

ROANOKE VALLEY RESOURCE AUTHORITY
TINKER CREEK TRANSFER STATION
1020 HOLLINS ROAD, N.E.
ROANOKE, VIRGINIA 24012

MINUTES OF JANUARY 22, 2025

The Roanoke Valley Resource Authority met at the Tinker Creek Transfer Station, 1020 Hollins Road NE, Roanoke, Virginia.

OPENING CEREMONIES

Call to Order: Chair Owens called the meeting to order at 12:06 p.m., followed by attendance roll call.

Members Present: Steve Bandy, Roanoke County
Rob Light, City of Salem
Mike McEvoy, City of Roanoke (*departed meeting at 12:50 p.m.)
Rebecca Owens, Roanoke County
Pete Peters, Town of Vinton
Jeffrey Powell, City of Roanoke
Todd Simmons, Roanoke County

Members Absent: Doug Blount, Roanoke County
Laurie Gearheart, Roanoke County

Staff Present: Jim Guynn, Attorney
Jon Lanford, Chief Executive Officer
Jeff Harbin, Director of Operations - Field Services
Jeremy Garrett, Director of Operations – Technical Services
Brad Brewer, Finance Manager
Lorie Bess, Board Secretary

REQUESTS TO POSTPONE, ADD TO, OR CHANGE THE ORDER OF AGENDA ITEMS

None

BUSINESS – ACTION ITEMS

ORGANIZATION OF THE BOARD

Ms. Owens turned Chairmanship of the meeting over to Mr. Jim Guynn, County Attorney, to conduct the election of the Chair.

ELECTION OF CHAIR

Mr. Guynn opened the floor for nominations for Chair. Mr. Bandy nominated Ms. Owens as Chair for 2025. Mr. Powell seconded the nomination. There were no further nominations.

MOTION: That nominations for Chair be closed and Rebecca Owens be elected as Chair for 2025.

MOTION: Mr. Bandy

SECOND: Mr. Powell

AYES: Unanimous

ABSENT: Mr. Blount, Ms. Gearheart

RESOLUTION: RA2025-01

ELECTION OF VICE CHAIR

Chair-Elect Owens opened the floor for nominations for Vice Chair of the Board for 2025. Mr. Bandy nominated Mr. Powell for Vice Chair. Mr. Light seconded the nomination. There were no further nominations.

MOTION: That nominations for Vice Chair be closed and Jeffrey Powell be elected as Vice Chair for 2025.

MOTION: Mr. Bandy

SECOND: Mr. Light

AYES: Unanimous

ABSENT: Mr. Blount, Ms. Gearheart

RESOLUTION: RA2025-02

ELECTION OF TREASURER

Chair-Elect Owens opened the floor for nominations for Treasurer of the Board for 2025. Ms. Owens nominated Ms. Gearheart for Treasurer. Mr. Light seconded the nomination. There were no further nominations.

MOTION: That nominations for Treasurer be closed and Laurie Gearheart be elected as Treasurer for 2025.

MOTION: Ms. Owens

SECOND: Mr. Light

AYES: Unanimous

ABSENT: Mr. Blount, Ms. Gearheart

RESOLUTION: RA2025-03

ELECTION OF BOARD SECRETARY

Chair-Elect Owens opened the floor for nominations for Board Secretary for 2025. Ms. Owens nominated Mrs. Bess for Board Secretary. Mr. Bandy seconded the nomination. There were no further nominations.

MOTION: That nominations for Board Secretary be closed and Lorie Bess be elected as Board Secretary for 2025.

MOTION: Ms. Owens

SECOND: Mr. Bandy

AYES: Unanimous

ABSENT: Mr. Blount, Ms. Gearheart

RESOLUTION: RA2025-04

BUSINESS – INFORMATION ITEMS

RVRA SMITH GAP MASTER PLANNING PRESENTATION

Mr. Lanford introduced Mike Jeffries and Andrew Monk from Thompson and Litton. Mr. Lanford noted the Authority started updating their member use agreements last year and numbers heard today would be different than what the Board heard in the past. At that time, Mr. Monk proceeded to give the presentation. (The full Master Plan can be found on the RVRA website under the January 22, 2025 Agenda and is attached to the Minutes.)

Shown below is the Narrative Summary from the presentation:

MASTER PLAN
Smith GapLandfill
Salem, Virginia

**Prepared For
Roanoke Valley Resource Authority**

This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of Thompson & Litton and is not to be used in whole or in part for any other project without the written authorization of Thompson & Litton.

Thompson & Litton
726 Auburn Avenue
Radford, Virginia 24141

T&L Project No. 18361

Issued for Review January 22, 2025

Introduction

The proceeding narrative briefly describes potential expansion areas for the Smith Gap Landfill. Each section includes a summarization of all elements analyzed such as site specific constraints, potential area size, earthwork, and capacity, life expectancy, and stream mitigation. Please refer to Table-1 following the narrative for a tabulation of key elements found within each area. Accompanying exhibits illustrating individual areas are included within Appendix A. A Preliminary Rough Order of Magnitude was calculated for each area given the results of each analysis. All estimations, for the purpose of this analysis, were conducted utilizing present values and not extrapolated for future inflation within any given market or an increase in disposal rates at the Smith Gap Landfill. Please see Table-2 for information.

Area 1

- Acreage: 6.70 acres
- Generated Airspace: 1,602,649 cubic yards
- Approximate Area Life Expectancy: 4.01 years

This area is located on the southern end of the currently permitted Phase I portion of the landfill. No known geotechnical data resided in this location; therefore, additional geotechnical investigations will be required to determine the underlying strata. The expansion would effectively increase the footprint of Phase I by approximately 6.70 acres. To construct this area, approximately 346,636 cubic yards (C.Y.) of cut and 11,829 C.Y. of fill will be required. The airspace generated in this area is approximately 1,602,649 C.Y. when accounting for the additional airspace gained from "piggybacking" off of the existing Phase I slopes, which is favorable when compared to the total earthwork required to construct the cell. Furthermore, the overall quantity of cut generated from the cell construction is sufficient to provide the required borrow material for daily cover. The life expectancy of this expansion is approximately 4.01 years. No stream mitigation will be required to construct this area. The existing leachate system constructed within Phase I will be utilized, requiring little to no adjustment. The existing stormwater management facilities will be utilized to detain and treat the stormwater generated by this expansion. Additional analysis will be required to ensure adequate capacity is available within the existing facilities. Please see Figure 4 and Figure 5 in Appendix A for further detail.

Area 2

- Acreage: 28.90 acres
- Generated Airspace: 4,062,779 cubic yards
- Approximate Area Life Expectancy: 10.16 years

This area is located on the northern end of the currently permitted Phases VII – VIX of the landfill. The expansion would effectively increase the footprint of these phases by approximately 28.90 acres. To construct this area, approximately 1,081,370 cubic yards (C.Y.) of cut and 127,861 C.Y. of fill will be required. The airspace generated in this area is approximately 4,062,779 C.Y. when accounting for the additional airspace gained from "piggybacking" off of the existing phase slopes, which is favorable when compared to the total earthwork required to construct the cell. Furthermore, the overall quantity of cut generated from the cell construction is sufficient to provide the required borrow material for daily cover. The life expectancy of this expansion is approximately 10.16 years. Additional geotechnical investigation will be required to further identify the underlying strata within the expansion area. Approximately 1,360 lineal feet (L.F.) of stream mitigation will be

required to construct this area. Gravity leachate collection discharging to an existing leachate holding facility is unfortunately not feasible for this area. Either a wet well coupled with a pump station or a side slope riser would be required. Preliminary stormwater management calculations were conducted to determine an area sufficient in size to construct a permanent stormwater management facility. It was found that the area directly to the northwest of the proposed construction provides an adequate area to construct an above ground detention facility with a relatively short discharge location within the adjacent stream. Please see Figure 4 and Figure 5 in Appendix A for further detail.

Area 3

- Acreage: 15.18 acres
- Generated Airspace: 1,069,950 cubic yards
- Approximate Area Life Expectancy: 2.67 years

This area is located on the eastern side of the property and includes a 15.18-acre cell. During the initial analysis, existing borings were utilized to determine the approximate depth to bedrock. It was determined that encountering bedrock during construction is unlikely, however, possible. Additional geotechnical investigation will be required to accurately map the underlying strata. Further expansion to the east is not possible due to the existing overhead electric transmission lines with accompanying easement. Existing streams encompass the perimeter of Area 3, which constrain the constructable area and have been accounted for to avoid excessive stream mitigation. The existing stream to the west of Area 3 will require crossing to connect the proposed access road to the access road of Area 2. To avoid stream mitigation, a Conspan bridge or similar bridge deck is recommended to span this section of stream. To construct this area, approximately 215,565 C.Y. of cut and 20,475 C.Y. of fill will be required. The airspace generated in this area is approximately 1,069,950 C.Y., which is favorable when compared to the total earthwork required to construct the cell. However, if the waste disposal rate remains consistent with historical data, this only provides approximately 2.67 years of life. Gravity leachate collection discharging to an existing leachate holding facility is unfortunately not feasible for this area. Either a wet well coupled with a pump station or a side slope riser would be required. Preliminary stormwater management calculations were conducted to determine an area sufficient in size to construct a permanent stormwater management facility. It was found that the area directly to the northeast provides an adequate area to construct an above ground detention facility with a relatively short discharge location within the adjacent stream. Please see Exhibit Sheet C201 and C202 in Appendix A for further detail.

Area 4

- Acreage: 50.75 acres
- Generated Airspace: 5,588,673 cubic yards
- Approximate Area Life Expectancy: 13.97 years

This area is located on the northeastern side of the property and includes a 50.75-acre cell. During the initial analysis, it was found that little to no existing borings to determine the approximate depth to bedrock were located within this area. Given that this area resides atop steep mountainous ridges with substantial slope deviations, bedrock may be encountered during construction. Additional geotechnical investigation will be required to accurately map the underlying strata. Further expansion to the east is not possible due to the existing overhead electric transmission lines with accompanying easement. Furthermore, slopes in excess of 2:1 encompass the northern perimeter of the proposed area, limiting construction feasibility and further expansion. Existing streams encompass the perimeter of Area 4, which also constrain the constructable area and have been accounted for to avoid excessive stream mitigation. Unfortunately, approximately 6,300 L.F. of existing stream would require mitigation to construct this area. Underdrains beneath the cell would be required to promote subsurface drainage. The proposed access road for Area 4 would tie-in to the access road for Area 3, requiring one (1) culvert. To construct this area, approximately 2,614,664 C.Y. of cut and 1,014,726 C.Y. of fill will be required. The airspace generated in this area is approximately 5,588,673 C.Y., which is less favorable when compared to the total earthwork required to construct the cell. However, if the waste disposal rate remains consistent with historical data, this would provide approximately 13.97 years of life to existing facility. The overall quantity of cut generated from the cell construction is sufficient to provide the required borrow material for daily cover. Gravity leachate collection discharging to an existing leachate holding facility is unfortunately not

feasible for this area. Either a wet well coupled with a pump station, a new leachate holding facility, or a side slope riser would be required. Preliminary stormwater management calculations were conducted to determine an area sufficient in size to construct a permanent stormwater management facility. It was found that the area directly to the west and within an existing valley provides an adequate area to construct an above ground detention facility with a relatively short discharge location within the adjacent stream. Please see Exhibit Sheet C203 and C204 in Appendix A for further detail.

Area 4B

- Acreage: 27.68 acres
- Generated Airspace: 3,162,295 cubic yards
- Approximate Area Life Expectancy: 7.91 years

This area is located on the northeastern side of the property and includes a 27.68-acre cell. This area was analyzed to determine if the exclusion of the western portion of Area 4 would promote a more favorable earthwork tabulation. Approximately 4,200 L.F. of existing stream would require mitigation to construct this area. Underdrains beneath the cell would be required to promote subsurface drainage. The proposed access road for Area 4B would tie-in to the access road for Area 3, requiring one (1) culvert. All other aspects of Area 4 remain consistent with Area 4B regarding stormwater, leachate collection, and site constraints. To construct this area, approximately 954,342 C.Y. of cut and 696,711 C.Y. of fill will be required. The airspace generated in this area is approximately 3,162,295 C.Y., which is more favorable than Area 4 when compared to the total earthwork required to construct the cell. However, if the waste disposal rate remains consistent with historical data, this would provide approximately 7.91 years of life to existing facility, which is approximately half of Area 4. The overall quantity of cut generated from the cell construction is not sufficient to provide the required borrow material for daily cover. Consequently, borrow material will be required from the adjacent expansion Area 3. Area 3 generates approximately 195,000 C.Y. of spoil material and should only require approximately 106,000 C.Y. for use within the cell. Therefore, phasing needs to be appropriately considered so that Area 3 would be constructed prior to Area 4B, with excess spoil material set aside with the intended use being for the operation of Area 4B. Gravity leachate collection discharging to an existing leachate holding facility is unfortunately not feasible for this area. Either a wet well coupled with a pump station, a new leachate holding facility, or a side slope riser would be required. Preliminary stormwater management calculations were conducted to determine an area sufficient in size to construct a permanent stormwater management facility. It was found that the area directly to the west and within an existing valley provides an adequate area to construct an above ground detention facility with a relatively short discharge location within the adjacent stream. Please see Exhibit Sheet C205 and C206 in Appendix A for further detail.

Area 5

- Acreage: 14.31 acres
- Generated Airspace: 513,722 cubic yards
- Approximate Area Life Expectancy: 1.28 years

This area is located within the existing borrow area and includes a 14.31-acre cell. During the initial analysis, existing borings were utilized to determine the approximate depth to bedrock. It was determined that encountering bedrock during construction is unlikely, however, possible. Additional geotechnical investigation will be required to accurately map the underlying strata. Further expansion for this area is constrained to the existing knoll the borrow resides due to the steep topography to the north, the existing stream and access road to the south, and the future development plans to the west. However, no stream mitigation should be required to construct this area. To construct this area, approximately 202,357 cubic yards C.Y. of cut and 3,106 C.Y. of fill will be required. The airspace generated in this area is approximately 513,722 C.Y., which is moderately favorable when compared to the total earthwork required to construct the cell. However, if the waste disposal rate remains consistent with historical data, this only provides approximately 1.28 years of life. The overall quantity of cut generated from the cell construction is sufficient to provide the required borrow material for daily cover. Gravity leachate collection discharging to an existing leachate holding facility is unfortunately not feasible for this area. Either a wet well coupled with a pump station or a side slope riser would be required. Preliminary stormwater management calculations were conducted to determine an area sufficient in size to construct a

permanent stormwater management facility. It was found that the area directly to the northwest provides an adequate area to construct an above ground detention facility with a relatively short discharge location within the adjacent stream. Please see Exhibit Sheet C207 and C208 in Appendix A for further detail.

Area 6

This area resides on the northwestern property border, between both existing leachate holding tanks. Multiple scenarios were analyzed including a single cell and multi-cell separated landfill, as well as a cell that would "piggyback" off of the existing permitting landfill phases. Due to the site constraints including excessively steep topography and extreme deviations in existing ground elevations, it was found that a constructible area which would benefit the life expectancy of the facility and be economical was not feasible within Area 6.

TABLE - 1: AREA SPECIFIC KEY ELEMENT SUMMARIZATION

AREA	ACREAGE (ACRES)	EARTHWORK (CUBIC YARDS)			OVERALL AIRSPACE PRODUCED (CUBIC YARDS)	LIFE EXPECTANCY (YEARS)	BORROW REQUIRED (CUBIC YARDS)	SUFFICIENT BORROW GENERATED	STREAM MITIGATION REQUIRED (LINEAL FEET)	CUT:AIRSPACE RATIO
		CUT	FILL	NET (CUT)						
NO. 1	6.70	346,636	11,829	334,807	1,602,649	4.01	160,265	YES	N/A	4.62
NO. 2	28.90	1,081,370	127,861	953,509	4,062,779	10.16	406,278	YES	1,360	3.76
NO. 3	15.18	215,565	20,475	195,090	1,069,950	2.67	106,995	YES	N/A	4.96
NO. 4	50.75	2,614,664	1,014,726	1,599,938	5,588,673	13.97	558,867	YES	6,300	2.14
NO. 4B	27.68	954,342	696,711	257,631	3,162,295	7.91	316,230	NO	4,200	3.31
NO. 5	14.31	202,357	3,106	199,251	513,722	1.28	51,372	YES	N/A	2.54

TABLE - 2:
GENERAL COST ESTIMATION BREAKDOWN

AREA	ACREAGE	AIRSPACE (C.Y.)	CONSTRUCTION COST ¹	MAINTENANCE COST ²	CLOSURE COST ³	MITIGATION REQUIRED (LF.)	MITIGATION COST ⁴	TOTAL	POTENTIAL REVENUE ⁵	DIFFERENCE
1	6.70	1,602,649	\$3,685,000.00	\$368,500.00	\$1,507,500.00	N/A	\$0.00	\$5,561,000.00	\$66,109,771.25	\$60,548,271.25
2	28.90	4,062,779	\$15,895,000.00	\$1,589,500.00	\$6,502,500.00	1,360	\$952,000.00	\$26,843,000.00	\$167,589,633.75	\$140,746,633.75
3	15.18	1,069,950	\$8,349,000.00	\$834,900.00	\$3,415,500.00	N/A	\$0.00	\$12,599,400.00	\$44,135,437.50	\$31,536,037.50
4	50.75	5,588,673	\$27,912,500.00	\$2,791,250.00	\$11,418,750.00	6,300	\$4,410,000.00	\$55,352,500.00	\$230,532,761.25	\$175,180,261.25
4B	27.68	3,162,295	\$15,224,000.00	\$1,522,400.00	\$6,228,000.00	4,200	\$2,940,000.00	\$31,794,400.00	\$130,444,668.75	\$98,650,268.75
5	14.31	513,722	\$7,870,500.00	\$787,050.00	\$3,219,750.00	N/A	\$0.00	\$11,877,300.00	\$21,191,032.50	\$9,313,732.50

- POTENTIAL CONSTRUCTION COST BASED ON \$550,000.00 PER ACRE TO ESTABLISH BASE GRADE
- MAINTENANCE COST = 10% OF CONSTRUCTION COST
- POTENTIAL CLOSURE COST BASED ON \$225,000.00 PER ACRE
- CURRENT STREAM MITIGATION DATA APPROXIMATES A \$700.00 PER LINEAL FOOT OF DISTURBED STREAM
- POTENTIAL REVENUE WAS TABULATED UTILIZING THE AIRSPACE GENERATED, THE CURRENT DISPOSAL RATE, AND THE CURRENT COMPACTION RATE FOR THE SMITH GAP LANDFILL.
- 5. ALL ESTIMATIONS WERE TABULATED UTILIZING PRESENT VALUES. NO INFLATION FACTORS EXTRAPOLATING TO FUTURE DATES WERE APPLIED.

There were some questions from Board members, answered by Mr. Monk, with the following takeaway points from his responses:

- While the Authority does have a lot of air space potential, you would not want to spend \$10M to gain \$8M in revenue. Just because it can be done, that does not mean it should be done.
- Life expectancy is based on current weight stream and current compaction.
- Currently, you easily have 20 years left. We do not see more than 40 years of life at this facility.
- You have 20-30 years left, but you do need to start looking at options for the future now as there is a lot of due diligence work involved with developing a new site, and at a minimum it can take 10 years, if it runs smoothly.
- He noted good revenue is generated when you are above the 3:1 ratio.
- He reminded the Board that permit regulations have gotten much stricter.
- The current compaction rate is pretty good already.

Mr. Garrett stated this Plan is important because it serves as a living document to help us make smart decisions moving forward. This helps us to ask ourselves if we should stay status quo and ride it out, or should we site another landfill, or should we work for revenue to do better. This allows us to give the Board real numbers and a real plan.

It was mentioned by Mr. Peters that the Authority owns another area and he wondered if there was any opportunity to expand that area. Mr. Monk stated the Authority does own additional property, it is steep terrain, that does not have Part A on right now; however, it was their opinion that it is not worth the effort to do a Part A on that property. He noted the property does have a good deal of stream there and it probably isn't worth pursuing. Mr. Monk emphasized to the Board that if the Authority considers purchasing more land in the future, he would strongly recommend they not buy any property with a lot of rock or streams.

Chair-Elect Owens thanked Mr. Monk for the presentation. She stated the Master Plan was presented for information this month and would be considered for approval at a future meeting. She noted the Board could add a work session to discuss further, if needed.

*Mr. McEvoy departed the meeting at 12:50 p.m.

REVIEW DRAFT AND DISCUSS UPDATED PURCHASING POLICY

Mr. Lanford noted the current policy is from 1998 and needed to be updated. He reported Mr. Haskell Brown had done most of the work to update the policy and he appreciated his expertise and due diligence. He noted one change to the policy included having no set limits for purchasing and procurement requirements, but instead have the policy reference the state code so as those limits change at the state level, the policy would automatically update itself and we would simply update the related attachment. He encouraged the Board members to review the updates and to consider approval at the next meeting.

CONSENT AGENDA

MINUTES OF DECEMBER 4, 2024

MOTION: That the Board approve the consent agenda item, as presented.

MOTION: Mr. Peters

SECOND: Mr. Powell

AYES: Unanimous

ABSENT: Mr. Blount, Ms. Gearheart, Mr. McEvoy

RESOLUTION: RA2025-05

REPORTS

FINANCIAL REPORTS

Mr. Brewer reviewed the following financial reports for month ending December 31, 2024.

WASTE TONNAGE REPORT

Mr. Lanford reviewed the Waste Tonnage report noting current level tonnages had outperformed the budgeted amount.

The following monthly reports were provided to the Board as information:

- FY24-25 Monthly Trailer Report
- Residential Waste Report
- Woodwaste Report
- Recycling Report
- Household Hazardous Waste Report

AIR SPACE REPORT

Mr. Garrett reviewed the Airspace Report noting this report will be provided and reviewed at most monthly meetings moving forward. He explained the numbers will fluctuate, but the report helps the Board to see how we are performing from an operation perspective and how we are doing regarding our time limits.

PROJECT STATUS REPORT

None.

PUBLIC QUESTIONS AND COMMENTS

None.

EXECUTIVE DIRECTOR REPORT

Mr. Lanford offered the following report:

1. **Budget Committee:** *Staff would appreciate two Board members serving with us as we develop a draft budget. Last year Ms. Gearhart and Mr. Bandy were great assets and would ask they consider assisting us again. (Ms. Gearhart and Mr. Bandy were selected to assist with the budget.)*
2. **City of Roanoke Police Department Investigation:** *Staff at Smith Gap were recently very involved in assisting Roanoke Police Department in a homicide investigation. Detective Caldwell, who led the investigation, and Chief Booth, were both very appreciative of the assistance our staff brought to the working face.*
3. **SWVA SW Management Board:** *Recognize Jeremy Garrett for recently being appointed to the Board of Directors for the Southwest Virginia Solid Waste Management Board.*
4. **FEMA:** *Mr. Brewer followed up on a request for reimbursement from FEMA, and we think we will get reimbursed.*
5. **Internship Program:** *Mr. Harbin has been working with a young man in the internship program; however, now that he is back to school there are scheduling challenges.*

BOARD MEMBER COMMENTS

Ms. Owens thanked everyone for attending the meeting.

CLOSED SESSION

MOTION: That the Board go into Closed Session pursuant to the Code of Virginia, 1950, as amended, to discuss the following:

- Section 2.2-3711(A)(1) – Discussion of personnel matters regarding the performance evaluation of the Chief Executive Officer.

MOTION: Mr. Bandy

SECOND: Mr. Simmons

AYES: Unanimous

ABSENT: Mr. Blount, Ms. Gearheart, Mr. McEvoy

TIME: 1:15 p.m.

RESOLUTION: RA2025-06

CERTIFICATION OF CLOSED SESSION

MOTION: That the Board return to Regular Session from Closed Session and adopted the following resolution by roll-call vote:

BE IT RESOLVED, that to the best of the Board members' knowledge only public business matters lawfully exempt from open meeting requirements and only such matters as were identified in the motion to go into Closed Session were heard, discussed or considered during the Closed Session.

MOTION: Mr. Bandy

SECOND: Mr. Powell

AYES: Unanimous

ABSENT: Mr. Blount, Ms. Gearheart, Mr. McEvoy

TIME: 1:25 p.m.

RESOLUTION: RA2025-07

ADJOURNMENT

Hearing no other questions or comments, Chair-Elect Owens adjourned the meeting at 1:26 p.m.

Respectfully submitted,



Lorie C. Bess
Board Secretary