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4. EXECUTIVE DIRECTOR'S REPORT

There were no recognitions presented.

RWSA BOARD OF DIRECTORS Minutes of Regular Meeting January 22, 2019

A regular meeting of the Rivanna Water & Sewer Authority (RWSA) Board of Directors was held on Tuesday, January 22, 2019 at 2:15 p.m. in the 2nd floor conference room, Administration Building, 695 Moores Creek Lane, Charlottesville, Virginia.

Board Members Present: Mike Gaffney, Mike Murphy, Liz Palmer, Kathy Galvin, Lauren Hildebrand, and Gary O'Connell

Board Members Absent: Jeff Richardson

Staff Present: Bill Mawyer, Miranda Baird, Liz Coleman, Scott Schiller, Lonnie Wood, Phil McKalips, Victoria Fort, Tim Castillo, Austin Marrs

Also Present: Kurt Krueger, RWSA counsel, members of the public and media representatives.

1. CALL TO ORDER

Mr. Gaffney called the regular meeting of the Board of Directors of the Rivanna Water and Sewer Authority at 2:15 p.m.

2. MINUTES OF PREVIOUS BOARD MEETINGS

a. Minutes of Regular Board Meeting on December 11, 2018

There were no changes to the minutes presented.

Dr. Palmer moved to approve the RWSA Board meeting minutes of December 11, 2018.

Ms. Galvin seconded the motion, which passed 6-0. Mr. Richardson was absent from the meeting and the vote.

3. RECOGNITION

Mr. Mawyer congratulated Mr. Gaffney on his reappointment to the RWSA Board for his ninth term. He wished the Board a Happy New Year and stated that 2019 would be a dynamic year with a lot happening at both Authorities.

He recognized employee Thomas Barger, who had successfully completed his Water Operator Class 2 license, moving up from a Class 3 to a Class 2 license.

 Mr. Mawyer reported that the RWSA had received a letter from the DEQ the previous week that terminated the consent order put in place on August 5, 2011 for sanitary sewer overflows. He noted that the letter stated RWSA had completed the requirements contained in the August 5 letter and thus the DEQ terminated the consent order, noting that they still needed to move forward with Schenks Branch for functional reasons.

Mr. Mawyer stated that Rivanna was also moving forward with the Birdwood waterline, and pipes had been delivered to the site over the last few days, with the installation of 36-inch ductile iron pipe slated to begin this week. He stated that they had met with the UVA Foundation regarding procurement of easements to the north and south of Birdwood, noting the easement areas on a map. Mr. Mawyer stated the Foundation had suggestions about the proposed water line alignment. The Foundation has a conservation easement on the property south of Birdwood, indicating that they preferred for Rivanna to go through the conservation easement if possible. Dr. Palmer asked if the UVA Foundation's lawyers would determine whether Rivanna could go through the conservation easement.

Mr. Mawyer clarified that both the Foundation's attorneys and Mr. Krueger would be determining what the language of the easement is and whether it allowed a utility to go across it - but the Foundation had a preference for going in that direction and seemed to think it was allowable.

Mr. Mawyer reported that Rivanna had been meeting with UVA about the Observatory Water Treatment Plant lease, and the previous week had met with the University facilities staff and architect staff regarding some of the details and materials for the building, including lighting, fencing, and storm water. He stated that it was a good meeting, and they all committed to having the easement signed by this summer -- so there would be two leases: one for the plant and one for Alderman Road pump station, and an easement for piping across the grounds.

Mr. Gaffney asked about the Colthurst easement.

Mr. Mawyer responded that Rivanna expected to talk to some of the larger property owners within the next month, with Colthurst to the north of Barracks Road, and with the Albemarle County School Board behind Jack Jouett Elementary and Lambs Road. He noted that they would also meet with VDOT because the alignment comes along Colthurst Drive through Colthurst, and along Rio Road through the VDOT right of way there. He mentioned that there were some other private property owners at Route 250, such as Piedmont Tractor [now Virginia Tractor]—and Ms. Fort was managing that effort, with meetings expected to happen in the coming month.

 88 Dr. Palmer asked for clarification of the Colthurst easement and if it was a private road there.

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Mr. Mawyer explained that it would be in the right of way, and stated that he did not think it was a private road.

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> 93 Mr. Gaffney commented that the last piece just before getting onto the UVA property, there was 94 a 50-foot section of road that could be private.

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Ms. Fort noted that there was also a large section through Ingleridge Farm, adjacent to the
County Schools property that would be approached once Rivanna finalized a few pieces of the
alignment. She stated that they would embark on those discussions in the next month, but they
initiated some discussions with the Foundation and the professional center across from Birdwood
since they were time sensitive.

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Mr. O'Connell asked if they met early on with the School Board discussion.

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Mr. Mawyer replied that Rivanna had met with the school facilities staff and would go back to show them the updated plan, and from there go to the School Board.

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107 Mr. Gaffney asked if they would work with the schools to build a trail on top of the easement.

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9 Mr. Mawyer and Ms. Fort confirmed that it was part of the discussion.

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111 Mr. Mawyer stated that the Foundation also had an interest in furthering a trail.

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Ms. Fort pointed out that it was for a greenway along Maury Creek, adding that there were a lot of things up in the air that they were trying to get nailed down, so they would keep those discussions moving forward.

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117 Mr. Mawyer reported that a Boy Scout had taken a tour of the Moore's Creek plant to get more information about how they treat wastewater.

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Mr. Mawyer reported that the RWSA Board would review the CIP on February 26, which would cover what was proposed for the FY 20-24 CIP. He stated that in March, they would review the Operating Budget and would be seeking authorization for a May public hearing on the budget.

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Dr. Palmer stated that she would like to hear more about the functional reasons for the Schenks
Branch consent order, noting that she had always been curious about the engineering rationale
for it.

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- Mr. Mawyer explained that the City had the 14th/15th Street Interceptor that provides
- 129 wastewater flow through the Schenks Branch line along McIntire Road, leading to the plant -- so
- it's a matter of capacity, City and UVA growth and more flow coming through the connector.

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Mr. O'Connell emphasized that the pipe was just too small.

Mr. Mawyer stated that with a certain sized rain, there could be sewer overflows that lead to the consent orders.

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Ms. Hildebrand stated that the City system was not in very good shape and they had done analysis on it that revealed a rehab -- with no capacity increase -- would require replacing about 85% of the pipe system from the County Building through 14th/15h Street. She commented that once you get into that, you are looking at just replacing pipe because it is not cost-effective to rehab it. She stated that there were pipe variances from small to large and back to small, and the system needed significant attention.

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> 144 Ms. Hildebrand confirmed that once Schenks Branch was replaced, the City would move forward with their project, as the Schenks Branch pipe needed to be larger to accommodate the 145 City's expected sewer flow needs. She emphasized that the City could not do its piece first, but 146 ultimately would increase it by two pipe sizes -- with the idea being that the City was working 147 cooperatively with Rivanna to install the next sections of pipe. She added that they wanted to go 148 through the City Yard for the next phase and the City was working with Rivanna for that, then 149 would go up to 14th/15th Street. She clarified that the alignment was generally between the 150 McDonald's and Wendy's property in that location. 151

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Mr. Mawyer noted that the CIP subcommittee, consisting of Ms. Hildebrand and Mr. O'Connell, would meet with Rivanna staff the last week of January, with a presentation to the full RWSA Board in February.

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- 5. ITEMS FROM THE PUBLIC
- There were no items from the public.

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- 6. RESPONSES TO PUBLIC COMMENTS
- 161 There were no responses to public comments.

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163 7. CONSENT AGENDA

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166 b. Staff Report on Ongoing Projects

a. Staff Report on Finance

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168 c. Staff Report on Operations

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- 170 d. Approval of Capital Improvement Plan Amendment and Contract Award Valve Repair-
- 171 Replacement (Phase 2) Garney Companies
- e. Approval of Term Contract for Safety and Industrial Hygiene Services Circle Safety and Health
- 173 Consultants

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- Mr. O'Connell asked to pull items d and e. He thanked Rivanna for working with the ACSA on a
- valve replacement on Route 29 North, which was a last-minute addition to that project.

178 Mr. O'Connell stated that he had sent Mr. Mawyer several items on the safety program,

179 commenting that they had seen the first round of the CIP with Crozet, which was 100% ACSA,

and some of the other projects yielding close to a double-digit rate increase. He stated that he

would encourage Rivanna staff to look for good value and cost-effective or even free

alternatives. He added that he had some concerns about getting into a term contract with a safety

consultant, although he did not want to micromanage -- but they needed to be cognizant of the

impact on customers, especially since the initiatives were multi-year increases.

Dr. Palmer asked if he was requesting a change.

Mr. O'Connell responded that he was deferring to Mr. Mawyer to manage it, but hoped they used free resources like insurance companies. He added that he would bring this up at the budget meeting, and Mr. Mawyer already had this information.

Mr. Mawyer stated that Rivanna would explore this, adding that they tried to get the best financial optimization with all programs, including using internal staff. He pointed out that safety was a big program, and there were about 20 topics that required staff training, procurement of equipment, and procedural steps -- which was an extensive program. He stated they were using their safety manager as much as possible, but it was challenging for her to do all the training and write all the procedures, which was why consultant help was suggested.

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Mr. Mawyer noted that when they had the OSHA inspection at the end of 2017, Rivanna got 38 citations[A1] -- and OSHA had only looked at a few of the 42 buildings. He mentioned that some of the comments were that plans were out of date, one being 10 years out of date, and there was clearly some catching up to do. He stated that within the budget allowances, they may need consultant help to speed up the process.

Mr. O'Connell suggested that some of the training could be shared with ACSA, such as confined space, fire extinguishment, etc.

 Mr. Murphy stated that in looking at this list and considering a risk management and safety coordinator for the City budget, they are launching a training platform called "Target Solutions" throughout a number of the departments -- and it seemed like there could be opportunities for collaboration.

Mr. Mawyer responded that Rivanna tried to do as much joint safety training as possible with the City and ACSA, including the "Lock Out/Tag Out" program, which involves writing a procedure to instruct staff on how to shut down a piece of equipment appropriately and safely -- and there were 2,000 pieces of equipment that required those procedures. He stated there were also 1,100 chemicals dealt with in water/wastewater treatment, and there were material safety data sheets for all of them that had to be kept up to date. He reiterated that they would try to use available resources but did not want to fall too far behind.

Mr. Mawyer stated that they would start with a safety master plan to solicit feedback on where efforts should initially be focused, similar to a strategic plan -- and it did fit into the strategic

plan goal of providing a safe environment for staff and customers. He added that there were 92 confined spaces that people had to be specially trained to enter.

Mr. Mawyer explained that with the Lock Out/Tag Out procedure, if there is a pump or motor, they go to the piece of equipment, photograph it, label it, and tell staff how to shut it down safely -- then they have to test it to make sure it is de-energized before they start working on it. He stated that they have to figure that out anyway when they are going to do the work, and they want a procedure that tells them how to do it each time.

Mr. O'Connell asked if Lock Out/Tag Out was one of the tasks for the treatment plant design engineers, and completion of their projects.

Mr. Mawyer responded that they currently did not, but with upcoming projects Rivanna planned to get Lock Out/Tag Out procedures through the construction process, so they would not have to invent them after it was over. He stated they were already evolving to get caught up and put those procedures on new pieces of equipment.

Mr. Mawyer presented a slide of a sewer manhole, with a person entering it needing to be trained and having a tripod for fall protection -- as well as the ability to get them out of the hole if they encountered problems. He stated that there needed to be a person above the opening to get them out, and it was a process they took seriously. He added that they have used a trainer from PVCC, which was a paid service, and invited ACSA and City staffs on confined space entry training.

Mr. O'Connell moved to approve the Consent Agenda as presented. Dr. Palmer seconded the motion, which passed 6-0. Mr. Richardson was absent from the meeting and the vote.

8. OTHER BUSINESS

a. Presentation: Value Engineering for CIP Projects; Bill Mawyer, Executive Director Mr. Mawyer reported that they were poised to start discussion of CIP projects, and one component of this was value engineering. He explained that the Code of Virginia talks about it being a systematic process wherein an independent group comes in and reviews the design, then makes suggestions on how to improve the value and reduce the costs.

He stated that it was required for all state capital projects with a value greater than \$5 million -- but there was some latitude for exemption of projects where the VE process was done as an integral component of project design or if they did design-build or construction management at risk, which Rivanna had not yet explored. Mr. Mawyer stated that they also provided latitude to the Director of General Services to use judgement as to whether the VE would be worthwhile, as the process itself came with a cost.

 Mr. Mawyer reported that in 2014, the RWSA Board reviewed the topic and provided some guidance regarding when Rivanna would have a VE process, and they stated that they would use an independent third-party firm for projects exceeding \$5 million -- but also authorized the Executive Director to exercise latitude if there was potential for other cost savings and benefits. He stated that in 2004, Rivanna did a VE study on the GAC project, which cost about \$207,000

269 but reported a \$2.8-million savings -- largely because the number of GAC vessels was reduced

from 3 to 2 at Observatory and 2 to 1 at North Rivanna treatment plants. He noted that also in 270

2014, staff did a VE study on the odor control project, which cost about \$116,000 for the process 271

but yielded about \$900,000 in savings by changing the way scrubbers and grit facilities were 272

done. 273

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275 Mr. Mawyer stated that there had not been a VE project done since 2014, but the Observatory

Water Treatment Plant renovation and expansion, a \$20-million project, and the South Rivanna 276

Water Treatment Plant renovation at \$15 million, would be candidates. He stated that if they held 277

their places in the CIP, Rivanna planned to combine the two projects into one construction

project to interest larger contractors to come into the area for the \$30-million project. He noted 279

that this could yield volume-based cost savings, consistency from the contractor buying the same 280

materials for both plants, and reduction of administration costs by bundling. 281

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Mr. Mawyer explained that they would start with South Rivanna and get that substantially

completed, then go to Observatory and finish that plant. He added that the design plans would be

30% complete by February, at which time the VE study could begin. Mr. Mawyer stated that 285

Rivanna included in the design engineer's contract that they do an integral VE process in the 286

design. He stated that everyone in Rivanna who would use and maintain the facility had met with

the consultant to review the systems and establish project parameters. Mr. Mawyer stated that at

this point, they planned to proceed in that fashion and not have the third party come in and do the

VE evaluation. 290

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Mr. Mawyer emphasized that these were renovation projects that were primarily upgrades to

better technology equipment, and they were not changing the treatment process, as was the case

with the GAC project. He added that through the process, the design engineer would need to 294

write a written report on what VE considerations were made and what the decisions were. He 295

296 stated that they already determined that more surface area was needed to do more settling at the

Observatory Treatment Plant, so they were putting inclined plate settlers -- steel plates put in the 297

existing sediment basins. He stated that this increased the surface area and the rate of sediment

removal without having to build larger basins, which was a prime VE candidate. 299 300

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Mr. O'Connell asked if there was another engineering firm that reviewed that.

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Mr. Mawyer responded that they currently did not have another firm, and SEH was the engineering firm -- which designed Crozet and was the designer of both South Rivanna and

Observatory. He stated that SEH had internal quality assurance and Rivanna would then meet 306

with them.

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Ms. Hildebrand asked if they had the same design engineer through the VE process or if they

brought in separate engineers from the projects to look at it.

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311 Mr. Schiller responded that it would probably be the same design team, although they may have 312

an opportunity to pull people from offices Rivanna wasn't currently working with.

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Mr. O'Connell suggested that they do that to get some fresh eyes to look at it.

Mr. Mawyer agreed that it was helpful to have extra eyes.

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318 Mr. Gaffney asked what the cost would be to have an outside firm do it if they could not.

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Mr. Mawyer responded that the history shows \$100,000+, with a cost of \$200,000[A2] for GAC -which included design engineering changes stemming from the review. He added that value engineering included stability and longevity of projects, not just cost savings, so facilities had a longer life. He added that they were trying to generally improve and increase operations at Observatory and South Rivanna.

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Mr. Mawyer stated that the rest of the VE candidates in the CIP included Beaver Creek Dam, 326 327 with a pump station that would be eligible for VE, and that project was about \$20 million. He stated that the raw water pump station and pipe from Ragged Mountain to Observatory was 328 about \$16 million and was already pushed out to FY25. He stated that the South Rivanna River 329

330 crossing and transmission main would provide a second pipe from the S. Rivanna treatment plant 331

to the north and was just over \$5 million.

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Mr. O'Connell asked if long-term maintenance costs were a consideration in VE.

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Mr. Mawyer confirmed that they were, adding that they were a standard within Rivanna consultant contracts -- and they always had an eye to efficiency and effectiveness, with life cycle being a major consideration.

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Dr. Palmer asked what the timeline was for the Observatory Treatment Plant.

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Mr. Mawyer responded that it was slated for FY20-24, and after that the pipeline from Ragged Mountain to Observatory would be started, as currently programmed in the CIP. He noted that Rivanna had met with the ACSA and had already been through a revised CIP effort to try to lower customers' rates. He stated that the pipeline project had initially been concurrent with Observatory, but it was pushed out of the five-year CIP to reduce costs to the ACSA.

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Mr. O'Connell stated that the ACSA had asked for that, with critical projects up front and others pushed back, in an effort to spread the cost average out over a longer period of time, as there were double-digit increases expected over the next several years -- which was not sustainable. He added that this was the case even without the RMR-SRR pipeline, which represented another leap.

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Mr. Mawyer stated that the RMR-SRR pipeline had a FY27-40 timeline. He stated that the Observatory Treatment Plant renovation and pipe on the raw water side from the plant back to the reservoir and pump station were deferred outside of 2024, so they would be moved to 2025. He added that the finished water pipe historically known as the Southern Loop had a master plan study and was slated for deferral to 2025. He stated that they were doing a master plan now to see where the water line needed to be located, either through the City central or around the southern perimeter as it was originally envisioned.

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Mr. O'Connell commented that it's basically how you get water from Observatory to Pantops, and the original plan was to go south -- but that did not work for a variety of reasons, and it was an expensive project. He stated that to get out of the five-year cycle, it would need to be pushed out of that and into the sixth year, which was what they were doing. 9. OTHER ITEMS FROM BOARD/STAFF NOT ON AGENDA Dr. Palmer stated that the Ivy Transfer Station, since lowering the rates this year, had more than doubled the average daily trash coming in.

Mr. Gaffney mentioned that he had received a call from a commercial hauler several weeks ago, and he stated it was outstanding how they had lowered the rates -- but he was disappointed that the facility was closed on Mondays.

Dr. Palmer commented that she hoped she could justify that to the County.

Mr. Mawyer mentioned that it would come to the RSWA in February, and at that point they would have six weeks of data. He added that they would also discuss the master plan and convenience center, and would have a joint RWSA/RSWA meeting to review the strategic plan update, as well as holding CIP discussions.

10. CLOSED MEETING

There was no closed meeting held.

11. ADJOURNMENT

Ms. Galvin moved to adjourn the meeting. Dr. Palmer seconded the motion, which passed 6-0. Mr. Richardson was absent from the meeting and the vote.

The RWSA Board adjourned its meeting at 2:56 p.m.

Respectfully submitted,

Secretary-Treasurer