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Case No. PUR-2017-00149

Sponsor: CITY OF ALEXANDRIA

Exhibit No. 5

Witness: CARL W. EGER, III

Bailiff: RENEE MILES

Virginia State Corporation Commission  
eFiling CASE Document Cover Sheet

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**Case Number (if already assigned)** PUR-2017-00149

**Case Name (if known)** Application for approval to implement a Water and Wastewater Infrastructure Service Charge Plan and Rider

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January 19, 2018

**BY ELECTRONIC FILING**

Joel H. Peck, Clerk  
Virginia State Corporation Commission  
1300 East Main Street  
Post Office Box 1197  
Richmond, Virginia 23218

**RE: Application of Virginia-American Water Company for approval to implement an approved WWISC Plan and Rider  
Case No.: PUR-2017-00149**

Dear Mr. Peck:

Enclosed please find the Direct Testimony of Carl W. Eger, III on behalf of the City of Alexandria, Virginia to be filed in the referenced matter.

Very truly yours,

  
Andrew R. McRoberts

ARM/ct  
Enclosure

cc: Service List

180130018

COMMONWEALTH OF VIRGINIA  
STATE CORPORATION COMMISSION

APPLICATION OF )  
 )  
VIRGINIA AMERICAN WATER COMPANY, )  
 )  
For approval to implement Water and )  
Wastewater Infrastructure Service Charge Plan )  
and Rider. )  
 )

CASE NO. PUR-2017-00149

DIRECT TESTIMONY OF  
  
CARL W. EGER III  
  
ON BEHALF OF THE  
  
CITY OF ALEXANDRIA, VIRGINIA

January 19, 2018

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180130018

WITNESS DIRECT TESTIMONY SUMMARY

Witness: Carl W. Eger, III

Title: Energy Manager for the City of Alexandria

Summary:

My testimony addresses concerns related to various components of the Water and Wastewater Infrastructure Service Charge Program and Rider ("WWISC") application (the "Application") filed by Virginia American Water Company ("Virginia-American" or the "Company").

Specifically, my testimony will address the following areas:

1. I will discuss my concerns that the Company's Application is inconsistent with the purported purposes of a WWISC, and that the Application identifies projects that cannot fairly be described as "in-kind" replacements, such that they are not appropriate for inclusion in this proceeding.

810051031

CITY OF ALEXANDRIA, VIRGINIA  
DIRECT TESTIMONY OF  
CARL W. EGER III  
PUR-2017-00149

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**Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS FOR THE RECORD.**

A. Carl W. Eger III. My business address is 301 King Street, Alexandria, Virginia 22314.

**Q. WHAT IS YOUR POSITION WITH THE CITY OF ALEXANDRIA?**

A. I am the Energy Manager for the City of Alexandria.

**Q. HOW LONG HAVE YOU HELD THIS POSITION?**

A. I have held this position since January 4, 2010.

**Q. PLEASE OUTLINE YOUR EDUCATIONAL, BACKGROUND AND EXPERIENCE WITH THE CITY.**

A. I hold a Bachelor of Science in Electrical Engineering, a Bachelor of Science in Computer Engineering, and a Master of Science in Engineering (Mechanical Engineering and Energy Engineering concentrations with additional graduate-level education in economics, econometrics, and public policy) from the University of Dayton in Dayton, Ohio. I am currently completing a Masters of Professional Studies in Sustainable Urban Planning from the George Washington University. I am a registered Professional Engineer in the State of Ohio, a Leadership in Energy and Environmental Design (LEED) Accredited Professional, an International Society of Sustainability Professionals Sustainability Association, and a Certified Public Manager. In 2017, I completed the Harvard University Executive Education in Sustainability Leadership and Urban

1 Land Institute-Washington Regional Land Use Leadership Institute programs. In 2013, I  
2 completed Michigan State University Institute of Public Utilities Annual Regulatory Studies  
3 Program (“Camp NARUC”) training. From 2012 to present, I have served on the Virginia  
4 Energy Purchasing Government Authority (VEPGA) Board of Directors. I serve on numerous  
5 other boards and commissions throughout the Metropolitan Washington DC area, and in the  
6 Commonwealth of Virginia in service to the public.

7

8 I joined the City of Alexandria in 2010 as Energy Manager. In 2011, I was promoted to the City  
9 of Alexandria’s Senior Management Group. As Energy Manager a portion of my responsibility  
10 includes servicing utility billings, including billings for water service, for City-owned or -  
11 operated properties and facilities. Moreover, as Energy Manager my responsibilities include  
12 providing guidance to the City of Alexandria City Council, City Attorney’s Office, and City  
13 Manager’s Office on public utility regulatory matters.

14

15 Before serving the citizens and City of Alexandria, from 2004 – 2006, I was Lead Engineer of  
16 the US Department of Energy Industrial Assessment Center at the University of Dayton with  
17 specializations that include industrial pumping systems, including water treatment and  
18 conveyance. From 2007 – 2008, I held position as Energy Manager for the City of Cleveland  
19 Division of Water before promotion in 2008 to the position of Energy Manager for the City of  
20 Cleveland Mayor’s Office of Sustainability.

21

1 Q. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY BEFORE ANY  
 2 REGULATORY AGENCY AS TO MATTERS AFFECTING WATER UTILITY  
 3 COMPANIES?

4 A. Yes. I have previously testified before this commission in case numbers PUE-2014-  
 5 00066, PUE-2015-00097, and PUE-2016-0001.

6

7 Q. WHAT ISSUES DID YOU ADDRESS IN THOSE PROCEEDINGS?

8 A. I testified as a witness on behalf of the City of Alexandria and its ratepayers, in  
 9 opposition to: (i) Virginia American Water Company's Petition for Rulemaking to Establish a  
 10 Water and Wastewater Investment Service Charge ("WWISC"); (ii) certain aspects of Virginia  
 11 American Water Company's Application for a general increase in rates, including the  
 12 establishment of a WWISC; and (iii) Washington Gas and Light Company's proposed return on  
 13 equity and Revenue Normalization Adjustment rider.

14

15 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

16 A. The purpose of my testimony is to address Alexandria's concerns related to the Company's  
 17 proposed WWISC Program and Rider.

18

19 Q. HAS THE CITY OF ALEXANDRIA FILED A PETITION FOR APPEAL TO THE  
 20 SUPREME COURT OF VIRGINIA REGARDING THE AUTHORITY OF THE  
 21 COMMISSION TO ESTABLISH AND IMPOSE A THREE-YEAR PILOT WATER AND  
 22 WASTEWATER INFRASTRUCTURE SERVICE CHARGE ("WWISC")?

23 A. Yes.



1 **Q. HAS THE APPEAL BEEN CERTIFIED BY THE SUPREME COURT OF VIRGINIA?**

2 A. Yes. The Supreme Court of Virginia certified the appeal filed by the City of Alexandria  
3 and the City of Hopewell on December 13, 2017.

4

5 **Q. IS THIS THE SAME THREE-YEAR PILOT WWISC THE COMPANY SEEKS**  
6 **APPROVAL FOR IN THIS PROCEEDING?**

7 A. Yes.

8

9 **Q. DID THE COMMISSION OUTLINE WWISC ELIGIBLE INFRASTRUCTURE IN**  
10 **ITS FINAL ORDER IN CASE NUMBER PUE-2015-00097?**

11 A. Yes. The Commission adopted Hearing Examiner Howard P. Anderson, Jr.'s  
12 recommendation with regard to WWISC-eligible infrastructure, to exclude the following: 1)  
13 meters; 2) equipment and infrastructure installed to address primary and secondary drinking  
14 water standards; 3) unreimbursed costs of relocating facilities due to highway projects; and 4)  
15 pumps, motors, blowers, tanks, mechanical equipment, and other infrastructure installed as in-  
16 kind replacements for customers.<sup>1</sup>

17

18 **Q. DOES VIRGINIA AMERICAN WATER COMPANY (VAWC) OUTLINE**  
19 **ADDITIONAL GOALS FOR THE WWISC PILOT IN ALEXANDRIA?**

20 A. Yes. The Virginia American Water Company (VAWC) Application for approval to  
21 implement an approved WWISC Plan and Rider outlines five goals for the WWISC pilot in  
22 Alexandria.<sup>2</sup> VAWC indicates these goals include:

---

<sup>1</sup> Final Order, Case No. PUE-2015-00097, at 6.  
<sup>2</sup> Application for a general increase in rates, Case No. PUE-2015-00097, at 2.

- 1       • An enhanced level of safety for the distribution system, resulting from the reduction or  
2       elimination of the highest risk, greatest leak-rate segments of VAWC's Alexandria water  
3       system. The WWISC Plan will initially primarily address small mains of 6-inch or less in  
4       diameter and mains constructed of cast iron.
- 5       • A more reliable system for all customers as the sections of the system most prone to  
6       failure (and thus to interruptions of service) due to corrosion, equipment failures, material  
7       failures or natural forces, are replaced in-kind, meeting existing industry standards.
- 8       • Over time, a reduction in main failures and associated leakage rates will directly reduce  
9       or help reduce unaccounted-for water in the VAWC distribution system. Over time, as  
10      replacement of deteriorating segments of mains increases, service reliability will increase,  
11      expense of purchasing water will decrease, and the expense of unplanned failures will  
12      decrease as fewer main breaks occur.
- 13      • Mains and services made of inferior design and poor construction will be replaced with  
14      pipe and tubing meeting current code requirements.
- 15      • Address primary and secondary water quality issues from aging infrastructure posing a  
16      risk to the health and wellbeing of both customers and the community.

17

18   **Q. DO THE PROJECTS VIRGINIA AMERICAN WATER COMPANY (VAWC)**  
19   **PROPOSES IN THIS APPLICATION (EXHIBIT KEM-1) MEET THE CRITERIA FOR**  
20   **COMMISSION'S DEFINITION OF ELIGIBLE INFRASTRUCTURE AND MEET THE**  
21   **GOALS VAWC OUTLINES IN THEIR APPLICATION?**

22   A.   No, not in my opinion. First, nearly all of the projects proposed by VAWC do not  
23   correspond to the commonly-understood definition of in-kind replacement. Second, while the

1 projects stated as Townes At Cameron Parke (Phase 1) and Townes at Cameron Parke (Phase 2)  
2 reflect the commonly-understood definition of in-kind replacement, the Company does not  
3 provide a narrative of why each type of replacement is consistent with the approved WWISC  
4 Plan, as recommended by Staff Witness Armstrong, adopted by the Hearing Examiner, and  
5 approved in the Final Order.<sup>3</sup> Third, VAWC does not provide material fact to support the  
6 Eisenhower Avenue Interconnect project as meeting the Commission's definition of eligible  
7 infrastructure nor supports the goals VAWC outlines in its application. Fourth, VAWC does not  
8 provide material fact to support the Freedman Cemetery project as meeting the Commission's  
9 definition of eligible infrastructure nor supports the goals VAWC outlines in its application.

10  
11 **Q. PLEASE DESCRIBE HOW NEARLY ALL OF THE PROJECTS PROPOSED BY**  
12 **VAWC DO NOT CORRESPOND TO THE COMMONLY-UNDERSTOOD DEFINITION**  
13 **OF IN-KIND REPLACEMENT TO QUALIFY FOR TREATMENT IN A WWISC.**

14 A. Of the thirty-two projects proposed with any stated detail of existing size (in inches) and  
15 proposed size (in inches), 23 of the 32 projects (or approximately 72%) include an increase in  
16 size. In general, proposed projects identify an increase from an existing 2-inch in size to between  
17 6-inches and 8-inches in size. Assuming similar pipe wall dimensions between the existing pipe  
18 and proposed pipe, the increase in volume per unit cross-sectional area increases by between  
19 800% and 1500%. Even in the most liberal of interpretations, it is very difficult to interpret such  
20 an increase as in-kind, as these are essentially betterments that will no doubt increase capacity  
21 and revenue for the Company beyond how the Company characterized the WWISC, such that  
22 they should be considered in a regular rate case and judged along with Company profits and

---

<sup>3</sup> Case No. PUE-2015-00097 Hearing Examiner Report, at 75, 124; Case No. PUE-2015-00097 Final Order, at 6.

1 expenses. The Company simply provides no demonstrable proof related to some projects that  
 2 they meet the goals the Company described for the WWISC.

3

4 **Q. CAN YOU GIVE EXAMPLES OF THE TYPES OF PROJECTS YOU ARE**  
 5 **SAYING LACK DEMONSTRABLE PROOF THAT THEY MEET THE GOALS**  
 6 **OUTLINED FOR THE WWISC?**

7 A. Good examples are the Townes at Cmeron Parke (Phase 1) and Townes at Cameron  
 8 Parke (Phase 2).

9

10 **Q. PLEASE EXPLAIN HOW THE COMPANY PROVIDES NO DEMONSTRABLE**  
 11 **PROOF THAT THE TOWNES AT CAMERON PARKE (PHASE 1) AND TOWNES AT**  
 12 **CAMERON PARKE (PHASE 2) MEET THE GOALS VAWC OUTLINES IN ITS**  
 13 **APPLICATION.**

14 A. VAWC proposes two projects – the Townes at Cameron Parke (Phase 1) and Townes at  
 15 Cameron Parke (Phase 2) – that reflect the aggregate replacement of 3,490 feet of 8-inch ductile  
 16 iron pipe with in-kind 8-inch ductile iron pipe. VAWC indicates the existing pipe was installed  
 17 in the 1990’s.

18

19 As stated by Company Witness Akmentins, “the very purpose of proposing a WWISC...is to  
 20 permit the Company to accelerate its distribution system infrastructure replacement efforts to  
 21 continue to improve and update the system.”<sup>4</sup> Further, as stated by Company Witness McGee,  
 22 “VAWC has prioritized the replacements based upon main break intensity and frequency, as  
 23 reducing main breaks results in improved customer service and lower non-revenue water (NRW)

---

<sup>4</sup>Gary L. Akmentins Direct at 5.



1 testimony states that the Eisenhower Avenue Project "...will result in increased service  
 2 reliability and water quality for the customers who are historically affected by main breaks in  
 3 this area."<sup>7</sup> However, Company Witness McGee does not provide facts to support the  
 4 Eisenhower Avenue Interconnect project as meeting the Commission's definition of eligible  
 5 infrastructure. Moreover, Company Witness McGee does not provide facts – including water  
 6 quality modeling, data on reduction of main breaks resulting from the Eisenhower Avenue  
 7 projects, etc. – to support how the Eisenhower Interconnect project will result in increased  
 8 service reliability and water quality for the customers in this area.

9

10 **Q. ANY OTHER EXAMPLES?**

11 A. Yes. The Freedmen Cemetery Project is another example.

12

13 **Q. PLEASE DISCUSS HOW THE COMPANY PROVIDES NO MATERIAL FACT**  
 14 **TO SUPPORT THE FREEDMEN CEMETERY PROJECT AS MEETING THE**  
 15 **COMMISSION'S DEFINITION OF ELIGIBLE INFRASTRUCTURE AND MEET THE**  
 16 **GOALS VAWC OUTLINES IN THEIR APPLICATION.**

17 A. Well, it is unclear to me based on the Company's description of this project, whether it  
 18 will result in two or more main lines according to information received by the City on June 6,  
 19 2017 which reflects the installation (not replacement) of a 12-inch water line extension to create  
 20 redundancy to help ensure that various customers in the area do not lose water in the event of a  
 21 main break or fire. See Attachment CWE-A. As such, this amounts to more than just a  
 22 replacement of failing water mains, and the proposed Freedmen Cemetery project could be  
 23 viewed as a betterment project in my opinion.

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<sup>7</sup> McGee Direct at 9.

1 Q. THE COMPANY ALSO INDICATES THAT "BECAUSE THE REPLACEMENT OF  
2 WWISC-ELIGIBLE INFRASTRUCTURE WILL NOT INVOLVE THE ADDITION OF  
3 NEW CUSTOMERS TO THE SYSTEM, IT WILL NOT INCREASE REVENUES."<sup>8</sup> DO  
4 YOU AGREE WITH THAT CONCLUSION?

5 A. No.

6

7 Q. WHY NOT?

8 A. Each of the projects I reference in my testimony will be increasing the Company's  
9 capacity to convey water to customers as all involve upgrades to larger main lines. Further, each  
10 of the projects discussed in my testimony will be serving known-growth areas in the City,  
11 therefore it is logical that each of the referenced projects will increase revenue to the Company  
12 from additional water sales and customer growth.

13

14 Q. DID YOU ATTEND OR ARE YOU AWARE OF MEETINGS THE COMPANY HAD  
15 WITH CITY OFFICIALS, AS DESCRIBED IN THEIR RESPONSE TO CITY OF  
16 ALEXANDRIA INTERROGATORY AND REQUEST FOR PRODUCTION OF  
17 DOCUMENTS NO. 4?  
18  
19

20 A. I did not attend any meetings, but I am aware that City Executive Staff, and Engineering  
21 and Operations Staff regularly met with representatives from VAWC during that time frame.  
22 However, it is my understanding after conferring with City Staff that those discussions either  
23 involved broad generalities regarding projects identified in their Application and/or logistics  
24 regarding the phasing and coordination of the construction between VAWC and the City.  
25 VAWC made no attempt whatsoever to consult with the City on which projects should be  
26

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<sup>8</sup> Application, at 4.

- 1 included or whether they met the goals outlined by VAWC for the WWISC or fell within the
- 2 Commission's ruling on the WWISC.
- 3

810021000000



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**CERTIFICATE OF SERVICE**


I hereby certify that on this 19th day of January, 2018, a copy of the foregoing was emailed and mailed by first-class postage prepaid to:

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Andrew R. McRoberts, Esquire

**From:** Alison N Bibb-Carson <Alison.Bibb-Carson@amwater.com>  
**Sent:** Monday, June 05, 2017 4:22 PM  
**To:** Water Communications Command Group  
**Cc:** Hao Chen  
**Subject:** Freedmen's Cemetery archeology test excavation begins week of June 12  
**Attachments:** site plan.pdf

Good afternoon—

The city has approved Virginia American Water's site plan to install a 12-inch water line extension at South Washington Street and the VDOT parcel beside Freedmen's Cemetery. Beginning the week of June 12, our contractor, Utilities Unlimited, will perform an archeological test excavation, and AECOM will conduct archeological monitoring and reporting (see attached for work area).

The archeological test excavation will last approximately 3 weeks and work will occur Monday through Friday from 9 a.m. – 3:30 p.m., and Saturdays from 9 a.m. – 6 p.m. Following the test excavation, we will submit the test report to the city and state archeological departments for review. Once Virginia American Water receives archeological approval, we will notify you and city residents, and will begin pipeline construction.

**More about the project:**

In order to improve water reliability and fire hydrant flow capacity to Bridgeyard Apartments (formerly Hunting Point on the Potomac) and Porto Vecchio Condominiums, Virginia American Water will install a 12-inch water line extension. Currently, only one existing 12-inch water main supplies water to these complexes. A water line extension will create redundancy, helping to ensure that the apartment and condominium homes do not lose water in the event of a main break or fire.

The water line extension will be routed around the west perimeter of Freedmen's Cemetery, located at South Washington and Church Streets. Freedmen's Cemetery is a Civil War-era African-American burial ground, and the site of a memorial commemorating the graves that remain there. Due to the location of the apartment and condominium buildings south of I-495, the only feasible solution for extending the water line is the proposed alignment at the perimeter of Freedmen's Cemetery.

In addition, St. Mary's Catholic Church Cemetery is located on the east side of South Washington Street at the junction where the new 12-inch pipe will connect to an existing pipe.

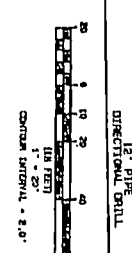
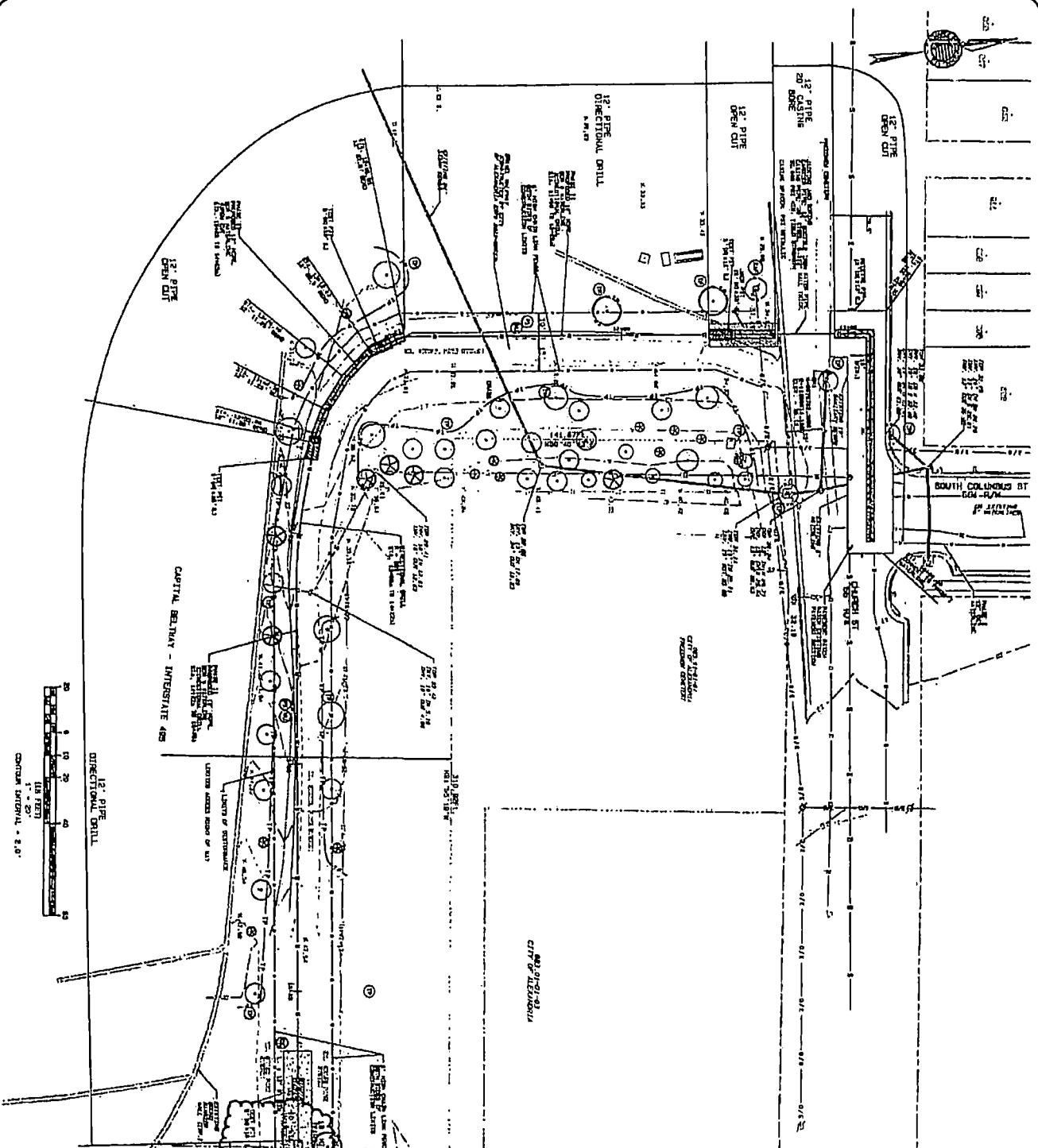
Alison Bibb-Carson  
External Affairs Consultant  
Virginia American Water  
216.926.3911 mobile

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



180130018



PLAN NUMBER: 207009-16-25  
 APPROVED DATE: 8/17/17  
 DESIGNER: [Signature]  
 CHECKER: [Signature]

**WORK AREA**  
 THE WORK AREA IS DEFINED BY THE DASHED LINE. ALL EXISTING UTILITIES AND OBSTRUCTIONS ARE SHOWN WITHIN THIS AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR PROTECTING ALL EXISTING UTILITIES AND OBSTRUCTIONS. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AND PUBLIC UTILITIES AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND REPAIR OF ALL EXISTING UTILITIES AND OBSTRUCTIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND REPAIR OF ALL EXISTING UTILITIES AND OBSTRUCTIONS.

**REVISIONS:**  
 2-9-2014 REVISED PER CITY COMMENTS  
 2-20-2016 REVISED PER CITY COMMENTS  
 11-22-2016 REVISED PER CITY COMMENTS  
 2-23-2017 REVISED TREES - COMMENT #3  
 4-5-2017 REVISED TREE SYMBOLS

VIRGINIA AMERICAN WATER COMPANY  
 FREEDMEN PHASE II  
 WATERLINE EXTENSION  
 CITY OF ALEXANDRIA, VIRGINIA  
 WATERLINE PLAN

DESIGNED: CDR  
 DRAWN: DJF  
 CHECKED: CDR  
 DATE: 8-9-2014

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