitan Sewer District of Buncombe County; CMMS Implementation; Asheville, North Carolina, United States; 2011-2012**

Technical Lead - Woolpert. Technical lead for the implementation of a CMMS for MSDBC's maintenance, and construction divisions. Implementation tasks included system design and implementation, geodatabase design review, system installation, system upgrade, report development, historic data migration, and training. The project also included integrating MSD's CCTV system with the CMMS.

### **City of West Melbourne, FL; Enterprise GIS and EAMS; West Melbourne, Florida, United States; 2009-2010**

Technical Lead - Woolpert. Performed a business process review; installed and configured ArcGIS Server, including ArcSDE; and implemented Azteca Cityworks for the Planning and Utilities Departments.

### **Metropolitan Sewer District of Cincinnati; CMMS Implementation; Cincinnati, Ohio, United States; 2008-2010**

Technical Lead - Woolpert. Assistance with implementation of Azteca's Cityworks computerized maintenance management system (CMMS) for MSDGC's sewer and stormwater collection operations; worked with staff to migrate historic work from a legacy work management system into Cityworks. Implementation tasks included system configuration, testing, report writing, and training.

### **City of Greenville, SC; CMMS Implementation; Greenville, South Carolina, United States; 2008-2010**

Technical Lead - Woolpert. Assisted the City's Public Works and GIS Departments in implementing Azteca's Cityworks for the Sewer, Transportation, Stormwater, Call Center, Construction Inspection, and Solid Waste Departments. This unique project allowed implementation experts to coach City staff through the implementation of the CMMS, with the staff performing most of the implementation tasks.

### **City of North Myrtle Beach; CMMS Implementation; North Myrtle Beach, South Carolina, United States; 2006-2008**

Technical Lead - Woolpert. Assisted in implementing Azteca's Cityworks as a CMMS for the City's Public Works and Public Utilities Departments. During the CMMS configuration, a geodatabase design and CMMS configuration were performed for transportation, stormwater, water, sewer, and wastewater treatment assets. This unique implementation currently uses a shared CMMS database with Horry County, which allows for cross-jurisdictional workflow to occur.

## **Attachment F – Black & Veatch Team Member Resumes**

### **St Johns County, FL; Asset Inventory and CMMS Implementation; St Augustine, Florida, United States; 2005-2008**

Technical Lead - Woolpert. Worked with the County's project team to implement a CMMS for the pavement, roads and bridges, traffic, and fleet divisions. A geodatabase was designed and implemented to house the asset data collected by survey staff to be used within the CMMS. The project team performed the installation, data loading and tuning of the Department's enterprise geodatabase, and assisted the Department with the upgrade their enterprise RDBMS.

### **Horry County; CMMS Implementation; Conway, South Carolina, United States; 2004-2006**

Technical Lead - Woolpert. Assisted in the implementation of an Azteca Cityworks Computer Maintenance Management System (CMMS) for the County's stormwater division; integration of the software with the existing GIS; updating existing business processes to embrace the Cityworks and GIS technology; and providing onsite Cityworks training. County staff training performed on SDE and SQL implementation in preparation for installation of new hardware and migration of data.

## Amanda Schwerman, P.E., ENV SP

### Senior Planning Engineer

Ms. Schwerman's experience is focused on water and wastewater-related planning projects. Her expertise lies in water and wastewater hydraulic modeling, but she has experience with process/mechanical design as well. She is involved with professional societies including chairing the WEF Collections System Committee's workshop group, working on the WEF Envision Taskforce, participating with AWWAs Engineering Modeling Applications Committee (EMAC) and M32 Updates, is a Trustee and the Membership Chair for WaterReuse Florida and is a certified Envision Sustainability Professional.

#### PROJECT EXPERIENCE

##### Wastewater Planning

[Plant City | Wastewater Master Plan; Plant City, FL | 2018-Ongoing](#)

**Engineering Manager.** Plant City's Utilities Department collection system services a population of approximately 38,000 people. The goal and objective of the Wastewater Master Plan (Project) is to assist City staff in providing a reliable and robust system with adequate capacity to accommodate future growth within the City's sewer service area. Their collection system includes more than 140 miles of gravity pipes, 20 miles of forcemain, and 44 lift stations using **InfoWorks ICM**. Tasks included: field data collection, population and demand projections, sewer treatment capacity, model update and calibration, hydraulic analysis, asset management strategy development, risk-based facilities assessment, CIP planning and master plan documentation.

[Broward County | Regional Wastewater Master Plan; Pompano Beach, FL | 2019-2020](#)

**Planning Manager.** In consideration of aging infrastructure and to best allocate the limited capital funds for the rehabilitation, repair or replacement of such infrastructure, which would cost significantly less than emergency mobilization repairs, B&V completed a Regional Wastewater Master Plan focusing on the regional transmission mains and master pump stations. The Master Plan allows Broward County to effectively provide risk analysis and prioritization with the objective of maintaining a desired level of service for its customers, communities and the environment at an acceptable level of risk and low cost for the rehabilitation, repair or replacement of its assets. Tasks included hydraulic and transient modeling, risk prioritization and condition assessment plan for the force mains, and inspection/condition assessment of the master pump stations. B&V used Survey123 data collection forms to inventory the asset data and provide condition scores to each asset. The ultimate delivery is an adaptive capital improvement plan tied to project triggers tied to decision support tools to track the triggers.



PROJECT ASSIGNMENT  
**Asset Management**

OFFICE LOCATION  
**Tampa, FL**

EDUCATION  
**MS, Environmental Science and Engineering, Colorado School of Mines 2006**  
**BS, Engineering, Colorado School of Mines 2005**

PROFESSIONAL REGISTRATION  
**PE – 2010, FL, #70751**

**Envision™ Sustainability Professional**

PROFESSIONAL ASSOCIATIONS  
**American Water Works Association (Engineering Modeling Applications Committee, and M32 Update Contributor)**  
**Water Environmental Federation (Collections Systems Committee, Workshop subcommittee Vice Chair)**  
**Florida Water Environment Association**  
**WaterReuse Association (Trustee 2016-2019 and Membership Chair)**

YEAR CAREER STARTED  
**2005**

YEAR STARTED WITH B&V  
**2013**

## Attachment F – Black & Veatch Team Member Resumes

### [Lee County | Wastewater Master Plan; Lee County, FL | 2018-Ongoing](#)

**Engineering Manager.** Lee County's Utilities Department collection system services a population of approximately 250,000 people. The goal and objective of the Wastewater Master Plan (Project) is to assist County staff in providing a reliable and robust system with adequate capacity to accommodate future growth within the City's sewer service area. Their collection system includes 10 service areas more than 650 miles of gravity pipes, 350 miles of forcemain, and 690 lift stations. The model was developed in **InfoWater** because the Master Plan hydraulic analysis was only conducted for the forcemain portion of the collection system. Tasks included: field data collection, population and demand projections, sewer treatment capacity, model update and calibration, hydraulic analysis, CIP planning and master plan documentation.

### [Miami-Dade Water and Sewer Department | CT-2 Central District Wastewater Treatment Plant – Tertiary Filtration Pilot Test and Effluent Pump Station Evaluation; Miami, FL | 2018](#)

**Lead Modeler.** Provided professional services to perform a surge (a.k.a. transient or water hammer) analysis of the existing effluent pump station using Bentley's HAMMER. The primary objective of the project was to assess the transient potential of the effluent pump station to confirm that the air valves on the effluent pipeline are adequate for the increased flow rate. Tasks included: sequence of operation recommendations, inertia calculations wave speed analysis, and transient scenario development.

### [City of Venice | Venice Water Master Plan Update; Venice, FL | 2017-2018](#)

**Engineering Manager.** The City of Venice's Utilities Department treats groundwater and distributes the treated water to service a population of approximately 22,000 people in the City of Venice/South Sarasota County area. The goal and objective of the Water Supply Master Plan (Project) is to assist City staff in providing a reliable and robust water system with adequate capacity to accommodate future growth within the City's water service area. The City of Venice uses an average of approximately 2.0 mgd of drinking water from one WTP. Their distribution system includes more than 76 miles of piping, 1 booster station and 2 elevated storage tanks and is an all-pipes model, using **InfoWater**. Tasks included: field data collection, population and demand projections, water supply and treatment capacity, model update and calibration, hydraulic analysis, water age and chlorine residual correlation, water quality evaluation, CIP planning and master plan documentation.

### [City of Tampa | Potable Water Master Plan; Tampa, FL | 2015-2018](#)

**Engineering Manager & Lead Modeler.** Responsible for executing the potable water master plan and deliverables. The project included: updating and calibrating the existing hydraulic model using **InfoWater**, distribution analysis and improvements for four planning years (2015, 2020, 2025, and 2035), pumping and storage facility capacity assessments, resiliency and reliability assessments, asset management program development, risk based pipeline prioritization using **InfoMaster**, capital improvement program and Master Plan documentation. The City of Tampa distribution service area serves a population of approximately 610,000 people across 1 pressure zone at an average day demand of approximately 70 mgd. The distribution system includes one water treatment plant, five repump stations with tanks and several interconnections with Hillsborough County and Tampa Bay Water.

### [City of Tavares | Downtown CRA Water and Wastewater Improvements; Tavares FL | 2012-13](#)

**Lead Water and Wastewater Modeler.** The City of Tavares is planning for growth within the City. Much of the City's projected future growth is planned for the Downtown Community Redevelopment Area (CRA), a 400 acres portion of the City. To support the future growth within the CRA, improvements to the existing water distribution and wastewater collection and transmission system are required. The calculated future potable water demand and wastewater flow were modeled to determine the location of necessary improvements to the system. Field survey and utility mapping work were performed to obtain the location and depth of existing water and wastewater infrastructure. Both the water and wastewater hydraulic models (**InfoWater** and **SewerGEMS**, respectively) were updated with the survey information and used to determine the required improvements to meet the projected population increase. Improvements included: water main upsizing, water main looping, water and sewer main

## Attachment F – Black & Veatch Team Member Resumes

extensions, gravity sewer resloping, gravity sewer upsizing, force main upsizing, lift station pump selection/replacement, and lift station wetwell replacement. Detailed construction drawings and an EOPCC were completed based on the results of the hydraulic models.

### Pinellas County | Water and Sewer Optimization Study; Pinellas County, FL | 2015-2020

**Engineering Manager.** The County has embarked upon an Optimization Program for its water, sewer and reclaimed water systems that involves using the “Envision Process”, which is an in-depth guidance and rating system used to assess and improve the sustainability metrics of infrastructure projects. The Program initially involved a comprehensive optimization study of the assets associated with or affecting the South Cross Bayou Water Reclamation Facility (SCBWRF). The objectives of the optimization study include, but were not limited to, reducing energy use, reducing O&M costs, process optimization and technology improvements, and triple bottom line sustainability (economic, environmental, and social) of the facility. The COUNTY is responsible for operating and maintaining the water, sewer, and reclaimed water systems within the designated service areas under the jurisdiction of the Pinellas County Florida Board of County Commissioners. Over three billion dollars in assets are included in the water and sewer systems.

### City of Tavares | Lift Station 49 Planning and Improvement Assessment; Tavares FL | 2013

**Lead Modeler.** The City is experiencing growth in the sanitary service area for Lift Station 49 (LS 49) due to medical facility and development expansions. LS 49 currently discharges to a 10-inch gravity sewer interceptor which has a history of surcharging. To determine the extent of existing surcharging and the effects of additional loading, the existing hydraulic model, modeled in **InfoWorks CS**, was used to determine the best improvement option. Options included upsizing/resloping the existing gravity sewer or diverting flow to a manifolded force main which is already connected to four existing lift stations.

**Edward J. Carpenetti, P.E.**

Condition Assessment Practice Leader

Black & Veatch



OFFICE LOCATION  
Gaithersburg, Maryland

EDUCATION  
MS, Environmental  
Science and Engineering,  
Virginia Polytechnic  
Institute and State  
University, 2005

Certificate, Water Quality  
Management, Virginia  
Polytechnic Institute and  
State University, 2005

BS, Geoscience,  
Pennsylvania State  
University, 1998

PROFESSIONAL  
REGISTRATION  
PE – #36922, MD  
PE – #0402045312, VA, 2009

PROFESSIONAL  
CERTIFICATIONS  
Certified Trainer - National  
Association of Sewer  
Service Companies  
(PACP/MACP/LACP)

NASSCO – Certified  
Manhole Rehabilitation  
Inspector Certified

Certified Project Manager

PROFESSIONAL  
ASSOCIATIONS  
Water Environment  
Federation (WEF) – WEF  
AM Committee

Chesapeake Water  
Environment Association  
(CWEA) – Past CSC  
committee Chair

NASSCO – Asset  
Management Committee  
Chair

YEAR CAREER STARTED  
1999

YEAR STARTED WITH B&V  
2021



## Attachment F – Black & Veatch Team Member Resumes

As a Program Director with over 20 years of engineering experience, Edward has supported a variety of water and wastewater programs with the development of comprehensive Capital Improvement Plans (CIPs); and condition assessment, rehabilitation, and asset management plans. In addition to his professional work, Ed is very active in the industry and has volunteered his time to support WEFs AM Committee and NASSCOs AM Committee with the development of asset management training modules.

In addition to his professional work, Ed is very active in the industry and has volunteered his time to develop National Association of Sanitary Sewer Companies condition assessment protocols; and is currently supporting the WEF AM Committee and NASSCOs AM Committee with the development of asset management training modules. Mr. Carpenetti has experience training and presenting technical information to stakeholders and is a certified NASSCO PACP/MACP/LACP Trainer.

### PROJECT EXPERIENCE

#### [Black & Veatch | Condition Assessment Practice Lead, East Region | 2021 - Present](#)

**Role.** Responsible for building a regional condition assessment team that utilizes a wide range of condition assessment tools to assess water, wastewater, and stormwater infrastructure.

Perform a comprehensive condition assessment of the force main associated with Lift Station 43 (LS 43). The LS 43 Force Main conveys wastewater approximately 1.5 miles from LS 43 on 75th Avenue south of Southern Avenue, along 75th Avenue, to Broadway Road. The force main has three barrels constructed of 24-inch diameter ductile iron pipe referred to as Barrels 1, 2, and 3.

Review existing practices/processes, evaluate and provide recommendations on how to improve WSSC's Preventative Maintenance implementation processes; evaluate existing data management systems to optimize workflows; and review the existing preventative maintenance tracking dashboard. The objective of the program was to improve efficiencies in the existing preventive maintenance program for the sanitary sewer system.

Provide PCCP program support and/or emergency support services at the request of the WSSC Water. These services include inspection coordination, replacement/repair support services and support, program coordination, scope coordination, pipeline drawing review, and data review and management, and other services.

Oversaw engineering services such as, but not limited to, inspection, field support, field investigation of areas of concern, safety planning and management, permit acquisition, any other tasks assigned by the WSSC Water, overall coordination with the WSSC Water and other consultants and contractors. When applicable, following the excavation and replacement of PCCP, the BV completed forensics investigation. Safety planning and management will be completed throughout the course of the work to be performed.

#### [Baltimore County Department of Public Works | Consent Decree Program Manager; Baltimore, MD | 2019 – 2021](#)

**Role.** In coordination with County staff, Mr. Carpenetti develops tactical asset management plans for DPWs sewer (horizontal and vertical), stormwater and transportation departments. In this role he coordinates with County Senior management and IT staff to coordinate asset management implementation activities. Ed also works closely with technical staff to develop condition assessment programs and optimized maintenance programs based on asset management practices and principles. As a result of this work Baltimore County has developed a gravity sewer asset management plan and is in the process of developing tactical AM plans for: Manholes, Force Mains, Pump Stations, Stormwater conveyance, Water Distribution, and paving.

#### [Baltimore County Department of Public Works | Consent Decree Program Manager; Baltimore, MD | 2015 – 2019](#)

**Role.** Mr. Carpenetti provided technical support to the Bureau of Engineering and Construction, and Bureau of Utilities Chiefs with the development and review of operations and maintenance (O&M) plans, and master



## Attachment F – Black & Veatch Team Member Resumes

schedules. Responsibilities also include: evaluating operating and maintenance strategies to identify alternative management methodologies to improve efficiencies; coordinating with County staff to develop the County's sewer cleaning program and the risk-based inspection program; identifying and evaluating special projects to improve O&M efficiencies such as the County's sewer acoustic inspection pilot study; and reviewing asset management software to develop predictive maintenance strategies such as the fats, oils and grease (FOG) control and collection system re-inspection programs.

Specific experience included:

- Performed infiltration and inflow characteristics and reduction studies for the Washington Suburban Sanitary Commission and Baltimore County to evaluate pipeline capacities. Results of the studies resulted in a reduction in the average number of dry weather and wet weather overflows.
- Evaluated and quantified the probability of an overflow based upon pipeline dimension, age, type of material, location and other ancillary attribute data.
- Developed user friendly tools to effectively evaluate historical maintenance management data, as-built drawing, geographic information system (GIS), work order management and ancillary database information. These tools are used to optimize work assignments and minimize the number of reported basement backups and overflows reported by Baltimore County.
- Performed site visits and desktop reviews to identify and quantify the extent of environmentally sensitive areas impacted by emergency and non-emergency repair and replacement work. Calculated estimates were utilized to expedite approval of Joint Permit Applications between the EPA and MDE, minimize impacts to flora and fauna and threatened and endangered species, and minimize the amount of wetland restoration work required to obtain all necessary environmental permits.
- Performed Sewer System Evaluation Surveys (SSES) to establish baseline conditions necessary to comply with Consent Decree requirements and the development of Long Term Control Plans. The baseline condition assessments consisted of the identification and quantification of inflow and infiltration rates, development of hydraulic models to identify the frequency and return period of storm events, creation of an asset registry, quantification of an assets likelihood and consequence of failure, development of a risk model to prioritize the order in which work is completed and the development of a sustainability and resiliency model.

### [New Jersey Department of Environmental Protection | Regional Stormwater Infrastructure Toolkit Development; Norther NJ | 2019-2020](#)

**Technical Expert.** Development of a Regional Stormwater Infrastructure Toolkit for five municipalities within the Meadowlands region of New Jersey. Examined green infrastructure training programs, and general infrastructure maintenance training programs and identified best asset management practices. The deliverable provided an explanation of Training Program Best Practices, reasons for their identification; and provides specific examples of their implementation within other jurisdictions, educational institutions, businesses, and other settings.

### ADDITIONAL EXPERIENCE

### [Washington Suburban Sanitary Commission \(WSSC\) | Sewer Basic Ordering Agreement \(BOA\); Montgomery and Prince George's Counties, MD | 2008 - 2011](#)

**Program Manager.** Lead engineer responsible for the investigation of WSSC's largest gravity sewer pipeline, the Anacostia 102-inch Trunk Sewer, which included the completion of an internal evaluation utilizing CCTV, Sonar, and Lidar. He also oversaw the completing of a H2S analysis and a structural analysis for this trunk sewer. Based on the results of the investigation, Ed was responsible for preparing the rehabilitation design, which included the

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evaluation of multiple large diameter pipe rehabilitation technologies, the preparation of details and specifications, and a detailed hydraulic analysis.

### WSSC | Consent Decree Program – Design Services; Laurel, MD | 2008 - 2011

**Principal Civil Engineer.** Responsible for the design of sanitary sewer renewal projects (sewer pipe and manholes) and the restoration of stream reaches. Design responsibilities included the cured in place renewal of sanitary sewer pipes ranging in size from 8-inches to 24-inches (approximately 100,000 linear feet), the renewal of 8-inch to 15-inch pipes through the use of pipe bursting technologies (approximately 2,700 linear feet), and the emergency replacement (40 linear feet) and renewal of a 66-inch reinforced concrete pipe through the installation of Spiral Wound PVC (900 linear feet). Also responsible for replacing and renewing manholes utilizing CIP bag liners and spray on/trowel on liners (approximately 75,000 vertical feet).

### WSSC | Consent Decree Program – Program Management Services; Laurel, MD | 2008 - 2011

**Program Manager.** Mr. Carpenetti was responsible for the development of their long-term plan to meet WSSCs Sewer Repair, Replacement and Renewal Plan. In support of this program he directed internal staff, contract managers and design consultants, developed the annual sewer rehabilitation budget, coordinated permitting activities with regulatory agencies, and coordinate contracts between multiple groups within WSSC. As part of the program management team, Mr. Carpenetti was responsible for the development and completion of Commission-wide initiatives such as the development of a database to integrate maintenance and construction related inspection data into WSSCs existing Maintenance Management System, was a member of the WSSC team to develop asset management protocols for sewer assets, and the development of a lateral naming convention so that all linear assets can be added to WSSCs GIS system. He was an active member of WSSC Material Evaluation Committee. Professional Services: 2008-2011.

### WSSC | Cabin John SSES Project; Montgomery County, MD | 2007 - 2008

**Project Manager.** Mr. Carpenetti was the main point of contact between the firm and various WSSC Project Managers responsible for the completion of the Cabin John SSES Report, which was used to identify the Priority 1 assets listed in the Cabin John SRRR3 Report. As the Project Manager, Ed was responsible for maintaining compliance with WSSCs Consent Decree, overseeing the completion of flow monitoring activities, completing an inflow and infiltration analyses, finalizing the Cabin John hydraulic modeling report, rectifying data between various flow monitoring activities, and the development of rehabilitation alternatives. Ancillary tasks to facilitate the completion of the Cabin John SSES included the CCTV inspection and cleaning of assets associated with WSSC Proactive Maintenance Plan, developing internal protocols for the identification and inspection of exposed sewer assets along trunk sewer alignments, and the development and implementation of a electronic inspection program to automate the inspection of manholes. Professional Services: 2007-September 2008

### WSSC | Capital Improvement Plan (CIP); Montgomery and Prince George's Counties, MD | 2009 - 2011

**Principal Civil Engineer.** Responsible for the completion of CIP and emergency sewer rehabilitation tasks who directed professional staff in the study, development and design of sewer rehabilitation projects, and supervising the preparation of and the review of plans, specifications, cost estimates and contract documents. Mr. Carpenetti negotiated the scope of work, budget of contracts and task orders; participate actively in WSSCs utility master plan program; and served as the wastewater collection system group representative to WSSCs Material Evaluation Committee. He conducted an evaluation of chemical grout which WSSC now considers Chemical Grout a viable rehabilitation technology, as well as developed a three-staged exposed sewer component/ impacted stream reach investigation program. Mr. Carpenetti also developed an asset management database that will be used to will be used to design rehabilitation/repair/replacement contracts.

### DC Water | TM-9 Proposed Downspout Disconnection for DC Waters CSO LTCP; Washington, DC | 2013 - 2014

**Lead Author.** Completed an independent review of active downspout disconnection and green infrastructure programs (Seattle Washington, Milwaukee Wisconsin, New York, New York, Philadelphia Pennsylvania, and Boston

## Attachment F – Black & Veatch Team Member Resumes

Massachusetts) across the United States. The review included the completion of a benchmarking survey to determine how other cities implemented their program, changes made to the program based on lessons learned, reviewed local regulations associated with each program and evaluated the applicability of implementing a downspout disconnection program in the District of Columbia. Results of the benchmarking survey were summarized in a comprehensive report that provided DC Waters Clean Rivers division with a recommended program approach, benefits and anticipated results and regulatory and logistical barriers to meeting the program goals.

### Hydrostructures, LLC; Arbutus, MD | 2011 - 2014

**Maryland Division Manager/Senior Project Manager.** Oversaw the day to day operations of Hydrostructures Arbutus, Maryland office. In this role, provided technical guidance for complex or unique assignments related to the infrastructure market with particular emphasis on rehabilitation and the application of trenchless technologies and field service activities such as sanitary sewer evaluation survey (SSES) investigations, closed circuit television (CCTV) inspections, and cleaning activities. Gained diversified knowledge of engineering principles and practices for the purpose of planning and design activities; communicated regularly with clients, and independently made decisions on significant design engineering problems or methods. Individual projects included:

- Baltimore County - Stemmers Run SSES
- Baltimore County – On-Call Cleaning and Inspection
- WSSC CCTV Cleaning and Inspection Services

### BP Products North America, Incorporated, Mid Atlantic Portfolio, Maryland, Delaware, District of Columbia, and Virginia | 2005 - 2007

**Mid Atlantic Portfolio Manager for the Environmental Compliance Programs for BP.** As the portfolio manager, served as the primary point of contact and liaison between BP, the Environmental Protection Agency (EPA), and respective state agencies. The portfolio consisted of 40+ sites with an annual budget of \$1.7 million. Responsibilities included: developing and managing yearly remediation budgets; forecasting BP's 10-Year Mid Atlantic Compliance Budget; training staff dedicated to the BP project on all BP health and safety requirements; managing and overseeing professional and field staff; developing, designing, and implementing various remediation strategies; analyzing the quality of groundwater to determine the fate and transport of contaminants; analyzing and interpreting analytical data; serving as technical advisor for regulatory compliance issues; preparing and submitting internal and external reports; and initiating technical reviews of reports for quality control.

### BP Products North America, Incorporated, Mid Atlantic Portfolio, Maryland, Delaware, District of Columbia, and Virginia | 2003 - 2004

**Site Manager.** Served as a and oversaw operations at new petroleum release sites. Responsibilities included: providing daily updates to the Maryland State Project Manager; procuring and scheduling subcontractors; coordinating and overseeing field staff and subcontractors; developing and writing work plans, corrective action plans, etc.; and interpreting field data and serving as principal writer of the subsequent reports. Ultimately promoted to Mid Atlantic portfolio manager for the Environmental Compliance Programs for BP.

## Martin Jones, BEng MSc MBA CEng MICE MIAM

### Asset Management Services Lead

Mr. Jones is the Asset Management Services Lead in Black & Veatch's Planning & Asset Management Group, and has nearly 25 years' experience in the international water industry. He is an experienced project manager and specializes in water utility asset management and regulatory audit. He is also an approved assessor for International Organization for Standardization (ISO) 55001 and Publicly Available Specification (PAS) 55 under the Institute of Asset Management (IAM) Endorsed Assessor scheme, and holds the IAM Certificate and IAM Diploma in Asset Management.

Martin is a member of the American Water Works Association Asset Management Committee. He is also a Chartered civil engineer. Martin has undertaken a variety of asset management projects including asset management assessments, asset valuations, PAS 55 and ISO 55001 implementation and strategy development. Martin was also a lead auditor undertaking technical audits for certification of regulatory information for two UK water companies.

#### PROJECT EXPERIENCE

##### [California DWR | Asset Management Program; California | 2015-Ongoing](#)

**Task Lead.** In Phase A, led the initial ISO 55001 assessment and the development of the Asset Management Policy, Program Development Strategy that included an organizational review, and an Implementation Plan that included over 20 improvement initiatives and a Management of Change Plan.

In Phase B led the development of the Asset Management Framework, Risk Framework, and Maintenance Management Strategy. Recently led the development of a long-term (50-year) R&R forecast for SWP assets that included dams. Currently implementing asset risk management processes and developing asset management plans. The risk management processes include enterprise asset risk and asset risks, with the development of an asset risk register.

##### [Peace River Manasota Regional Water Supply Authority | Asset Inventory Survey and Renewal Forecasting; Arcadia, FL | 2019 - 2020](#)

**Asset Management Lead.** Project involved developing a renewal and replacement forecast for the Authority's assets which include 70 miles of transmission main, a 51 MGD Water Treatment Plant, a 6-billion-gallon reservoir, pumping stations and ASR wells. Tasks included an asset inventory survey and condition assessment of the facility assets, a risk assessment of the facility and pipeline assets, a useful life assessment and forecasting rehabilitation and replacement costs, and development of a dynamic asset management plan using Power BI.



OFFICE LOCATION  
Alpharetta, GA

EDUCATION  
MBA, Open University  
Business School, 2005  
MSc, Water Resource  
Systems Engineering,  
University of Newcastle  
upon Tyne 1997  
BEng, Civil Engineering  
(2:1 Hons) University of  
Bristol, 1996

PROFESSIONAL  
REGISTRATION  
Chartered Engineer (UK)  
No: 49727244

PROFESSIONAL  
ASSOCIATIONS  
Member of Institution of  
Civil Engineers (UK)  
Engineering Council (UK)  
Member of the Institute of  
Asset Management

YEAR CAREER STARTED  
1997

YEAR STARTED WITH B&V  
2012

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### Hampton Roads Sewer District (HRSD) | Asset Management Program, Virginia Beach, VA | 2016-Ongoing

**Technical Manager.** Led an ISO 55001 gap assessment and developed the improvement roadmap. Now in final year of implementing the asset management program, that included developing an Asset Management Framework that included an Asset Management Policy and Strategy, developing levels of service and KPIs, and the approach for developing dynamic asset management plans.

### Tulsa Metropolitan Utility Authority | Utility Enterprise Initiative, Tulsa, OK | 2013-Ongoing

**Principal Consultant.** Part of team that developed and implemented an asset management change program for the Water and Sewer Department and the Engineering Department of the city of Tulsa. Led PAS 55 assessment and roadmap development, and development an asset management framework including strategy and objectives. Have performed annual update assessments using ISO 55001, and most recently performed a pre-certification assessment.

### Milwaukee Metropolitan Sewer District | 2050 Facilities Master Plan, Milwaukee, WI | 2014-2017

**Principal Consultant.** Advising on the development of asset management plans based on the International Infrastructure Management Manual. This task included the development of a risk assessment methodology, including a risk register template and business case form. Project will involve optimization of the capital improvement program (CIP) once projects are developed.

### Iberdrola USA | Capital Planning and Risk Assessment Training; USA | 2013-2014

**Principal Consultant.** Reviewed Iberdrola's approach to investment planning for electricity and gas transmission and distribution assets, and facilitated training workshops on investment planning best practice including case studies. Then developed criticality criteria for asset risk assessment and facilitated workshops to refine the criteria and provide training in risk assessment. Also developed spreadsheet asset risk register tool.

### Gwinnett County Department of Water Resources | Pump Station Risk Assessment and Prioritization; Gwinnett County, GA | 2013

**Principal Consultant.** Developed risk assessment approach for wastewater pump stations.

### Abu Dhabi Distribution Company | Asset Management Improvement Program; UAE | 2013

**Principal Consultant and Assessor.** The Abu Dhabi Distribution Company is responsible for electricity and water distribution for Abu Dhabi. Spent two weeks in Abu Dhabi interviewing staff as part of PAS 55 assessment. Undertook a gap analysis and helped develop an improvement roadmap.

### Drainage Services Department | Enhanced Management of Underground Sewer and Drain Networks; Hong Kong | 2013

**Principal Consultant and Subject Matter Expert.** Advised on the development of sewer deterioration models and development of a sewer rehabilitation and replacement plan following a risk based approach.

### BC Hydro | PAS 55 Assessment; Canada/USA | 2013

**Principal Consultant and Assessor.** Part of team that updated BC Hydro's previous PAS 55 assessment for Transmission and Distribution, including document review, interviews, and workshops.

### Salt River Project | Transformer Asset Management; USA | 2012-2013

**Principal Consultant.** Activities focused on transformer management, including an asset management maturity assessment, a review of organizational structure, and a review of processes. Subsequent phase focused on implementation, with development of an asset management team structure, asset management policy and strategy, and a risk management process.

## Justin Mitchell

### GIS Developer & Data Scientist

Mr. Mitchell is a data science professional with eight years of consulting experience. The projects he has worked on include energy and water asset management for municipalities, wetland and stream mitigation banking/restoration, raster analysis/spatial statistics projects for environmental suitability, large scale field collection/survey efforts with custom built applications, creating custom tools using python to automate report generation/large processing tasks, Cityworks implementations, and assisting FEMA with emergency and disaster response.

Environmental and geospatial sciences are interdisciplinary and constantly evolving, which is why Mr. Mitchell is always prepared to learn new things and adapt to the needs of a project. Whether this means utilizing new technologies, researching additional methodologies, or consulting peers for alternative perspectives, he is always looking for the most efficient path to a complete and thorough product.

## Project Experience

### [Server GIS & Cityworks Deployment | Marshall Michigan | 2021](#)

**GIS Lead.** Mr. Mitchell was responsible for the development & implementation of cloud based-GIS services and Cityworks management systems. In addition, he developed complete workflows including mobile and program management components for several routine and regulated water quality programs.

### [Sanitary & Stormwater Risk Assessment | Sioux City Iowa | 2022](#)

**GIS Lead.** Mr. Mitchell developed a custom tool with python that accepts multiple input data sources and implements a weighting ranking system to each individual pipe to provide municipalities a granular view of their systems health.

### [Lead & Copper Rule | Multiple Projects | 2022](#)

**Solutions Manager/Implementation Lead.** Mr. Mitchell developed a complete system to assist municipalities with the various compliance requirements related to the EPA's Lead & Copper Rule revisions/improvements. The latest technologies were leveraged to provide real time data, reduce data entry redundancy, and manage the entire program including customer coordination, field work, and project management reporting/key performance indicators.



#### EDUCATION:

MS | GIS | Pennsylvania State University

Graduate Certificate | Computer Programming | Pennsylvania State University

BS | GIS | University of Florida

#### TOTAL YEARS OF EXPERIENCE:

10

#### B&V YEARS OF EXPERIENCE:

1

#### OFFICE LOCATION:

Tampa, Florida | United States

## Attachment F – Black & Veatch Team Member Resumes

### [Hi Hat Ranch Application for Master Development | Hi Hat Ranch | Sarasota, Florida, United States | 2019](#)

**GIS Lead.** Mr. Mitchell led the spatial data collection and analysis efforts for the 10,000-acre Hi Hat Ranch property. He assisted in the development of field data collection applications for listed wildlife, jurisdictional wetlands, existing land use, and other environmental data. He participated in data collection, supported field staff in the transition from traditional GPS units to the latest technologies offered by ESRI, and was responsible for the post-processing, analysis and mapping of all data collected. Mr. Mitchell also led the design of a custom GIS tool to calculate the Transfer of Development Rights units (TDR) for the site based on county Zoning Regulations. This process included analysis of existing land cover and proposed development use to calculate the number of residential units that could be assigned throughout the property and subsequently transferred from areas of high environmental value into areas more appropriate for development. Justin created dynamic data tables to allow efficient review of modeling results by the client and agency reviewers.

### [Interstate 4 Corridor Environmental Assessment | Hillsborough County | Sarasota, Florida, United States | 2021](#)

**GIS Lead.** The Interstate 4 Corridor Environmental Assessment contracted by Hillsborough County was requested to document baseline conditions for use in informing future discussions and decisions regarding future land use within the study area. The RFP requested a report and mapping summarizing the analysis of several potential project area characteristics but did not specify an analysis methodology or the actual datasets to be used. In evaluating a geospatial analysis approach, Mr. Mitchell reviewed over 50 datasets from which he selected eight (8) for analysis. He then designed a weighted overall analysis scoring and weighting scheme to accomplish the work. Mr. Mitchell designed the weighted overlay analysis scoring and weighting, completed the geospatial analysis using a custom-built weighted overlay analysis tool, and designed and created the final mapping products.

### [Utility Asset GPS Location & Attribute Collection | City of Sarasota | Sarasota, Florida, United States | 2019](#)

**GIS Analyst.** Mr. Mitchell has been involved in the development of field collector applications and GIS data management. He has also been in the field collecting the GPS locations of meters, manholes, valves, and other assets.

### [GIS System & Asset Management | City of Los Alamos New Mexico | Los Alamos, New Mexico, United States | 2019](#)

**GIS Analyst.** Mr. Mitchell is assisting in the asset management for the city of Los Alamos New Mexico including their water distribution, wastewater, and gas system while utilizing and integrating the latest in geospatial technologies.

### [FEMA & EHP Disaster Support | COR3/Navigant | Puerto Rico | 2019-2019 |](#)

**GIS Analyst.** When Hurricane Maria hit Puerto Rico, the island was almost entirely without power. During the reconstruction and repair of these electrical systems, potential environmental impacts were made. Mr. Mitchell is a part of the team that is identifying and reporting on the impacts through the FEMA EHP process. He analyzed and compiled all field data collected by Stantec staff. There also became an apparent need for better management of the assets owned and maintained by the Puerto Rico Electric Power Authority. Mr. Mitchell employed the latest in GIS technologies to efficiently manage and analyze damage assessments for poles and lines, work/repairs performed, access roads created during the repairs, and much more. He was responsible for producing nearly one thousand maps and many excel exports during the reporting and permitting process of the project.



## Ravi Nalamothu, PE

### Senior Engineer

Ravi has over fourteen years of experience in water resources management. He is an expert in minimum flows and levels (MFLs) and hydraulic and physical habitat modeling for MFLs. Ravi has extensive knowledge of hydrology and hydraulics to develop efficient modeling tools. He has managed variety of projects including MFLs and Water Resource Values (WRVs) assessment, hydrologic and hydraulic modeling, environmental/water use/stormwater permitting, forensic assessments, ecohydrology, and groundwater remediation. His ecohydrology work involves multi-discipline, scientific assessments to determine regulatory minimum flows and levels assessments for rivers, estuaries, and springs. He is well versed in the data collection using ADCP and application of hydro-ecological models using software's such as PHABSIM and SEFA, and numerical modeling codes for the analysis of watershed and stream hydraulics (HEC-1/HEC-HMS, HEC-2/HEC-RAS, HSPF) and groundwater (MODFLOW, MT3D, RT3D, SEAWAT). Mr. Nalamothu completed multiple physical habitat models and HEC-RAS models for water management districts in Florida.



#### PROJECT EXPERIENCE

##### [Southwest Florida Water Management District | Rainbow River Floodplain Analysis | Marion County, FL | 2016-2016](#)

**Project Manager.** Completed floodplain analyses using HEC-RAS, HEC-geoRAS, and ArcGIS software for SFWMD. Analyses were performed to determine the correlation between flow and stage along the Rainbow River and Wetland Community Inundation Areas.

##### [Southwest Florida Water Management District | Water Quality Study | Shell Creek, FL | 2016-2017](#)

**Project Manager.** Completed the water quality mass balance to determine the agricultural excess runoff reaching the Shell Creek in SWFWMD. The analysis was used to determine the Shell Creek baseline flows by adjusting the measured flows with excess agricultural runoff.

##### [South Florida Water Management District | Regional Rainfall-Runoff Modeling | St. Lucie and Indian River Counties, FL | 2009-2010](#)

**Lead Modeler.** Developed regional rainfall-runoff model for C-25 Basin in SFWMD. The Wash (Watershed) software, an ArcGIS based model based on HSPF, was used to evaluate the hydraulic reconnection of the C-25 Basin with C-52 Basin in SJRWMD. Model simulations supported the Indian River/St. Lucie Counties Water Resource Study and feasibility evaluations of alternative storage reservoir designs.

##### [Suwannee River Water Management District | Aucilla and Wacissa River Minimum Flows and Levels | Live Oak, FL | 2014-2015](#)

**Project Manager.** Developed the HEC-RAS model for Aucilla/Wacissa Rivers and the HEC-RAS model was used to establish functional relationship between river stage and flow for MFLs assessment. The MFLs prescribed a flow withdrawal schedule that are protective of the rivers hydrologic and ecosystem functions.

#### OFFICE LOCATION

Tampa, FL

#### EDUCATION

MS, Environmental Engineering, University of Central Florida, 2007

Bachelor of Technology, Civil Engineering, Indian Institute of Technology-Madras, India, 2005

#### PROFESSIONAL REGISTRATION

PE – 2015, FL, #80250

#### PROFESSIONAL ASSOCIATIONS

National Groundwater Association

Society of American Military Engineers

#### YEAR CAREER STARTED

2007



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### [Suwannee River Water Management District | Lower Santa Fe and Ichetucknee River Minimum Flows and Levels | Live Oak, FL | 2019-2020](#)

**Project Manager.** Developed the HEC-RAS model for Lower Santa Fe and Ichetucknee Rivers and the HEC-RAS model was used to establish functional relationship between river stage and flow for MFLs assessment. Completed technical analysis of hydro-ecology, hydrology, WRV, and field assessments supporting MFLs development for these rivers and associated priority springs.

### [Suwannee River Water Management District | Upper Suwannee River Minimum Flows and Levels | Live Oak, FL | 2020-2021](#)

**Project Manager.** Updated the HEC-RAS model for the Upper Suwannee River. The HEC-RAS model was used to establish functional relationship between river stage and flow for MFLs assessment.

### [Suwannee River Water Management District | Springs Assessment | Live Oak, FL | 2018-2019](#)

**Project Manager.** Project manager and technical lead responsible for developing spring-flow ratings for 17 priority, first- and second-magnitude springs in North Florida based on available groundwater level and river stage data using linear and non-linear regression analysis (R, SPSS).

### [Southwest Florida Water Management District | Rainbow River Spatial Mapping | Marion County, FL | 2016-2017](#)

**Project Manager.** Project Manager and technical lead responsible for river mapping (water depth/velocity) data collection on Rainbow River using multiple Acoustic Doppler Current Profilers for hydrodynamic modeling.

### [Southwest Florida Water Management District | Upper Withlacoochee River HEC-RAS Data | Dade City, FL | 2020-2021](#)

**Project Manager.** Project Manager and technical lead responsible for installation of Sontek IQ plus at three locations within the upper portion of the Withlacoochee River. Flow and stage data at 15 min intervals were collected for a period of two years for HEC-RAS model calibration/validation. Data was used to develop both Index-velocity and stage-discharge ratings.

### [Northwest Florida Water Management District | Merritt Mills Pond HEC-RAS Review | Dade City, FL | 2021-2022](#)

**Project Manager.** Project Manager and technical lead responsible for review of the existing HEC-RAS model. Additional data collection at multiple locations was recommended for better calibration and validation of the HEC-RAS model.

## Nicholas Wyatt, E.I.

### Implementation Specialist

Nick is a member of the Asset Management Information Solutions team that supports their Water Division. He has experience in system implementation and integration on projects for municipal government public works and water, wastewater, and stormwater utilities clients. He specializes in systems implementation and refinement, report writing, GIS analysis, and workflow automation via Python.

#### PROJECT EXPERIENCE

[City of Delray Beach | Cityworks Implementation, Phase 2; Delray Beach, FL | 2019-In-Progress](#)

**Asset Management and Information Solutions Systems Analyst.** Delray Beach's Cityworks Implementation Phase II includes the implementation of the Public Works department. Tasks included in the project are assistance with data migration for Public Works, Cityworks configuration, reporting, end-user training and go-live support. Responsibilities included Cityworks configuration, reporting in Crystal Reports, performing Cityworks training, and providing go-live support.

[Southern Nevada Water Authority | Horizon Lateral Water Main; Las Vegas, NV | 2021-In-Progress](#)

**Data Management.** Responsible for development and implementation of data management strategies and workflows. Utilizing the Microsoft Power Platform and Azure Ecosystem such as Power Apps, Power Automate, and Azure Functions to monitor, manage, and audit the reception, response to, and updating of file systems across multiple file management platforms.

[Department of Public Utilities | Cityworks Implementation; Hollywood, FL | 2018-In-Progress](#)

**Cityworks Implementation Specialist.** Assisting with the implementation of the City's CMMS for Utilities. Implementation focused on the migration from the City's legacy system for linear and facility assets and included historic data migration for all past work. Tasks assisted on include data migration design and development, designing and configuration of the CMMS, integration design and development, report design and creation, end-user training, and implementation planning.

[City of Delray Beach | Cityworks Implementation, Phase I; Delray Beach, FL | 2018-2019](#)

**Asset Management and Information Solutions Systems Analyst.** Delray Beach's Cityworks Implementation Phase I included migrating the Utilities department from another CMMS to Cityworks, all of which was completed within a short timeframe. Tasks included in the project were assistance with GIS geodatabase design, data migration, Cityworks configuration, end-user training and go-live support. Responsibilities included Cityworks configuration, producing Cityworks training materials, performing Cityworks training, and providing go-live support.



OFFICE LOCATION  
Tampa, Florida

CERTIFICATIONS  
E.I.—2020, MO,  
EI-2020012119

EDUCATION  
BS, Geological  
Engineering, Missouri  
University of Science and  
Technology, 2018

YEAR CAREER STARTED  
2018

YEAR STARTED WITH B&V  
2019

## Attachment F – Black & Veatch Team Member Resumes

### Simon Watson, CMRP

#### Maintenance Manager Leader

Mr. Watson has extensive experience in all aspects of asset and maintenance management development and adoption in water and wastewater. Prior to joining BV Mr. Watson was the O&M National Practice Leader for 8 years at Brown and Caldwell. Before he started in the consulting business Simon worked for 23 years at Orange County Sanitation District (OCSan), including 13 years as the Maintenance Manager. His responsibilities in this capacity included oversight and management of up to 115 full-time employees; development and management of joint operating budgets of up to \$19 million; development and implementation of the District's Asset Management program and a reliability engineering group; management and oversight of mechanical maintenance, collection systems maintenance, corrosion management program, building and grounds, and computer maintenance management systems.

#### PROJECT EXPERIENCE

[California State Water Project Asset Management Program Development, Department of Water Resources \(DWR\), CA | 2015-Ongoing](#)

**Maintenance Management Strategy Development and Management of Change Task Lead and Asset Management Program Deputy Task Lead.** Simon led the development of the Management of Change (MoC) plan and Maintenance Management Strategy to support implementation of the Asset Management Program (AMP), encompassing more than 1,200 employees, 700 miles of canals and pipelines, 34 storage facilities, and 29 pumping and generating plants that produce 1,700 megawatts (MW) and deliver three-million acre-feet of water throughout California. As the deputy lead for the AMP, he assisted in a gap analysis and preparation of a multi-year implementation roadmap, including a risk register and risk map development for the entire State Water Project and an improvement plan for the plant and civil condition assessment programs. He is currently providing assistance with implementing the Maintenance Management Strategy by facilitating the development of the Maintenance Plan development process, Asset Engineer job descriptions and providing program oversight of Maintenance Plans being developed.

[Preventive Maintenance Framework Improvements, Washington Suburban Sanitary Commission, VA | 2021-Ongoing](#)

**Maintenance Management Lead.** Simon led the update of the failure modes and failure effects for plant assets that will be used in the CMMS to track failures. In addition, a high-level evaluation of the maintenance programs was completed including sight visits, data review, and interviews with staff. Prioritized recommendations were provided for optimizing the maintenance program that included the application of predictive maintenance technologies.

[Asset and Maintenance Management Program Development, City of Emporia, VA | 2021-2022](#)

**Maintenance Management Lead and Subject Matter Expert.** Responsible for assisting in developing an Asset Management Plan. The project provided an asset inventory including an overall condition assessment for each asset, levels of service, risk vulnerability, a cost analysis, Rehabilitation and Replacement Forecast, and annual maintenance plan.

[Asset Management Program Development, Louisville and Jefferson County Metropolitan Sewer District, Louisville, KY | 2020-2021](#)

**Maintenance Management Lead and Subject Matter Expert.** Responsible for assisting in developing the strategic assessment management plan (SAMP) governance document and



OFFICE LOCATION  
Virtual - Colorado

EDUCATION  
Masters, Public Administration, California State University Dominguez Hills, 2007

Bachelors, Business Management, University of Phoenix, 2003

PROFESSIONAL CERTIFICATIONS  
Certified Maintenance Reliability Professional (CMRP)

Certified Aladon Practitioner for Reliability Centered Maintenance and Design

Grade 4 Mechanical Technologist

Grade 4 Collections Systems Maintenance

Certified Cross Connections Control Program Specialist

PROFESSIONAL ASSOCIATIONS  
Society of Maintenance Reliability Professionals

California Water Environment Association: Past President, Past Technical Certification Program

Water Environment Federation

Rocky Mountain Water Environment Association

American Public Works Association

American Water Works Association

YEAR CAREER STARTED  
1991

YEAR STARTED WITH B&V  
2021

## Attachment F – Black & Veatch Team Member Resumes

supporting program elements including level of service, risk, condition assessment, maintenance management, rehabilitation/replacement plans, and capital improvement plans for the District's wastewater treatment, collections, and stormwater assets to comply with consent decree requirements.

### **Bull Run Water Treatment Plant Program Management, Portland Water Bureau, Portland OR | 2018-2021**

**O&M Lead.** The City of Portland is under a consent decree to build their first surface water treatment plant to serve the City. The plant will provide filtration of their Bull Run supply at an initial capacity of 160 MGD, expandable to 240 MGD. Simon is leading O&M efforts, including development of a staffing plan and asset management plan, and facilitating the Reliability Centered Design process as part of a larger program management function to construct the new plant by 2027. This will mark the largest treatment project in the City's history, initially estimated to cost in the vicinity of \$500 million. Treatment is to include rapid mixing, flocculation filtration disinfection, and corrosion control. Pilot plant studies are underway to determine if sedimentation and ozonation are to be considered.

### **Fairview Sewage Pumping Station Improvements; Great Lakes Water Authority; Detroit, MI | 2020-2021**

**Lead O&M Specialist.** Responsible for design review, assistance during construction, start up and commissioning of the improve projects on the existing 240MGD pump station while maintain facility functionality during construction.

### **Groundwater Well Asset Management Plan, Sacramento Suburban Water District, Sacramento, CA | 2019-2020**

**Maintenance Management Lead.** Responsible for developing maintenance strategy, and performance as part of asset management plan development, facilitated workshops with SSWD staff, developed performance measures, developed optimized maintenance program including detailed tasks for each maintenance activity. for the District's 70 water supply wells. Completed a staffing evaluation to identify staffing needs to complete the annual maintenance plan.

### **Plant Asset Management Services, Metropolitan St. Louis Sewer District (District), MO | 2014-2018**

**Technical Advisor/Asset Management Strategy.** The District wanted to implement a more formalized asset management program for its six wastewater treatment plants (WWTP) and more than 40 major pump stations to optimize processes. The project team developed criticality and condition assessments for all plant and pump station equipment/systems. This included estimating remaining useful life and developing a replacement planning model to allow the District to integrate their capital requirements with their other long-term capital needs. Simon facilitated the chartering workshop that developed the project's asset management mission and goals. He also assisted in completing an Asset Management Gap Analysis by interviewing staff from five different facilities to identify gaps. The gap analysis was used to develop a Strategic Asset Management Plan that included recommendations for improvement and a subsequent implementation plan. In the second phase of the project Simon assisted the District in maintenance management strategy improvements for the seven treatment plants and the collection system pump stations and provided coaching and on-site training for the internal condition assessment program.

### **Water Supply and Treatment Master Plan, City of Greeley, CO | 2020**

**Lead O&M Specialist.** Simon developed the staffing plan, operations and maintenance plan for the forty years expansion of the cities water supply and treatment program. The plan included staffing needs, high level maintenance requirements and associated costs for the new water treatment facility, pipeline supply and additional wells.

### **AWIA 2018 Risk and Resilience Assessment (RRA), California Water Services, San Jose CA | 2019-2021**

**RRA Leader.** California Water Services (Cal Water) had 8 plants in California that were required to meet the March 30, 2020 certification deadline to be AWIA RRA compliant. Simon was the co-lead for the initial executive management chartering session for the project. He was responsible for completing the assessment and reports for 3 of the 8 plants and providing QA review and guidance on the remaining 5 plants. All 8 reports were completed within a three-month period and Cal Water certified all 8 plants ahead of the deadline. The second phase of the

## Attachment F – Black & Veatch Team Member Resumes

project included updating the appropriate Emergency Response Plans and completing the RRA on over 20 remaining plants located in California, New Mexico, Washington, and Hawaii.

### [AWIA 2018 Risk and Resilience Assessment \(RRA\), South Adams County Water and Sanitation District \(SAWSD\), Commerce City, CO | 2020](#)

**RRA Leader.** Simon is leading the RRA for both the water and wastewater systems at SACWSD. Although SACWSD does not have to certify until December 30, 2020, they are proactively completing the RRA early to develop a budget for capital projects and emergency response plan updates to include in the upcoming budget cycle. Simon has been facilitating the workshops and is responsible for quality assurance of the data and reports that will be produced at the end of the project.

### [AWIA 2018 Risk and Resilience Assessment \(RRA\), City of Phoenix, | 2019-2020](#)

**RRA Subject Matter Expert and Quality Control.** Simon provided subject matter expertise and quality checks of the RRA completed on the City's water system. The city successfully certified the completing of the RRA on March 27, 2020. At the City's request BC is now completing the RRA for the wastewater system which will be completed by August 2020.

### [Truckee Meadows Water Reclamation Facility Plan, Cities of Reno and Sparks, NV | 2019-2020](#)

**Lead O&M Specialist.** Simon developed the staffing plan for four plant expansion alternatives in the Facility Plan. This included conducting interviews with O&M staff, evaluating current staffing levels, and then developing future staffing needs for the alternatives. He also led the mechanical condition assessment of plant equipment which was used to determine remaining useful life. This information was then used to determine if the existing equipment would be reliable until one of the four expansion alternatives was constructed.

### [Smith Creek Resource Recovery Facility 6 MGD Expansion, City of Raleigh, NC | 2020](#)

**Lead O&M Specialist.** Simon led the condition assessment of the entire plant to determine if the existing equipment could be used for the expansion or would require rehabilitation or replacement. The assessment also provided the Smith Creek staff with a prioritized list of maintenance items that needed to be addressed to improve the reliability of the plant.

### [Evaluation of Plant, Collection and Distribution System Facilities Maintenance Program and Staff, Paulding County Water Services, GA | 2018](#)

**Lead O&M Specialist.** Simon completed an evaluation of the wastewater plants, collections system, water distribution system, and the associated maintenance program and staff capability. The evaluation of the maintenance program included work order management, contingency planning, safety practices, emergency procedures, asset criticality, and training program. The result of the evaluation was a prioritized list of recommendations focused on improving the reliability of the assets, safety and staff capabilities.

### [Pure Water Program North City Upgrades Pre-design and Operational Readiness Plan, City of San Diego, CA | 2015-Ongoing](#)

**Lead O&M Specialist.** To maximize the use of recycled water, the City of San Diego embarked on the Pure Water Program to treat as much effluent from the WWTPs as possible, to either direct or indirect potable reuse. Simon led the development of the Operational Readiness Plan, including staffing, hiring, and training plans. This information will be used by the City to confirm they have the qualified staff for the new Advanced Water Treatment Facility and as part of the Title 22 document. He also provided O&M technical support during the pre-design of critical facilities. He continues to provide O&M technical support during construction and startup of the advanced water treatment facility.

Attachment D – Full List of Completed Contracts in the Last Two Year

<b>Project Name/Location</b>	<b>Final Contract Amount</b>	<b>Prime or Sub</b>	<b>Classification of Work Performed</b>	<b>Year Started/Completed</b>	<b>Owner Name/Location</b>	<b>Name &amp; Phone Number of Owner's Representative on this Project</b>
182332 TBW KELLER O&M EVALUATIONMP	\$50,148	Prime	Construction - Water & Sewer Facilities	Dec 2015 - Jun 2018	TAMPA BAY WATER	TAMPA BAY WATER Black & Veatch PM: Robert Burchett (813) 207-7927
182332 TBW SCHWRF SURGE ANALYSISMP	\$64,469	Prime	Construction - Water & Sewer Facilities	Mar 2016 - Aug 2018	TAMPA BAY WATER	TAMPA BAY WATER Black & Veatch PM: Robert Burchett (813) 207-7928
184904 TBW AUDIT SERVICES FOR O&M CONTRACTS REVIEW	\$40,000	Prime	Maintenance - Exotic Vegetation Removal, Maintenance - Canal/Drainage, Maintenance - Landscape and Irrigation, Maintenance - Lake and Littoral	Mar 2016 - Feb 2018	TAMPA BAY WATER	TAMPA BAY WATER Black & Veatch PM: Robert Burchett (813) 207-7929
2020 GRU Gnrl Eng Consultant - AWIA ERP Phase III	\$97,103	Prime	Construction - Stormwater Mgmt Facilities, Construction - Water & Sewer Facilities, Construction - Irrigation Facilities, Maintenance - Landscape and Irrigation	Apr 2020 - Dec 2020	GAINESVILLE REGIONAL UTILITIES (GRU)	GAINESVILLE REGIONAL UTILITIES (GRU) Black & Veatch PM: Rebecca Oliva (813) 282-4189
City of Tampa AWIA Support	\$107,455	Prime	Construction - Water & Sewer Facilities	Sep 2019 - Mar 2021	TAMPA, FL, CITY OF	TAMPA, FL, CITY OF Black & Veatch PM: Rebecca Oliva (813) 282-4189
Clearwater AWIA Support Svc Ph 1	\$13,315	Prime	Construction - Water & Sewer Facilities	Oct 2019 - Apr 2022	CLEARWATER, CITY OF	CLEARWATER, CITY OF Black & Veatch PM: Rebecca Oliva (813) 282-4189
Clearwater AWIA Support Svc Ph 1	\$327,555	Prime	Construction - Water & Sewer Facilities	Oct 2019 - Apr 2022	CLEARWATER, CITY OF	CLEARWATER, CITY OF

						Black & Veatch PM: Rebecca Oliva (813) 282-4189
Dam Safety Seminar	\$3,500	Prime	Maintenance - Lake and Littoral	Oct 2018 - May 2019	FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP)	FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) Black & Veatch PM: Andy Westfall (813) 207-7910
GIS DIGITIZING ASSISTANCE	\$63,896	Prime	Construction - Stormwater Mgmt Facilities, Construction - Water & Sewer Facilities, Construction - Irrigation Facilities, Construction - Streetlighting, Maintenance - Canal/Drainage, Maintenance - Landscape and Irrigation, Maintenance - Lake and Littoral, Maintenance - Streetlighting	Jun 2020 - Nov 2021	HILLSBOROUGH FL, COUNTY OF	HILLSBOROUGH FL, COUNTY OF Black & Veatch PM: Emilie Moore (813) 207-7902
GRU AWIA Services - RRA	\$110,254	Prime	Construction - Water & Sewer Facilities	Dec 2019 - Jan 2021	GAINESVILLE REGIONAL UTILITIES (GRU)	GAINESVILLE REGIONAL UTILITIES (GRU) Black & Veatch PM: Rebecca Oliva (813) 282-4189
GRU Risk & Resilience Asmnt & ERP	\$50,177	Prime	Construction - Stormwater Mgmt Facilities, Construction - Water & Sewer Facilities, Maintenance - Canal/Drainage	Aug 2019 - May 2020	GAINESVILLE REGIONAL UTILITIES (GRU)	GAINESVILLE REGIONAL UTILITIES (GRU) Black & Veatch PM: Rebecca Oliva (813) 282-4189
H&S REGIONAL SURFACE WTP EXPANSION STUDY	\$143,497	Prime	Construction - Roadways, Construction - Water & Sewer Facilities, Construction - Streetlighting	Feb 2020 - Mar 2022	TAMPA BAY WATER	TAMPA BAY WATER Black & Veatch PM: Emilie Moore (813) 207-7902



HAZEN & SAWYER TBW LONG TERM WATER MASTER PLANMP	\$619,278	Sub	Construction - Water & Sewer Facilities	Nov 2014 - May 2019	HAZEN & SAWYER	HAZEN & SAWYER Black & Veatch PM: Robert Burchett (813) 207-7927
HILLS CNTY PUMP STATION ASSESSMENT FOR QUAL REV	\$9,800	Prime	Construction - Water & Sewer Facilities	Mar 2018 - Sep 2018	HILLSBOROUGH FL, COUNTY OF	HILLSBOROUGH FL, COUNTY OF Black & Veatch PM: Andy Westfall (813) 207-7910
HILLS CNTY SO CNTY BOOSTER PS WTMMP	\$844,848	Prime	Construction - Water & Sewer Facilities	Feb 2015 - Sep 2020	HILLSBOROUGH FL, COUNTY OF	HILLSBOROUGH FL, COUNTY OF Black & Veatch PM: Andy Westfall (813) 207-7910
HILLS CO COUNTYWIDE PS ELECTRICAL MODSMP	\$2,381	Prime	Construction - Water & Sewer Facilities	Jan 2011 - Feb 2018	HILLSBOROUGH FL, COUNTY OF	HILLSBOROUGH FL, COUNTY OF Black & Veatch PM: Andy Westfall (813) 207-7910
HILLS CO COUNTYWIDE PS ELECTRICAL MODSMP	\$496,984	Prime	Construction - Water & Sewer Facilities	Jan 2011 - Feb 2018	HILLSBOROUGH FL, COUNTY OF	HILLSBOROUGH FL, COUNTY OF Black & Veatch PM: Andy Westfall (813) 207-7910
HILLS CO HAMILTON PUMP STATION REHABILITATIONMP	\$225,799	Prime	Construction - Water & Sewer Facilities	Aug 2011 - Feb 2018	HILLSBOROUGH FL, COUNTY OF	HILLSBOROUGH FL, COUNTY OF Black & Veatch PM: Andy Westfall (813) 207-7910
HILLS CO NWRWRF DESIGN ASSIS	\$459,682	Prime	Construction - Water & Sewer Facilities	Jan 2020 - Jul 2021	HILLSBOROUGH FL, COUNTY OF	HILLSBOROUGH FL, COUNTY OF Black & Veatch PM: Rebecca Oliva (813) 282- 4189
HILLS COUNTY PUMP STATION FALL PROTECTION STUDY	\$78,296	Prime	Construction - Water & Sewer Facilities	Mar 2018 - Nov 2019	HILLSBOROUGH FL, COUNTY OF	HILLSBOROUGH FL, COUNTY OF Black & Veatch PM: Andy Westfall (813) 207-7910
HILLS COUNTY SANITARY SEWER REHAB CONSTRUCTION SVCS	\$298,833	Prime	Construction - Water & Sewer Facilities	Feb 2018 - May 2020	HILLSBOROUGH FL, COUNTY OF	HILLSBOROUGH FL, COUNTY OF Black & Veatch PM: Andy Westfall (813) 207-7910



HILLS COUNTY VALRICO AWTP UV BASIN IMPROVEMENTSMP	\$199,700	Prime	Construction - Water & Sewer Facilities	Mar 2013 - Feb 2018	HILLSBOROUGH FL, COUNTY OF	HILLSBOROUGH FL, COUNTY OF Black & Veatch PM: Andy Westfall (813) 207-7910
HILLSBOROUGH COUNTY VALRICO AWTP SOLAR PV SYSTEM	\$91,087	Prime	Maintenance - Streetlighting	Feb 2018 - May 2019	HILLSBOROUGH FL, COUNTY OF	HILLSBOROUGH FL, COUNTY OF Black & Veatch PM: Andy Westfall (813) 207-7910
LAKELAND COMBEE WTP TANK REPAIR MP	\$13,769	Prime	Construction - Water & Sewer Facilities	Dec 2016 - Jun 2018	LAKELAND, CITY OF	LAKELAND, CITY OF Black & Veatch PM: Andy Westfall (813) 207-7910
MUNICIPAL ENG SERV 2016-21 GLENDALE WRF HSW	\$35,764	Prime	Construction - Water & Sewer Facilities	Nov 2020 - Nov 2021	LAKELAND, CITY OF	LAKELAND, CITY OF Black & Veatch PM: Emilie Moore (813) 207-7902
NORTHSIDE WRF BIOSOLIDS STUDY	\$38,332	Prime	Construction - Water & Sewer Facilities	Feb 2019 - Jun 2020	LAKELAND, CITY OF	LAKELAND, CITY OF Black & Veatch PM: Andy Westfall (813) 207-7910
NWWRF BIOSOLIDS DEWATERING FACILITY	\$486,670	Prime	Construction - Water & Sewer Facilities	Jul 2019 - Aug 2020	HILLSBOROUGH FL, COUNTY OF	HILLSBOROUGH FL, COUNTY OF Black & Veatch PM: Rebecca Oliva (813) 282- 4189
PASCO BOYETTE RESERVOIR PUMP ISSUES	\$10,338	Prime	Construction - Stormwater Mgmt Facilities	Mar 2018 - Feb 2020	PASCO COUNTY, FL	PASCO COUNTY, FL Black & Veatch PM: Robert Burchett (813) 207-7927
PASCO CNTY COWPATH MPS	\$190,330	Prime	Construction - Water & Sewer Facilities	May 2017 - Oct 2021	PASCO COUNTY, FL	PASCO COUNTY, FL Black & Veatch PM: Mike Tache (813) 207-7912
PASCO CNTY COWPATH PUMP STATIONMP	\$62,654	Prime	Construction - Water & Sewer Facilities	Apr 2016 - Mar 2018	PASCO COUNTY, FL	PASCO COUNTY, FL Black & Veatch PM: Robert Burchett (813) 207-7927
PASCO CNTY CYPRESS MANOR WWTF FDEP PERMIT REN SUP	\$32,655	Prime	Construction - Water & Sewer Facilities	Sep 2017 - Nov 2019	PASCO COUNTY, FL	PASCO COUNTY, FL Black & Veatch PM: Robert Burchett (813) 207-7927
PASCO CNTY CYPRESS MANOR WWTF IMPROVEMENTS	\$89,346	Prime	Construction - Water & Sewer Facilities	Jan 2018 - Mar 2020	PASCO COUNTY, FL	PASCO COUNTY, FL Black & Veatch PM: Robert Burchett (813) 207-7927

PASCO CNTY EMBASSY HILLS WWTF ASSESSMENTMP	\$89,264	Prime	Construction - Water & Sewer Facilities	Jun 2016 - Mar 2018	PASCO COUNTY, FL	PASCO COUNTY, FL Black & Veatch PM: Robert Burchett (813) 207-7927
PASCO COUNTY MISC ENGINEERING SERVICESMP	\$31,548	Prime	Construction - Water & Sewer Facilities	Nov 2016 - Nov 2018	PASCO COUNTY, FL	PASCO COUNTY, FL Black & Veatch PM: Robert Burchett (813) 207-7927
PASCO COUNTY WESLEY CHAPEL PRESSURE SURGE ANALYSIS	\$49,910	Prime	Construction - Water & Sewer Facilities	Aug 2020 - Jul 2021	PASCO COUNTY, FL	PASCO COUNTY, FL Black & Veatch PM: Mike Tache (813) 207-7912
PASCO LACHOOCHEE WELL IMPROVEMENTS	\$33,459	Prime	Construction - Water & Sewer Facilities	Mar 2018 - May 2019	PASCO COUNTY, FL	PASCO COUNTY, FL Black & Veatch PM: Robert Burchett (813) 207-7927
PEACE RIVER DESOTO CNTY WTR SYSTEM ASSESS	\$49,730	Prime	Construction - Water & Sewer Facilities, Maintenance - Landscape and Irrigation, Construction - Irrigation Facilities	Oct 2017 - Jun 2018	PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY	PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY Black & Veatch PM: Andy Westfall (813) 207-7910
PEACE RIVER MRWSA - 1991 REBUILDMP	\$6,907	Prime	Construction - Water & Sewer Facilities	Feb 2013 - Feb 2018	PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY	PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY Black & Veatch PM: Andy Westfall (813) 207-7910
PEACE RIVER MRWSA - 1991 REBUILDMP	\$1,943,206	Prime	Construction - Water & Sewer Facilities	Feb 2013 - Feb 2018	PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY	PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY Black & Veatch PM: Andy Westfall (813) 207-7910
PEACE RIVER WTP ENERGY EFFICIENCY STUDYMP	\$109,740	Prime	Construction - Water & Sewer Facilities	Sep 2016 - Aug 2018	PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY	PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY Black & Veatch PM: Andy Westfall (813) 207-7910
PINELLAS CNTY BELLEAIR WATER SYSTEM ANALYSIS	\$29,705	Prime	Construction - Water & Sewer Facilities	Jun 2021 - May 2022	PINELLAS COUNTY, FL	PINELLAS COUNTY, FL Black & Veatch PM: Mike Tache (813) 207-7912

PINELLAS CNTY DUNN WRF OFFSITE RELCAIMED PUMP ST	\$41,830	Prime	Construction - Irrigation Facilities	Oct 2018 - Jan 2020	PINELLAS COUNTY, FL	PINELLAS COUNTY, FL Black & Veatch PM: Robert Burchett (813) 207-7927
PINELLAS CNTY SCBWRD MODEL CALIBRATION	\$176,173	Prime	Construction - Water & Sewer Facilities	Sep 2017 - May 2019	PINELLAS COUNTY, FL	PINELLAS COUNTY, FL Black & Veatch PM: Robert Burchett (813) 207-7927
PINELLAS CNTY SCBWRF COPPER REM	\$98,748	Prime	Construction - Water & Sewer Facilities	Sep 2017 - Nov 2019	PINELLAS COUNTY, FL	PINELLAS COUNTY, FL Black & Veatch PM: Robert Burchett (813) 207-7927
PINELLAS CNTY SOUTH CROSS WRF OPTIMIZATION STUDYMP	\$199,958	Prime	Construction - Water & Sewer Facilities	Dec 2014 - Mar 2018	PINELLAS COUNTY, FL	PINELLAS COUNTY, FL Black & Veatch PM: Robert Burchett (813) 207-7927
PINELLAS COUNTY BIOSOLIDS MASTER PLAN	\$199,983	Prime	Construction - Water & Sewer Facilities	Apr 2018 - Aug 2019	PINELLAS COUNTY, FL	PINELLAS COUNTY, FL Black & Veatch PM: Robert Burchett (813) 207-7927
PINELLAS COUNTY DUNN ELECTRICAL SYS IMPROVMNTS PLA	\$79,792	Prime	Maintenance - Streetlighting	Jan 2018 - May 2019	PINELLAS COUNTY, FL	PINELLAS COUNTY, FL Black & Veatch PM: Robert Burchett (813) 207-7927
PINELLAS COUNTY DUNN WRF FILTRATION & DISINFECTION	\$157,896	Prime	Construction - Water & Sewer Facilities	Dec 2016 - Jun 2018	PINELLAS COUNTY, FL	PINELLAS COUNTY, FL Black & Veatch PM: Robert Burchett (813) 207-7927
PINELLAS COUNTY DUNN WRF MASTER PLAN	\$199,924	Prime	Construction - Water & Sewer Facilities	Jan 2019 - Feb 2021	PINELLAS COUNTY, FL	PINELLAS COUNTY, FL Black & Veatch PM: Mike Tache (813) 207-7912
PINELLAS COUNTY FUNN WRF ASSESSMENT & PROCESS MODM	\$129,978	Prime	Construction - Water & Sewer Facilities	Dec 2016 - May 2018	PINELLAS COUNTY, FL	PINELLAS COUNTY, FL Black & Veatch PM: Robert Burchett (813) 207-7927
PINELLAS COUNTY OPTIMIZATION PROGRAM (2015-2019)MP	\$49,991	Prime	Construction - Water & Sewer Facilities, Construction - Irrigation Facilities, Maintenance - Canal/Drainage, Maintenance - Landscape and Irrigation, Maintenance - Lake and Littoral	Aug 2015 - May 2018	PINELLAS COUNTY, FL	PINELLAS COUNTY, FL Black & Veatch PM: Robert Burchett (813) 207-7927
PINELLAS COUNTY SCBWRD MASTER PLAN	\$199,628	Prime	Construction - Water & Sewer Facilities	Jun 2019 - Aug 2021	PINELLAS COUNTY, FL	PINELLAS COUNTY, FL

						Black & Veatch PM: Mike Tache (813) 207-7912
Plant City GES 2020 WO - Lift Station #2 Eval	\$71,557	Prime	Construction - Water & Sewer Facilities	Jul 2020 - Apr 2021	PLANT CITY, FL, CITY OF	PLANT CITY, FL, CITY OF Black & Veatch PM: Rebecca Oliva (813) 282-4189
Sarasota Co 2021 Capacity Mgmt	\$84,934	Sub	Construction - Stormwater Mgmt Facilities	Feb 2020 - Sep 2021	HAZEN & SAWYER	HAZEN & SAWYER Black & Veatch PM: Emilie Moore (813) 207-7902
TAMPA HF CURREN AWTP METHANOL STORAGE TANK	\$149,345	Prime	Construction - Water & Sewer Facilities	Jan 2019 - Mar 2022	TAMPA, FL, CITY OF	TAMPA, FL, CITY OF Black & Veatch PM: Emilie Moore (813) 207-7902
TAMPA TIPPIN WTP MASTER PLANMP	\$18,900	Prime	Construction - Water & Sewer Facilities	Jul 2016 - Mar 2018	TAMPA, FL, CITY OF	TAMPA, FL, CITY OF Black & Veatch PM: Robert Burchett (813) 207-7927
TAMPA WATER SYSTEM MASTER PLAN UPDATEMP	\$16,741	Prime	Construction - Stormwater Mgmt Facilities	Sep 2015 - Feb 2020	TAMPA, FL, CITY OF	TAMPA, FL, CITY OF Black & Veatch PM: Robert Burchett (813) 207-7927
TAMPA WATER SYSTEM MASTER PLAN UPDATEMP	\$522,567	Prime	Construction - Stormwater Mgmt Facilities	Sep 2015 - Feb 2020	TAMPA, FL, CITY OF	TAMPA, FL, CITY OF Black & Veatch PM: Robert Burchett (813) 207-7927
TAMPA WATER SYSTEM MASTER PLAN UPDATEMP	\$28,923	Prime	Construction - Stormwater Mgmt Facilities	Sep 2015 - Feb 2020	TAMPA, FL, CITY OF	TAMPA, FL, CITY OF Black & Veatch PM: Martin Jones (913) 458-8846
TBW AUDIT SERVICES FOR O&M CONTRACTSMP	\$57,225	Prime	Construction - Water & Sewer Facilities, Construction - Stormwater Mgmt Facilities, Construction - Irrigation Facilities	Feb 2015 - Feb 2018	TAMPA BAY WATER	TAMPA BAY WATER Black & Veatch PM: Robert Burchett (813) 207-7927
TBW AUDIT SERVICES FOR OM&M SERVICESMP	\$60,000	Prime	Construction - Irrigation Facilities, Construction - Water & Sewer Facilities, Construction - Stormwater Mgmt Facilities	Jul 2014 - Feb 2018	TAMPA BAY WATER	TAMPA BAY WATER Black & Veatch PM: Robert Burchett (813) 207-7927
TBW DESAL O & M EVALUATIONMP	\$84,856	Prime	Construction - Water & Sewer Facilities	Feb 2015 - Jun 2018	TAMPA BAY WATER	TAMPA BAY WATER Black & Veatch PM: Robert Burchett (813) 207-7927

TBW ENERGY RECOVERY TURBINE ANALYSIS	\$37,292	Prime	Construction - Water & Sewer Facilities	Sep 2018 - Aug 2019	TAMPA BAY WATER	TAMPA BAY WATER Black & Veatch PM: Robert Burchett (813) 207-7927
TBW FY-17 AUDITS FOR SWTP & DESAL CONTRACT OPSMP	\$40,000	Prime	Construction - Water & Sewer Facilities	Dec 2016 - Jun 2018	TAMPA BAY WATER	TAMPA BAY WATER Black & Veatch PM: Robert Burchett (813) 207-7927
TBW RESERVOIR TOE DRAIN INSPECTION	\$66,174	Prime	Construction - Stormwater Mgmt Facilities	Jun 2019 - Mar 2020	TAMPA BAY WATER	TAMPA BAY WATER Black & Veatch PM: Robert Burchett (813) 207-7927
TBW SURFACE WATER PLANT ENERGY AUDIT	\$177,547	Prime	Construction - Stormwater Mgmt Facilities	Jan 2020 - Mar 2022	TAMPA BAY WATER	TAMPA BAY WATER Black & Veatch PM: Emilie Moore (813) 207-7902
TBW SYSTEM ENGINEERING TASKSMP	\$746,320	Prime	Construction - Water & Sewer Facilities	Jan 2014 - Jun 2018	TAMPA BAY WATER	TAMPA BAY WATER Black & Veatch PM: Robert Burchett (813) 207-7927
VENICE WATER SYS HYDRAULIC MODELING	\$294,436	Prime	Construction - Water & Sewer Facilities	Jul 2017 - May 2020	VENICE, FL, CITY OF	VENICE, FL, CITY OF Black & Veatch PM: Andy Westfall (813) 207-7910
VENICE WTP RO EFFICIENCY STUDY MP	\$322,386	Prime	Construction - Irrigation Facilities	Dec 2016 - May 2019	VENICE, FL, CITY OF	VENICE, FL, CITY OF Black & Veatch PM: Andy Westfall (813) 207-7910
VENICE WWTP OPERATIONG PERMIT RENEWAL	\$54,897	Prime	Construction - Water & Sewer Facilities	Apr 2021 - May 2022	VENICE, FL, CITY OF	VENICE, FL, CITY OF Black & Veatch PM: Mike Tache (813) 207-7912
WTP SECOND STAGE RO	\$359,228	Prime	Construction - Irrigation Facilities	Oct 2019 - Nov 2021	VENICE, FL, CITY OF	VENICE, FL, CITY OF Black & Veatch PM: Emilie Moore (813) 207-7902



5/13/2022

Pasco County Utilities  
19420 Central Blvd  
Land O' Lakes, Florida, 34637

Subject: Black & Veatch Letter of Recommendation

To whom it may concern:

I am writing this letter to recommend Black & Veatch for consideration, approval, and addition to West Villages Improvement District's list of pre-approved vendors.

Through the following project, Black & Veatch has served as a trusted consultant that provides expert guidance, technical execution, and detailed project management.

Their management and execution of projects has ensured budgets and schedules were met in a timely and consistent manner, and that any changes to scope, schedule, and/or deliverables were well defined, documented, and communicated to us for review and approval.

**Project Name and Number:** Lacoochee Well Site Improvements (Project Number: 402111)

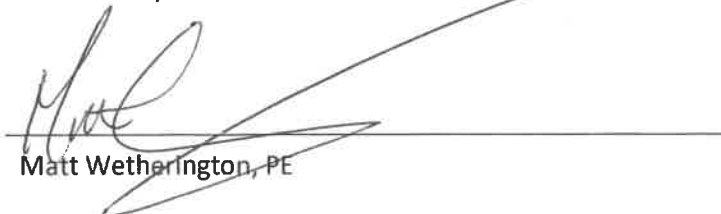
**Project Description:** Project includes preliminary design, detailed design, permitting, bid phase support, and construction support services for the implementation of a new pressure filtration system to reduce iron concentrations to the secondary Maximum Contaminant Level (MCL) at the Lacoochee Well site. The new filtration system is designed for a flow of 500 gallons per minute (gpm). The Lacoochee well withdraws groundwater supply from the Upper Floridan Aquifer.

**Project Budget:** \$34,650 (Preliminary Design) and \$122,540 (Detailed Design / Construction Support)

**Project Completed in Timely Manner (yes/no):** Yes

Very truly yours,

Pasco County Utilities



Matt Wetherington, PE





May 9<sup>th</sup>, 2022

City of Hollywood, Dept. of Public Works  
P.O Box 229045  
Hollywood, FL 33022

To whom it may concern:

I am writing this letter to strongly recommend that Black & Veatch be considered and approved as a West Villages Improvement District pre-approved vendor.

Black & Veatch has provided expert technical execution, professional guidance, and proficient and well executed project management, on a number of various projects for the City of Hollywood, FL as a whole, and in particular for the implementation of Cityworks for the Public Works Department.

This project involved coordinating multiple divisions and stakeholders to understand existing maintenance practices, recommend enhancements, implement new technology to streamline communication, and effectively train our staff on how to better maximize the tools at our disposal to improve operational efficiencies and prolong our assets expected life with better management practices.

**Project Name and Number:** Cityworks Implementation – 409337

**Project Description:** Cityworks Implementation for City of Hollywood's Department of Public Works for Fleet, Streets & Row, Urban Forestry, Environmental Services, Beach Maintenance and Facilities Maintenance to improve operational efficiencies and enhance maintenance practices that will drive longer user life of assets.

**Project Budget:** \$379,930.00

**Project Completed in Timely Manner (yes/no):** Yes, on-going

Very truly yours,

City of Hollywood – Department of Public Works

A handwritten signature in blue ink that reads "Annalie Holmes". The signature is written in a cursive, flowing style.

Annalie Holmes, Project Manager, Asst. Director of  
Public Works

**Date:** May 13, 2022

**To:** Whom it may concern

**Subject:** Letter of Recommendation for Black & Veatch

I am writing this letter to recommend Black & Veatch for consideration, approval, and addition to West Villages Improvement District's list of pre-approved vendors.

Through the project(s) below, Black & Veatch has served as a trusted consultant, providing expert guidance, technical execution, and project management.

Their management and execution of projects has ensured budgets and schedules were/are being met in a timely and consistent manner, and that changes to scope, schedule, and/or deliverables were/are defined, documented, and communicated to us for review and approval.

**Project Name and Number:** Cityworks Implementation Phase 1 and 2 – 411665

**Project Description:** Cityworks Implementation for City of Hollywood's Department of Public Utilities which includes Water Treatment and Wastewater Treatment Facilities, as well as Underground Utilities to improve operational efficiencies and enhance maintenance practices that will extend the useful life of assets.

**Project Budget:**

Phase 1 – \$388,852

Phase 2 - \$426,346

**Project Completed in Timely Manner (yes/no):** Phase 1 - Yes, Phase 2 on-going

Sincerely,

A handwritten signature in blue ink that reads "Howard Richards".

Howard G. Richards, P.E.

Assistant Director, Plant Operations and Asset Management





To the Selection Committee:

In 2019, Polk County began to expand and revitalize our asset management program, including hiring an Asset Manager, implementing a CMMS, establishing key performance indicators (KPIs) and implementing risk-based prioritization of aging assets. The County selected Black & Veatch from our available consultants on our Master Consulting Agreement list to support us on several asset management projects.

In my experience, I have found the Black & Veatch team to be easy to work with and knowledgeable in all areas of asset management. They have provided outstanding services for the following projects/tasks:

- Asset Management Benchmarking Study, 2019
- WWTF Asset Inventory and Condition Assessment, 2019 – 2020
- Key Performance Indicator and Standard Operating Procedure Pilot, 2020
- Facilities KPI Roadmap, 2021
- Compliance KPI Dashboards, 2021 – 2022
- Power BI Dashboard Training, 2021 – 2022
- Horizontal Asset Risk Assessment, 2022 - 2024

Black & Veatch's project manager, Amanda Schwerman, and the multi-discipline project team members have been effective communicators, efficient in gathering data and proactive in developing methods to present complex data in an understandable and useful form. The team does an excellent job staying on task and keeping the larger asset management team informed on a regular basis. Tim Collazuol with Black and Veatch, and his business intelligence team, have provided effective support across the asset management and IT integrations teams, helping us realize our vision of automated KPI dashboards. Black and Veatch's team has also been value conscious during project execution and have been able to keep all projects within budget.

I would highly recommend the Black & Veatch team to support asset management services for other utilities.

Regards,

Chuck Nichols  
Utility Asset Manager