

## MEMORANDUM

**TO:** RIVANNA WATER & SEWER AUTHORITY  
BOARD OF DIRECTORS

**FROM:** JENNIFER WHITAKER, DIRECTOR OF ENGINEERING & MAINTENANCE

**REVIEWED BY:** BILL MAWYER, EXECUTIVE DIRECTOR

**SUBJECT:** CIP PROJECTS REPORT

**DATE:** APRIL 22, 2025

This memorandum reports on the status of the following major Capital Projects as well as other significant operating, maintenance, and planning projects. *Recent budget changes, if any, are highlighted in the project information below.*

For the current CIP and additional project information, please visit: <https://www.rivanna.org/wp-content/uploads/2024/06/2025-2029-CIP-Final-Draft.pdf>

### Summary

	Project	Construction Start Date	Construction Completion Date
1	Rivanna Pump Station Restoration	July 2024	October 2025
2	Red Hill Water Treatment Plant Upgrades	January 2025	June 2026
3	South Fork Rivanna River Crossing	December 2024	January 2027
4	RMR to OBWTP Raw Water Line and Pump Station	February 2025	June 2029
5	MC Building Upfits and Gravity Thickener Improvements	May 2025	May 2027
6	MC Structural and Concrete Rehabilitation	May 2025	May 2027
7	Crozet Pump Stations Rehabilitation	August 2025	September 2027
8	MC Administration Building Renovation and Addition	June 2025	December 2027
9	Central Water Line	August 2025	March 2029
10	Crozet WTP GAC Expansion – Phase I	September 2025	March 2027
11	MC Pump Station Slide Gates, Valves, Bypass, and Septage Receiving Upgrades	September 2025	September 2026
12	SRWTP – PAC Upgrades	December 2025	August 2027
13	RMR Pool Raise	September 2025	September 2026
14	SRR to RMR Pipeline, Intake, and Facilities	February 2026	December 2030
15	Beaver Creek Dam, Pump Station, and Piping	May 2026	January 2030
16	Upper Schenks Branch Interceptor, Phase II	2026	2027

17	SRWTP Permanganate Improvements	June 2026	August 2027
18	Glenmore WRRF Phase 1	June 2026	January 2028
19	Dam Concrete and Steel Repairs	January 2026	December 2026
20	SVWRRF Generator	January 2026	June 2027

#### Under Construction

1. Rivanna Pump Station Restoration
2. Red Hill Water Treatment Plant Upgrades
3. South Fork Rivanna River Crossing
4. RMR to OBWTP Raw Water Line and Pump Station
5. MC Building Upfits and Gravity Thickener Improvements
6. MC Structural and Concrete Rehabilitation
7. Crozet Pump Stations Rehabilitation
8. MC Administration Building Renovation and Addition

#### Design and Bidding

9. Central Water Line
10. Crozet WTP GAC Expansion – Phase I
11. MC Pump Station Slide Gates, Valves, Bypass, and Septage Receiving Upgrades
12. SRWTP – PAC Upgrades
13. RMR Pool Raise
14. SFRR to RMR Pipeline, Intake, and Facilities
15. Beaver Creek Dam, Pump Station, and Piping
16. Upper Schenks Branch Interceptor, Phase II
17. SRWTP Permanganate Improvements
18. Glenmore WRRF Upgrade Phase 1
19. Dam Concrete and Steel Repairs
20. SVWRRF Generator

#### Planning and Studies

21. MCAWRRF Biogas Upgrades
22. Flood Protection Resiliency Study

#### Other Significant Projects

23. Urgent and Emergency Repairs
24. Security Enhancements

### **Under Construction**

#### **1. Rivanna Pump Station Restoration**

Design Engineer:

Hazen/SEH

Construction Contractor:

MEB

Construction Start:

July 2024

Percent Complete:	90%
Completion:	October 2025
Budget:	\$22 M

Current Status: Contractor completed installation of rebuilt pumps, new motors and associated mechanical and electrical components required to begin the first stage of a demonstration period (began on 4/8/25) associated with one side of the pump station. Following successful completion of this demonstration period, components will be finalized on the other side of the pump station and a final demonstration period will commence. Bypass pumping system should be completely removed by the end of April 2025, assuming the demonstration periods proceed with no issues, with full pump station restoration completed by October 2025.

## **2. Red Hill Water Treatment Plant Upgrades**

Design Engineer:	Short Elliot Hendrickson (SEH)
Construction Contractor:	Anderson Construction (Lynchburg)
Construction Start:	January 2025
Percent Complete:	5%
Base Construction Contract +	
Change Order to Date = Current Value:	\$2,067,000 - \$324,625 = \$1,742,375
Completion:	June 2026
Budget:	\$2.05 M

Current Status: A temporary pressure tank has been placed in service and an inspection of the existing tank has been performed. Work on the existing pressure tank will begin this month. Construction of the building addition will begin as soon as the Site Plan is approved by the County.

## **3. South Fork Rivanna River Crossing**

Design Engineer:	Michael Baker International (Baker)
Construction Contractor:	Faulconer (Charlottesville)
Construction Start:	December 2024
Percent Complete:	8%
Base Construction Contract +	
Change Order to Date = Current Value:	\$4,916,940
Completion:	January 2027
Budget:	\$6.25 M

Current Status: Contractor completed clearing on both sides of the river. A portion of Old Rio Mills Road will be closed for several months as construction of the new 24" water line begins. Access to Brook Hill River Park will remain open to the public.

## **4. Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Line and Pump Station**

Design Engineer:	Kimley-Horn
Construction Contractor:	Thalle Construction (North Carolina)
Construction Start:	February 2025
Percent Complete:	5%
Base Construction Contract +	

Change Order to Date = Current Value:	\$56,532,000 - \$2,779,390 = \$53,752,610
Completion:	June 2029
Budget:	\$61.49 M

Current Status: The Contractor focused on clearing trees in March and has shifted to grinding felled trees and prepping easement areas for pipe installation. The Contractor is also setting up its jobsite trailer at the pump station site on Reservoir Road and will be test drilling for rock in key areas of the pipeline alignment.

## **5. MCAWRRF Building Upfits and Gravity Thickener Improvements**

Design Engineer:	Short Elliot Hendrickson (SEH)
Construction Contractor:	English (Lynchburg, VA)
Construction Start:	May 2025
Percent Complete:	2%
Base Construction Contract+	
Change Order to Date = Current Value:	\$9,821,000 - \$189,500 = \$9,631,500
Completion:	May 2027
Budget:	\$11.8 M

Current Status: A pre-construction conference was held on April 4, 2025. A Notice to Proceed is anticipated this month after approval of the bonds and insurance.

## **6. MCAWRRF Structural and Concrete Rehabilitation**

Design Engineer:	Hazen and Sawyer (Hazen)
Construction Contractor:	WM Schlosser (Hyattsville, MD)
Construction Start:	May 2025
Percent Complete:	1%
Base Construction Contract+	
Change Order to Date = Current Value:	\$13,866,000 - \$898,500 = \$12,967,500
Completion:	May 2027
Budget:	\$15.5 M

Current Status: A pre-construction conference was held on April 10, 2025. A Notice to Proceed is anticipated this month after approval of the bonds and insurance.

## **7. Crozet Pump Stations Rehabilitation**

Design Engineer:	Wiley   Wilson
Construction Contractor:	Waco, Inc. (Sandston, VA)
Construction Start:	August 2025
Percent Complete:	3%
Base Construction Contract+	
Change Order to Date = Current Value:	\$9,583,350
Completion:	September 2027
Budget:	\$12.35 M

Current Status: Equipment submittals are being processed and materials are being ordered. We anticipate lengthy material delivery times.

#### **8. Moores Creek Administration Building Renovation and Addition**

Design Engineer:	SEH
Construction Contractor	Martin Horn (Charlottesville)
Construction Start:	June 2025
Percent Complete:	1%
Base Construction Contract+	
Change Order to Date = Current Value	\$22,094,000
Completion:	December 2027
Budget:	\$27.6 M

Current Status: Contracts have been signed, and a Pre-Construction Meeting was held on April 18, 2025. A Notice to Proceed is anticipated for early May after approval of the bonds and insurance.

### **Design and Bidding**

#### **9. Central Water Line**

Design Engineer:	Michael Baker International (Baker)
Project Start:	July 2021
Project Status:	Bidding (Phase 1)
Construction Start:	August 2025
Completion:	March 2029
Budget:	\$79 M

Current Status: **Phase 1 Contract (west end):** The bid opening date has been rescheduled for May 8, 2025 to address design revisions. Revised plans were issued to Contractors in April. **Phase 2 Contract (east end):** Design efforts in the E. High Street area are in process and survey work is complete. An additional private easement will be required as well as new easements on two City parcels. Phase 2 design will be completed in the summer 2025.

#### **10. Crozet GAC Expansion – Phase I**

Design Engineer:	SEH
Project Start:	July 2023
Project Status:	100% Design
Construction Start:	September 2025
Completion:	March 2027
Budget:	\$10 M

Current Status: Project will be advertised for bidding when we receive approval of the design from VDH. \$6.24 M in grant funds from VDH are available for this project.

#### **11. MC Pump Station Slide Gates, Valves, Bypass, and Septage Receiving Upgrades**

Design Engineer:	Hazen and Sawyer (Hazen)
Project Start:	June 2023

Project Status:	90% Design
Construction Start:	September 2025
Completion:	September 2026
Budget:	\$9.7 M

Current Status: Staff are making decisions on the septage receiving equipment and billing software needed. A new work authorization is being negotiated to include repairs to the South Side Septage Receiving Facility to improve plant operations during construction.

## **12. SRWTP – PAC Upgrades**

Design Engineer:	SEH
Project Start:	November 2023
Project Status:	95% Design
Construction Start:	December 2025
Completion:	August 2027
Budget:	\$1.1 M

Current Status: Construction bids will be received in May.

## **13. RMR Pool Raise**

Design Engineer:	Schnabel Engineering
Project Start:	April 2024
Project Status:	Bidding
Construction Start:	September 2025
Completion:	September 2026
Budget:	\$6 M

Current Status: Construction bids will be received in May.

## **14. SFRR to RMR Pipeline, Intake, and Facilities**

Design Engineer:	Kimley Horn/SEH
Project Start:	July 2023
Project Status:	75% Design
Construction Start:	February 2026
Completion:	December 2030
Budget:	\$117 M

Current Status: Staff provided comments on the 90% pipeline plans to the Design Engineer. A workshop was held for the intake structure design on April 9<sup>th</sup>, and the Design Engineer is completing 60% plans for the intake.

## **15. Beaver Creek Dam, Pump Station and Piping Improvements**

Design Engineer:	Schnabel Engineering (Dam)
Design Engineer:	Hazen & Sawyer (Pump Station)
Project Start:	February 2018
Project Status:	70% Design

Construction Start:	May 2026
Completion:	January 2030
Budget:	\$62 M

Current Status: Hazen is proceeding with design of the pump station. Final design by Schnabel for the dam spillway upgrades, temporary detour, and spillway bridge is ongoing. Discussions with the County have been initiated for acquisition or lease of property for the Pump Station. A significant (\$20 M) construction grant from the NRCS is anticipated. A Value Engineering workshop is scheduled for May on the raw water pump station and intake structure.

#### **16. Upper Schenks Branch Interceptor, Phase II**

Design Engineer:	CHA Consulting
Project Start:	July 2021
Project Status:	Design
Construction Start:	2026
Completion:	2027
Budget:	\$6.4 M for RWSA section; \$11 – 15 M including City section

Current Status: Meetings with the County and City are ongoing to finalize the piping design.

#### **17. SRWTP Permanganate Improvements**

Design Engineer:	SEH
Project Start:	January 2025
Project Status:	10% Design
Construction Start:	June 2026
Completion:	August 2027
Budget:	\$400,000

Current Status: This project will replace chemical feed equipment at the end of its useful life and increase chemical containment capacity.

#### **18. Glenmore WRRF Upgrade Phase 1**

Design Engineer:	SEH
Project Start:	March 2025
Project Status:	0% Design
Construction Start:	June 2026
Completion:	January 2028
Budget:	\$1.65 M

Current Status: This project will replace wastewater treatment equipment at the end of its useful life and reduce the noise generated from the blowers.

## **19. Dam Concrete and Steel Repairs**

Design Engineer:	GAI Consultants
Project Start:	January 2025
Project Status:	5% Design
Construction Start:	January 2026
Completion:	December 2026
Budget:	\$1.28 M

Current Status: Structural assessments of the Sugar Hollow, South Rivanna, Lickinghole Creek, and Totier Creek dams were conducted by GAI in March 2025. Repairs will be completed in the summer of 2026.

## **20. SVWRRF Generator**

Design Engineer:	Wiley Wilson
Project Start:	October 2022
Project Status:	10% Design
Construction Start:	January 2026
Completion:	June 2027
Budget:	\$0.9 M

Current Status: This project includes installation of a generator that will provide emergency backup power to both the Scottsville Water Resource Recovery Facility and Wastewater Pump Station. As this project is receiving approximately \$0.552M in funding from FEMA and VDEM, FEMA requested that the generator and fuel tank be installed on an elevated platform located above the 500-yr floodplain.

## **Planning and Studies**

### **21. MCAWRRF Biogas Upgrades**

Design Engineer:	SEH
Project Start:	October 2021
Project Status:	Preliminary Engineering/Study (99%)
Completion:	December 2024
Budget:	\$6.2 M

Current Status: RWSA and City staff continue to discuss all available options to reuse biogas.

### **22. Flood Protection Resiliency Study**

Design Engineer:	Hazen
Project Start:	August 2024
Project Status:	Preliminary Engineering/Study
Completion:	July 2025
Budget:	\$278,500

Current Status: This project will identify individualized flood mitigation measures for various facilities to increase their resiliency from a 1% to a 0.2% flooding event and will focus on facilities



located at the Moores Creek AWRRF within those flood event boundaries. This project received \$198,930 in grant funding from FEMA and VDEM.

## **Other Significant Projects**

### **23. Urgent and Emergency Repairs**

Staff are currently working on several urgent repairs within the water and wastewater systems as listed below:

Project No.	Project Description	Approx. Cost
2023-01	Finished Water System ARV Repairs	\$150,000
2024-09	Stillhouse Waterline Erosion @ Ivy Creek	\$200,000
2025-03	Ragged Mtn Raw Waterline Break @ Reservoir Road	\$25,000

- **RWSA Finished Water ARV Repairs:** RWSA Engineering staff recently met with Maintenance staff to identify a list of Air Release Valves (ARVs) that need to be repaired, replaced, or abandoned. Several of these locations will require assistance from RWSA On-Call Maintenance Contractors, due to the complexity of the sites (proximity to roadways, depth, etc.). The initial round will include seven (7) sites, all along the South Rivanna Waterline. Three replacements have been completed at this time, with a fourth site in progress. This in progress site included abandonment of an existing manual ARV located in the middle of the Route 29-Hydraulic intersection, which has been completed, and was a major coordination effort with VDOT, as they intend to pave this area in the coming weeks. The Contractor is working with VDOT on permits for the final sites. The remaining replacements will likely be scheduled starting in Spring 2025.
- **Stillhouse Waterline Erosion at Ivy Creek:** In November 2024, it was discovered that the banks of Ivy Creek had experienced significant erosion during some of the heavy rainstorms earlier in the Fall, and that the erosion was now intruding on RWSA's 12" Stillhouse Waterline. The area was temporarily armored with sandbags in December, to protect the waterline from further erosion in the interim. Staff are working with the USACOE to permit a permanent bank stabilization project, which will include placement of large rip-rap along the streambank. Given continued region-wide disaster relief efforts associated with Hurricane Helene, it is anticipated that permits may not be received until Spring 2025. RWSA intends to utilize its On-Call Maintenance Contractor, Faulconer Construction Company, for completion of this work and is seeking funding/reimbursement opportunities through FEMA.
- **Ragged Mountain Raw Waterline Break at Reservoir Road:** On March 19<sup>th</sup>, a Contractor installing internet fiber lines bored through RWSA's 18" Ragged Mountain Raw Waterline, along Reservoir Road in the proximity of Camp Holiday Trails and the access road to the Ragged Mountain Natural Areas. RWSA staff responded to the incident quickly and helped isolate the break, and then on March 20<sup>th</sup>, RWSA Maintenance staff made repairs to the raw water main, put it back in service, and restored Reservoir Road with a gravel patch. The roadway was repaved by On-Call Maintenance Contractor on Tuesday, April 1<sup>st</sup>.

### **24. Security Enhancements**

Design Engineer:

Construction Contractor:

Construction Start:

Hazen & Sawyer

Security 101 (Richmond, VA)

March 2020

Percent Complete:	90% (WA9), 50% (WA #12)
Based Construction Contract +	
Change Orders to Date = Current Value:	\$718,428 (WA1) + \$1,006,804 (WA2-12)
Completion:	June 2025 (WA9), December 2025 (WA12)
Budget:	\$2.98 M

Current Status: WA9 will include installation of card access on all exterior doors at the South Rivanna WTP and has been amended to include interior doors at the new IT data center. WA12 includes installation of card access on all exterior doors at the Observatory WTP, as well as two small electrical buildings at MCAWRRF. Design of MCAWRRF entrance modifications with Hazen & Sawyer continues, with discussions with Dominion Energy also ongoing, as relocation of existing electrical infrastructure will be required. This relocation process will need to be finalized prior to the project proceeding to the bidding phase. Relocation of existing electrical infrastructure will require coordination with the adjacent landowner, as the infrastructure must be completely relocated from the entrance area. As these discussions are ongoing, staff have submitted appropriate permitting documents to Albemarle County.