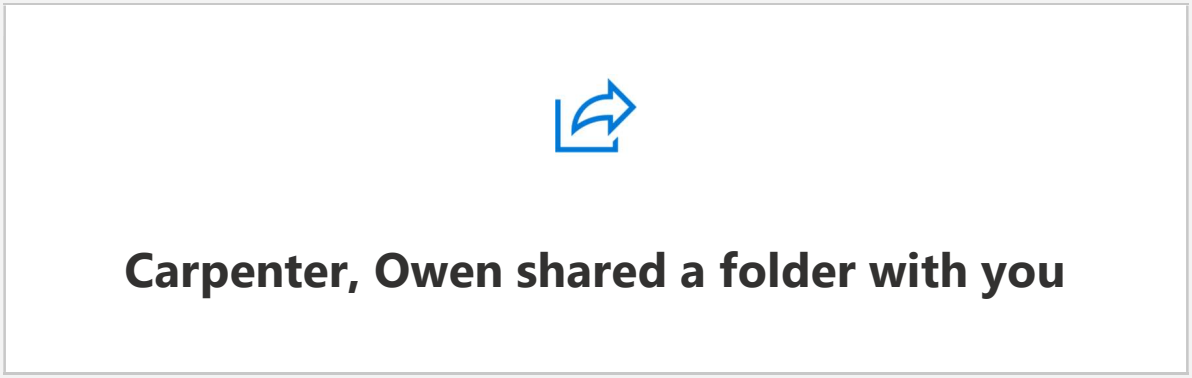
Haley Griffith (adpce.ad)

Subject: RE: Carpenter, Owen shared the folder "2025 Class 1 and Compost AEIRs" with you

From: Carpenter, Owen <Owen.Carpenter@terracon.com>
Sent: Tuesday, March 31, 2026 4:24 PM
To: Greg Banic (adpce.ad) <greg.banic@arkansas.gov>
Subject: Carpenter, Owen shared the folder "2025 Class 1 and Compost AEIRs" with you

CAUTION: External Email



Carpenter, Owen shared a folder with you

Please see accompanying email with download link. This link can also be used to download City of Little Rock Facility calendar year 2025 AEIRs.

2025 Class 1 and Compost AEIRs

This link only works for the direct recipients of this message.

Open

This email is generated through Terracon Consultants Inc.'s use of Microsoft 365 and may contain content that is controlled by Terracon Consultants Inc..

2025 Annual Engineering Inspection Report

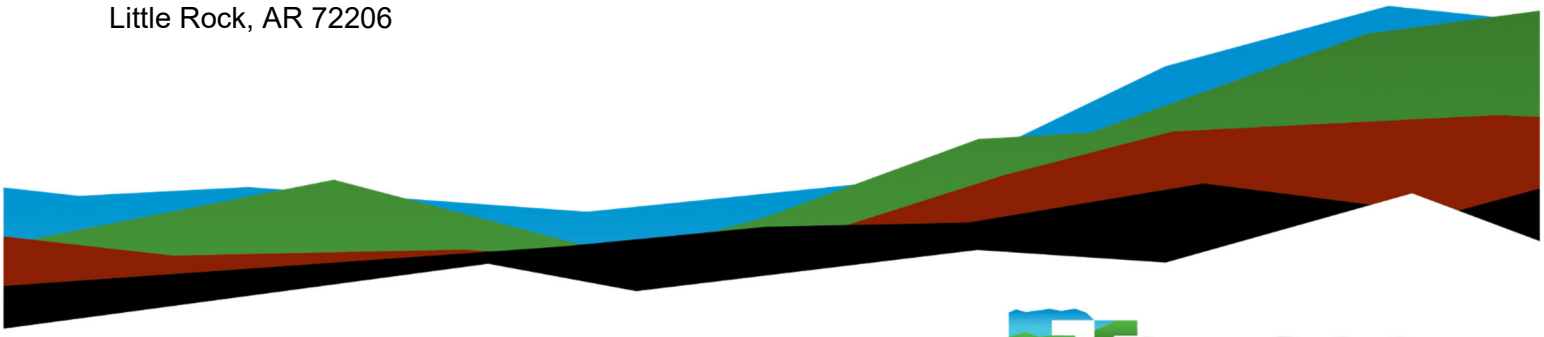
City of Little Rock Class 1 Landfill

March 31, 2026 | Project Number: 35267002

Prepared for:

CITY OF LITTLE ROCK

City of Little Rock – Dept of Public Works
Division of Solid Waste Services
10803 Ironton Cutoff
Little Rock, AR 72206



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LIST OF APPENDICES

PROFESSIONAL ENGINEER'S CERTIFICATION

As required by *Arkansas Regulation 22* (*Reg.22.423*), representatives from Terracon Consultants, Inc. inspected the City of Little Rock Class 1 Landfill (Facility) on March 19, 2026. During this inspection, general Facility operating practices and procedures in relation to *Arkansas Regulation 22* and the Facility's permit were reviewed. Based on site visits, review of the facility operating records, and discussions with the landfill owner/operator, it is my professional opinion that the Facility is being operated and maintained in compliance with *Arkansas Regulation 22* and the Facility's solid waste permit, unless stated herein. This opinion is contingent on the fact that all information supplied to the signatory authority as of the date of this certification is unquestionably accurate and provided in good faith.

March 31, 2026

F. Owen Carpenter, P.E., P.G. — Date

Arkansas Professional Engineer No. 8653

ANNUAL ENGINEERING INSPECTION REPORT (AEIR) FORM Reporting Year: 2025

Note: Check applicable landfill class. **Class 1 (Reg 22.423(b)) X , Class 3 (22.522(a)) ___ , Class 4 (22.619(b)) ___**

Facility Name: City of Little Rock Class 1 Landfill AFIN: 60-01071 Permit #: 0266-S1 Landfill Class: 1

Report Submittal Date: March 31, 2026 Date of Landfill Site Inspection by Certifying Engineer: March 19, 2026

Complete the form as indicated
Instructions are bolded and italicized.

COLUMN TO BE COMPLETED BY REPORTER

Item	Regulation Reference	Item Description	Report Information/Comments/Remarks	Attachment Reference
1	22.423(b)(1) 22.522(a)(1) 22.619(b)(1)	Remaining volume in current cells. (Operational / Permitted)	a) 2,122,360 / 6,363,014 cubic yards Note: • Remaining volume in current cells is based on an isopach created in AutoCAD® Civil 3D®. This isopach is a comparison of the aerial dated March 19, 2026 and an intermediate surface that was created.	
		Projected date of opening new cell.	b) Date: 2031	
2	22.423(b)(2) 22.522(a)(2) 22.619(b)(2)	Remaining volume of all permitted units.	a) 12,613,555 cubic yards	
		Total air space used during the reporting period.	b) 212,095 cubic yards	
		Estimated remaining site life (years) based on utilization rate during the reporting period. ***Note: Itemize current permitted unit/cell information - use attachment if necessary.***	c) Landfill Unit/Cell remaining life (Operational / Permitted): Cell 1 , 0.00 / 0.00 years. Cell 2 , 0.00 / 0.00 years. Cell 4 , 0.00 / 0.00 years. Cell 5 , 5.4 / 10 years. Cell 9 , 2.7 / 13 years. d) Entire permitted landfill: 39 years remaining life. Notes: • Landfill lifetimes are estimated using the air space remaining and are based on a 5-year average disposal rate with a 1% annual projected increase. Operational life for each unit/cell is based on are based on an isopach between the existing contours and an intermediate surface. • Cells 1, 2, 4 are considered filled.	

			• Cell 9 is not fully constructed until all underlying cells are constructed.	
3	22.423(b)(3) 22.522(a)(3) 22.619(b)(3)	Documentation of fill progression in compliance with permit plans, specs and operating plan and narrative. ***Note: Provide narrative regarding fill progression during the reporting period. Be specific about landfill unit/cell designations (example: Cell 1, Phase A completely filled; Cell 2, Phase A, 50% full, being filled south to north as of December 31). Specifically note any overfill conditions.***	a) Progression narrative: Cells 1, 2, and 4 are considered completed per the permit. Fill, however, continued in these areas within the upper cell, Cell 9, which is the airspace above Cells 1-8. During 2025, fill was primarily placed in Cell 5 and the southern half of Cell 2. Approximately 38.5% of Cell 5 useable remaining volume and 82.2% of Cell 9 useable volume has been used to date.	
4	22.423(b)(4) 22.522(a)(4) 22.619(b)(4)	Documentation of compliance with regulatory operating requirements, permit conditions, approved operating plan, and other applicable regulations. ***Note: Review current operating plans, and permit conditions. Include photographs of engineer's inspection as Attachment A. Check for weekly/monthly operational logs, waste volume records in and out of landfill, unauthorized waste form sheets, waste cover maintenance, stormwater reports to ADEQ, and wet weather repair information.***	a) Weekly/monthly operational logs exist (Y/N)? Y b) Photos of AEIR inspection attached (Y/N)? Y c) Waste volume in and out records exist (Y/N)? Y d) Unauthorized waste forms exist (Y/N)? N e) Daily/weekly cover adequate at time of inspection (Y/N)? Y f) Alternative Daily Cover (ADC) Plan located onsite (Y/N)? Y Operations in compliance with ADC Plan (Y/N)? Y g) Liquid Waste Management (LWM) Plan located onsite (Y/N)? N/A Operations in compliance with LWM Plan (Y/N)? N/A h) Liquids received to be bulked during reporting period: 0 gallons 0 tons i) Waste cover of inactive areas maintained adequately (Y/N)? Y j) Net amount of waste disposed in landfill during reporting period: 212,095 (in-place) cubic yards 123,473 tons k) Leachate head level less than 1' on liner at time of inspection (Y/N)? Y	**A**
5	22.423(b)(5) 22.522(a)(5) 22.619(b)(5)	Updated contour map that depicts: ***Note: Provide updated drawing(s) and final cover permit drawing as Attachment B – discuss any discrepancies. Max. contour interval = 2 feet)***	a) Updated contour drawing attached (Y/N)? Y b) Final cover permit drawing attached (Y/N)? Y (Part of ADEQ Doc ID 17929, 2002) c) ***List all discrepancies here:*** No discrepancies observed d) Is there an overfill condition (Y/N)? N	**B**
		(i) horizontal and vertical extent of active and inactive fill areas;		
		(ii) status of all permitted units/cells; ***(Note: Label all active (working face, bulking area, stockpiles), inactive, closed and interim cover areas)***.	a) Currently, does the facility have sufficient on-site quantities and types of soils for liner and cover construction of permitted units/cells (Y/N)? N b) If not, where will deficiency shortfalls be obtained (be specific)? GCL or clay borrow from offsite. c) Is the current Design Narrative earthwork balance accurate (Y/N)? Y	

		(iii) survey grid (required by 22.426); ***Note: Include benchmarks and horizontal controls***		
		(iv) location of other visible surface features or improvements (e.g., roads, buildings, gas control systems, etc..); ***Note: Include leachate risers, manholes, monitoring wells, gas wells, etc.***		
		(v) the person responsible for gathering the survey data and the date survey data was taken to prepare the map. *Reminder: Reporting period is calendar year. Survey data should be collected to reflect the AEIR reporting period.*	a) Name: Terracon Consultants, Inc. b) Name of person using the data to produce contour map: Matt Acree c) Date survey data was collected: March 19, 2026	
6	22.423(b)(6) 22.522(a)(6) 22.619(b)(6)	Quantity, location, and characteristics of leachate collected, recirculated, and disposed. ***Note: Provide analytical report as Attachment C. Provide brief narrative on this form in space provided about leachate sources, how leachate is collected, measured and disposed. Also explained how the leachate head on the landfill liner is monitored and measured.***	a) Leachate Collected: 14,614,939 gallons b) Leachate Disposed: 14,614,939 gallons c) Leachate Recirculated: 0 gallons d) Leachate Recirculation Plan exists (Y/N)? Y ADEQ approval Doc # 6242 e) Leachate operating records exist (Y/N)? Y f) Leachate analytical report attached (Y/N)? Y g) Leachate narrative (collection, measurements and disposal): Leachate is pumped into the pre-treatment lagoon and disposed into the city sewer system. h) Leachate narrative (verifying <1' head on liner system): Leachate pumps are set to pump down before leachate levels reach 1 foot. During the inspection, no pump issues were noted and leachate levels were below 1 foot.	**C**
7	22.423(b)(7) 22.522(a)(7) 22.619(b)(7)	Maintenance of stormwater controls and best management practices for erosion control. ***Note: List any upset conditions during the reporting period (i.e., washouts, etc…). Also, include narrative about vegetation maintenance and repair.***	a) ***Briefly list maintenance activities and upset conditions here:*** Litter was picked up in the storm water collection area north of Cell 5, in the south portion of Cell 5W, and along the road on the south side of Cells 4 and 5. The City purchased dirt to cover leaks on the west side of Cell 5W and to cover exposed waste in the south portion of Cell 5W.	
8	22.423(b)(8) 22.619(b)(8)	Status of capping and closure of completed areas. ***Note: List areas with acreage that have received interim or final cover. Include total landfilled area acreage not yet under final certified closed cover.*** ***Note: "Certified closed" means the facility has received an approval letter from ADEQ accepting the engineer's closure certification report.***	a) LF unit/cell Cells 1 & 2 , 8.6 acres. Intrm or Final Cover (I/F): F LF unit/cell Cells 1 & 2 , 16.3 acres. Intrm or Final Cover (I/F): I LF unit/cell Cell 4 , 4.6 acres. Intrm or Final Cover (I/F): F LF unit/cell Cell 4 , 14.2 acres. Intrm or Final Cover (I/F): I LF unit/cell Cell 5 , 16.2 acres. Intrm or Final Cover (I/F): None b) Acres of disposed waste not under final certified cover: 46.7 acres. c) Acres of disposed waste area that have interim cover: 30.5 acres.	
9	22.423(b)(9) 22.522(a)(8) 22.619(b)(9)	Status of remedial or corrective action activities. ***Note: List corrective action events during reporting period (e.g., seeps and erosion correction, leachate***	a) ***Briefly list corrective actions events here:*** 1st Quarter Inspection (Doc Id: **133079** - 2/3/2025) • **Category 2, Regulation 422(c) –** Operating Plan requires updating.	

		spills, unauthorized waste handling and removal, etc…), and indicate whether action was taken in response to an ADEQ inspection. ***Note: If trust fund financial assurance mechanism is utilized, the trust fund must fully fund all acres permitted.***	• **Category 2, Regulation 411(o) –** Leachate observed from Cell 5, to the ditch, to the stormwater pond located west of the active area. • **Category 3, Regulation 413(c) –** Exposed waste was observed in Cell 5W. Area has less than 12" of interim cover. Alternate material for interim cover has not been approved. 1st Quarter Inspection Response • See response email dated 3/26/2025 2nd Quarter Inspection (Doc Id: **133698** - 6/16/2025) • **Category 2, Regulation 422(c) –** Operating Plan requires updating. • **Category 2, Regulation 411(o) –** Leachate observed from Cell 5, to the ditch, to an unlined stormwater collection area located west of the Cell 2 and northwest of Cell 5W. • **Category 3, Regulation 413(c) –** Exposed waste was observed in Cell 5W. Area has less than 12" of interim cover. Alternate material for interim cover has not been approved. 2nd Quarter Inspection Response • See response email dated 8/6/2025 3rd Quarter Inspection (7/11/2024) (Doc Id: **134157** - 9/23/2025) • **8 CAR § 60-411(i)(1) –** Lack of vegetation and exposed waste observed in final cover of east slope. • **8 CAR § 60-413(c) –** Exposed waste observed across Cell 5. • **8 CAR § 60-419(a)(5) –** Leachate observed from west slope to an unlined storm water collection area. • **8 CAR § 60-411(o)(1) –** Erosion and exposed waste observed on top of landfill (Cell 9). 3rd Quarter Inspection Response N/A 4th Quarter Inspection (11/26/2024) N/A 4th Quarter Inspection Response N/A	

			b) Were any of the corrective actions taken in response to an ADEQ inspection (Y/N)? Y c) Current status of corrective actions: Partially addressed (see 9.d, below). d) Did corrective actions permanently solve the conditions (Y/N)? Y ***Explain briefly:*** • The City submitted a New Draft OP (Doc. Id: 85107) • The City graded the west side of Cell 5 and drained stormwater into the leachate pond. • The City will ensure that interim areas are covered with dirt, not ADC.	
10	22.423(b)(10) 22.522(a)(9) 22.619(b)(10)	Updated Financial Assurance documentation as required by Chapter 14. ***Note: Include copy of most recent financial assurance documentation as Attachment D. Also, include updated closure and post closure cost estimated as an attachment– recommend to use the Closure Costs and Post-closure Care Costs Worksheet located at ADEQ - Solid Waste - Technical Branch Home Page Specific links to the worksheets:*** http://www.adeq.state.ar.us/solwaste/branch_technical/pdfs/closure_costs_worksheet.xlsx ***and*** http://www.adeq.state.ar.us/solwaste/branch_technical/pdfs/post_closure_care_costs_worksheet.xlsx***. . Show detailed calculations of cost items in tabular format with specific item breakdowns. Also, show source of unit cost information and/or inflationary factor adjustments – use ADEQ factors where applicable. If updated unit cost information is used instead of inflationary factors, show the source of unit cost information. Confirm estimates are based on largest area ever requiring final cover.***	a) Size of facility property under current permit? 240 acres b) Size of actual permitted disposal area? 110 acres c) What is the current total permitted disposal area that contains disposed waste but is not certified closed? 60.6 acres (29.4+17.43+11.62 acres) d) Updated closure cost estimate amount: $ 9,815,764.40 e) Is the closure cost estimate based on the largest area ever requiring closure (Y/N)? Y f) Is the existing closure financial assurance adequate for acreage not yet certified closed (Y/N)?: Y g) Updated post closure care cost estimate amount: $ 10,349,097.08 h) Is the existing post closure care financial assurance adequate for all permitted areas (Y/N)?: Y i) Is the financial assurance mechanism a trust fund (Y/N)? Y j) Are the sources of information for updated unit cost line items shown on the cost estimate calculations (Y/N?): Y k) Do the unit cost items for soil cover material include actual third party cost of materials and labor (Y/N?): Y	**D**
11	22.423(b)(11) 22.522(a)(10) 22.619(b)(11)	Revised or updated facility Closure Plan in accordance with Chapter 13. ***Note: Provide updated Closure Plan as Attachment E if facility obtained a permit modification during the reporting period that affects the closure and/or post closure care.***	a) Was an updated Closure Plan required during this reporting period (Y/N)?: N b) Is an updated Closure Plan attached herein (Y/N)? N	
12	22.423(b)(12) 22.522(a)(11) 22.619(b)(12)	Other items that affect compliance. ***Note: Include an ADEQ enforcement activity summary (solid waste, water, air, hazardous waste related) and , status of operating and permit fees. Also, include brief narrative concerning groundwater monitoring reports, landfill gas, leachate recirculation, alternate daily cover, etc…***	a) Are there current ADEQ enforcement actions (Y/N)? N b) Summary of enforcement actions:_____ c) Are operating and permit fees payments up-to-date (Y/N)? Y If not explain:_____ Additional Information: d) Does the facility monitor groundwater (Y/N)?: Y	

			If so, is it detection monitoring or assessment monitoring?: Detection e) What is the groundwater analytical sampling frequency? 6 months f) Does the facility collect landfill gas (Y/N)?: Y g) Does the facility have a Gas Monitoring Plan (Y/N)? Y h) Does the facility have gas monitoring probes (Y/N)? Y (Not dedicated) i) Does the facility use an alternate daily cover (ADC)(Y/N)? Y If so, what type of ADC is used: ground yard waste If so, list document id# approving ADC: 47756 j) Does the facility have a Liquid Waste Management (LWM) Plan (Y/N)? N If so, list document id# approving the LWM Plan: N/A k) Date and document id # of currently approved Operating Plan and Narrative: Date: 4-27-1993 Doc#: *49500* l) Date and document id # for currently approved Closure/ Post Closure Plan: Date: 4-27-1993 Doc#: *49500* m) Date and document id # of currently approved Permit Drawings: Date: 4-27-1993 Doc#: *49500* n) Date and document id # of currently approved Design Narrative: Date: 4-27-1993 Doc#: *49500* o) Are weigh scales utilized at the landfill (Y/N)? Y p) Does the final cap include a synthetic liner (Y/N)? N q) Does the final cap include clay liner (Y/N)? Y r) Total current permitted landfill volume: 19,860,298 cubic yards	
13	22.423(b) 22.522(a) 22.619(b)	Certification of AEIR Report: "I have inspected the landfill site and have prepared this report to reflect operational compliance with permit conditions, permit plans, specifications, narrative, and all applicable regulations"	a) Arkansas Licensed Engineer:	

			Sign: See Engineer Certification on Page 2 Date: 6.31.2026 b) License Number: 8653 c) ***Attach seal here:*** 	

Appendix A:

Photographic Log

Looking E-NE over Cell 5 (Active area)

Looking NW over east slope of Cell 4 – partial closed area on the right

Looking SW over north slope of Cells 1 and 2 – active area in background

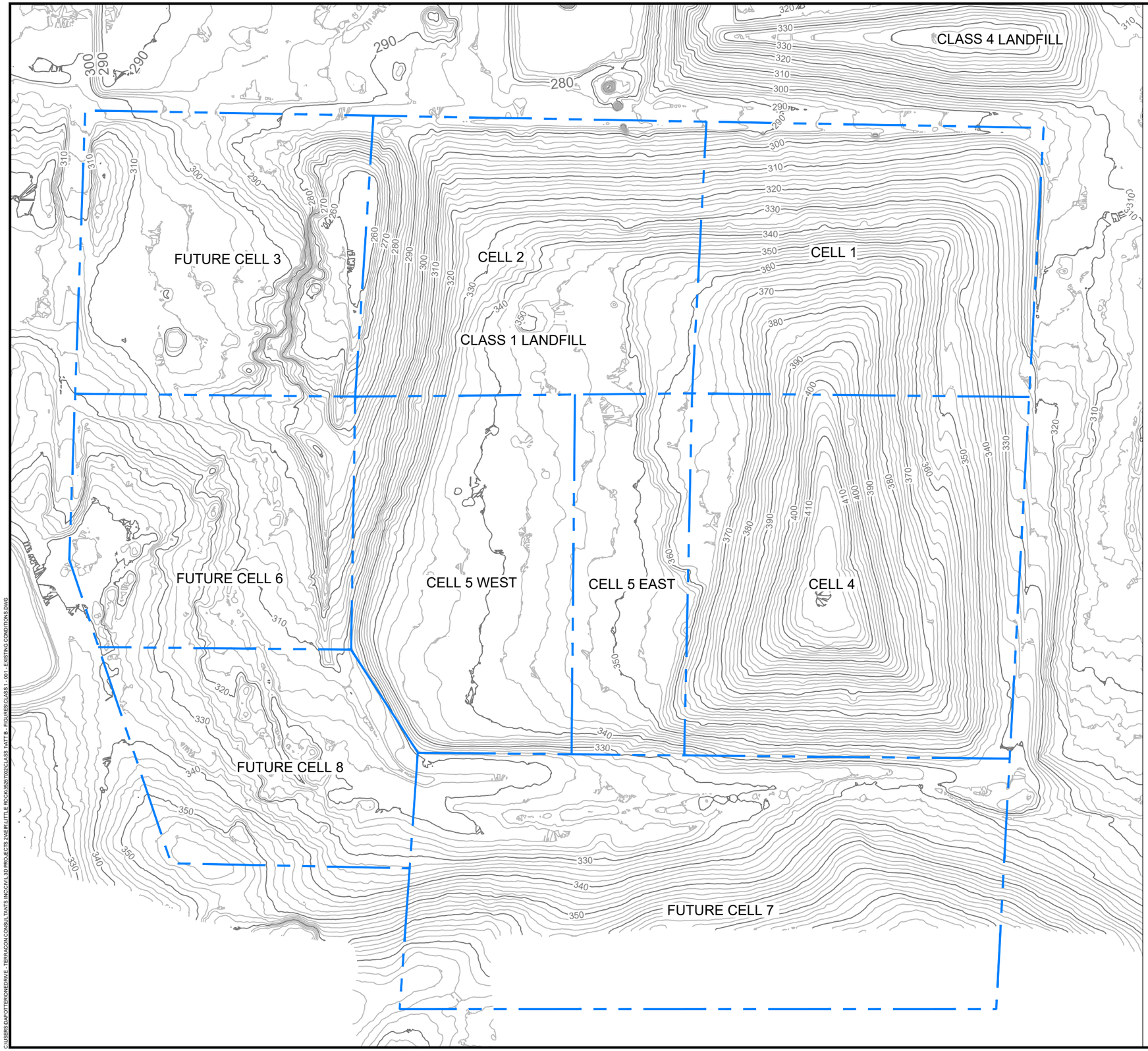
Looking S over Cell 5 (Active area)

Documenting leachate level controllers

Looking south over Cell 5 active area

Appendix B:

Updated Drawings



N

250 0 125 250

SCALE: 1" = 250'

LEGEND

- DISPOSAL CELL BOUNDARY
- 400 — EXISTING 2025 INDEX CONTOURS (10')
- EXISTING 2025 INTERMEDIATE CONTOURS (2')

NOTE:

EXISTING CONTOURS REPRESENT AERIAL SURVEY INFORMATION PERFORMED BY TERRACON ON MARCH 19, 2026.

REV.	DATE	BY	DESCRIPTION

EXISTING CONDITIONS

2025 ANNUAL ENGINEERING INSPECTION REPORT

CITY OF LITTLE ROCK

CLASS 1 LANDFILL

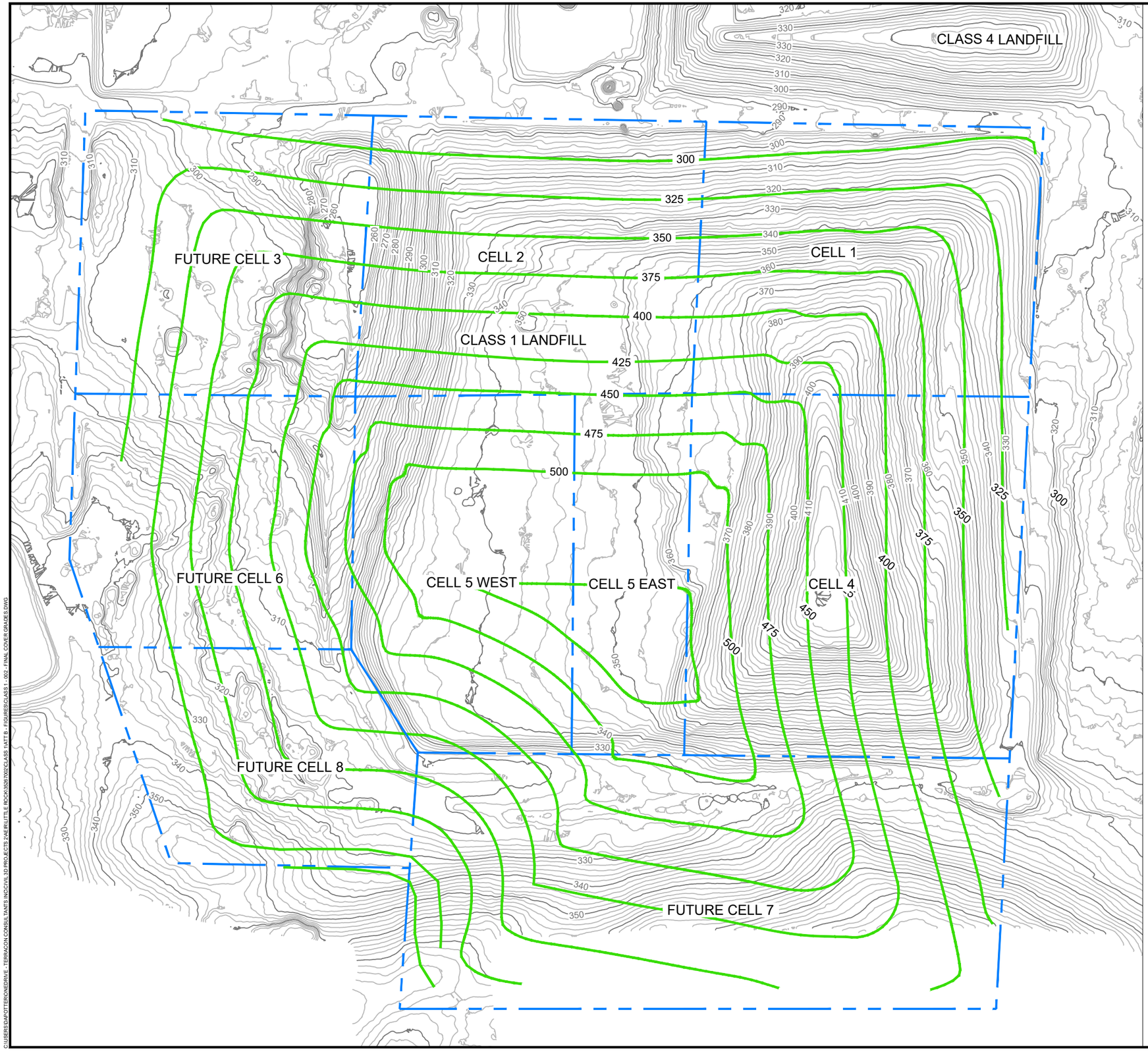
LITTLE ROCK ARKANSAS

Terracon
Consulting Engineers and Scientists
25909 I-30 SOUTH
PH: (501) 847-9292
BRYANT, AR 72022
FAX: (501) 847-9210

FIGURE 1

DESIGNED BY:	
DRAWN BY:	DAP
APPVD. BY:	FOC
SCALE:	SEE BARSCALE
DATE:	MARCH 2026
JOB NO.	018-001-35267002
ACAD NO.	001
SHEET NO.:	1 OF 2

C:\USERS\DAPOTTER\ONEDRIVE - TERRACON CONSULTANTS INC\CIVIL 3D PROJECTS 2\AERIAL\LITTLE ROCK\35267002\CLASS 1\ATT B - FIGURES\CLASS 1 - 001 - EXISTING CONDITIONS.DWG



N

250 0 125 250

SCALE: 1" = 250'

LEGEND

- DISPOSAL CELL BOUNDARY
- 400 — EXISTING 2025 INDEX CONTOURS (10')
- EXISTING 2025 INTERMEDIATE CONTOURS (2')
- 500 — FINAL COVER CONTOURS (25')

NOTE:

EXISTING CONTOURS REPRESENT AERIAL SURVEY INFORMATION PERFORMED BY TERRACON ON MARCH 19, 2026.

REV	DATE	BY	DESCRIPTION

FINAL COVER GRADES

2025 ANNUAL ENGINEERING INSPECTION REPORT

CITY OF LITTLE ROCK

CLASS 1 LANDFILL

LITTLE ROCK ARKANSAS

Terracon
Consulting Engineers and Scientists
25909 I-30 SOUTH
PH: (501) 847-9292
BRYANT, AR 72022
FAX: (501) 847-9210

FIGURE 2

DESIGNED BY:	
DRAWN BY:	DAP
APPVD. BY:	FOC
SCALE:	SEE BARSCALE
DATE:	MARCH 2026
JOB NO.	018-001-35267002
ACAD NO.	002
SHEET NO.:	2 OF 2

C:\USERS\DAPOTTER\ONEDRIVE - TERRACON CONSULTANTS INC\CIVIL 3D PROJECTS 2\AERIAL\LITTLE ROCK\35267002\CLASS 1\ATT B - FIGURES\CLASS 1 - 002 - FINAL COVER GRADES.DWG

Appendix C:

Leachate Analytical Reports

City of Little Rock 2025 Leachate Quantities			
Month	Gallons Treated	Gallons Recirculated	Total Gallons
January	523,244		523,244
February	483,548		483,548
March	1,146,272		1,146,272
April	3,277,475		3,277,475
May	3,254,600		3,254,600
June	2,802,318		2,802,318
July	736,516		736,516
August	582,147		582,147
September	370,738		370,738
October	518,614		518,614
November	485,701		485,701
December	433,766		433,766
TOTAL	**14,614,939**		**14,614,939**

1st Half Leachate Analytical Report

GROUNDWATER MONITORING SAMPLING RECORDS

OVERVIEW

PROJECT NUMBER: 35247081 DATE: 3/27/2025
SAMPLING LOCATION: Leachate WEATHER: Clear 73 F
DATUM FOR WATER DEPTH MEASUREMENT: T.O.C. WELL DIAMETER (in): NA

WELL PHYSICAL CONDITION

WELL LOCKED? ☐ Yes ☐ No CASING CONDITION: ☐ Ok ☐ Needs Attention
WELL NUMBER LABELED? ☐ Yes ☐ No WELL PAINT CONDITION: ☐ Ok ☐ Needs Attention
GENERAL WELL INTERIOR/EXTERIOR CONDITIONS: NA

WATER CALCULATIONS

WATER DEPTH (feet): NA TOTAL DEPTH OF WELL (feet): NA
VOLUME OF WATER *V = 3.0408 X [TD-WD(ft)] x [Diameter(in)]^2 in Gallons:* NA

WELL PURGING

INITIAL APPEARANCE: NA INITIAL ODOR: NA
PURGING DATE: NA PURGING METHOD: NA
TIME START PURGING: NA TIME END PURGING: NA
VOLUME PURGED [Gallons]: NA WELL PURGED DRY? ☐ Yes ☐ No

WELL SAMPLING

SAMPLE APPEARANCE: NA SAMPLE ODOR: NA
SAMPLE DATE: NA SAMPLE METHOD: NA
TIME START SAMPLING: NA TIME END SAMPLING: NA

FIELD MEASUREMENTS

TIME	VOLUME [GAL]	WATER LEVEL [feet]	TEMP [°C]	pH [SU]	CONDUCTIVITY [µS/cm]	TURBIDITY [NTU]
	n/a	n/a				

FIELD SAMPLE PRESERVATION:	Ice	CONTAINER HANDLING:	Terracon Consultants, Inc.
COMMENTS	No leachate available 3/27/25 waiting on EDQ approval		

Pump Station #1

Each Pump Rate is 80 Gallon per minute

Leachate Pumps							Gradient Pump			
Date	Time	Pump 1 Run Time Hours	Gallons Pump 1	Pump 2 Run Time Hours	Gallons Pump 2		Run Time Start	Run Time Stop	GCS Pump Hours	Gallons GCS
8/30/2024		2395.8		745.4	16320		6673.9	6716.3	42.4	203520
9/6/2024		2395.8		748.8	22560				0.0	0
9/13/2024		2395.8		753.5	23040				0.0	0
9/20/2024		2395.8		758.3	36000				0.0	0
9/27/2024		2395.8		765.8	11040		6673.9	6729.1	55.2	264960
10/4/2024		2395.8		768.1	21120				0.0	0
10/11/2024		2395.8		772.5	18240				0.0	0
10/18/2024		2395.8		776.3	20640				0.0	0
10/25/2024		2395.8		780.6	19200		6729.1	6754.7	25.6	122880
11/1/2024		2395.8		784.6	21600				0.0	0
11/6/2024		2395.8		789.1	24000				0.0	0
11/15/2024		2395.8		794.1	11040				0.0	0
11/22/2024		2395.8		796.4	32160				0.0	0
11/29/2024		2395.8		803.1	6240		6754.1	6780.6	26.5	127200
12/6/2024		2395.8		804.4	24960				0.0	0
12/13/2024		2395.8		809.6	15840				0.0	0
12/20/2024		2395.8		812.9	41760				0.0	0
12/27/2024		2395.8		821.6	0		6780.6	6806.7	26.1	125280
1/3/2025		2395.8		821.6	36000				0.0	0
1/10/2025		2395.8		829.1	7200				0.0	0
1/17/2025		2395.8		830.6	22080				0.0	0
1/24/2025		2395.8		835.2	23040				0.0	0
1/31/2025		2395.8		840	28800		6806.7	6851.7	45.0	216000
2/7/2025		2395.8		846	11040				0.0	0
2/14/2025		2395.8		848.3	34080				0.0	0
2/21/2025		2395.8		855.4	22560				0.0	0
		Totals:	0		550560					1059840

Pump Station #2
Each Pump Rate is 80 Gallon per minute

Leachate Pumps

Date	Time	Pump 1 Run Time Hours	Gallons Pump 1	Pump 2 Run Time Hours	Gallons Pump 2
8/30/2024		1789.8		5570.1	1920
9/7/2024		1789.8		5570.5	7680
9/13/2024		1789.8		5572.1	2400
9/20/2024		1789.8		5572.6	0
9/27/2024		1789.8		5572.6	0
10/4/2024		1789.1		5572.6	0
10/11/2024		1794.7		5572.6	93120
10/18/2024		1795.2		5592	0
10/25/2024		1795.6		5592	54720
11/1/2024		1795.9		5603.4	195360
11/8/2024		1795.9		5644.1	168960
11/15/2024		1795.9		5679.3	58080
11/22/2024		1795.9		5691.4	16320
11/29/2024		1795.9		5694.8	1920
12/6/2024		1795.9		5695.2	6720
12/13/2024		1795.9		5696.6	5280
12/20/2024		1795.9		5697.7	16320
12/27/2024		1795.9		5701.1	0
1/3/2025		1795.9		5701.1	12960
1/10/2025		1795.9		5703.8	1440
1/17/2025		1795.9		5704.1	8640
1/24/2025		1795.9		5705.9	4320
1/31/2025		1795.9		5706.8	9600
2/7/2025		1795.9		5708.8	2880
2/14/2025		1795.9		5709.4	11520
2/21/2025		1795.9		5711.8	18240
2/28/2025		1795.9		5715.6	3840
				5716.4	
		Totals:			698400

Pump Station #3
Each Pump Rate is 80 Gallon per minute

Leachate Pumps

Date	Time	Pump 1 Run Time Hours	Gallons Pump 1	Pump 2 Run Time Hours	Gallons Pump 2
8/30/2024		3142.7		4997.1	480
9/6/2024		3142.7		4997.2	0
9/13/2024		3142.7		4997.2	30720
9/20/2024		3142.7		5003.6	75360
9/27/2024		3142.7		5019.3	0
10/4/2024		3142.7		5019.3	0
10/11/2024		3142.7		5019.3	0
10/18/2024		3142.7		5019.3	0
10/25/2024		3142.7		5019.3	0
11/1/2024		3142.7		5019.3	0
11/8/2024		3142.7		5019.3	0
11/15/2024		3142.7		5019.3	0
11/22/2024		3142.7		5019.3	0
11/29/2024		3142.7		5019.3	0
12/6/2024		3142.7		5019.3	0
12/13/2024		3142.7		5019.3	0
12/20/2024		3142.7		5019.3	0
12/27/2024		3142.7		5019.3	0
45660		3142.7		5019.3	0
1/10/2025		3142.7		5019.3	0
1/17/2025		3142.7		5019.3	0
1/24/2025		3142.7		5019.3	0
1/31/2025		3142.7		5019.3	0
2/7/2025		3142.7		5019.3	0
2/14/2025		3142.7		5019.3	0
2/21/2025		3142.7		5019.3	0
		Totals:	0		106560

Pump Station #4

Each Pump Rate is 80 Gallon per minute

Leachate Pumps						Gradient Pump			
Date	Time	Pump 1 Run Time Hours	Gallons Pump 1	Pump 2 Run Time Hours	Gallons Pump 2	Run Time Start	Run Time Stop	GCS Pump Hours	Gallons GCS
8/30/2024		4932.9		4991.5	213600	12918	13660	742.0	3561600
9/6/2024		4934.7		5036	231840			0.0	0
9/13/2024		4934.7		5084.3	206400			0.0	0
9/20/2024		4934.7		5127.3	248160			0.0	0
9/27/2024		4934.7		5179	0	13660	13990	330.0	1584000
10/4/2024		4934.7		5179	236160			0.0	0
10/11/2024		4934.7		5228.2	240960			0.0	0
10/18/2024		4934.7		5278.4	227040			0.0	0
10/25/2024		4934.7		5325.7	0	13990	14259	269.0	1291200
11/1/2024		4934.7		5325.7	388320			0.0	0
11/8/2024		4934.7		5406.6	291360			0.0	0
11/15/2024		4934.7		5467.3	132000			0.0	0
11/22/2024		4934.7		5494.8	1177920			0.0	0
11/29/2024		4934.7		5740.2	153120	14259	14600	341.0	1636800
12/6/2024		4935.5		5772.1	797280			0.0	0
12/13/2024		4935.5		5938.2	689760			0.0	0
12/20/2024		4935.5		6081.9	1606560			0.0	0
12/27/2024		4935.5		6416.6	0	14600	14864	264.0	1267200
1/3/2025		4936.5		6416.6	588000			0.0	0
1/10/2025		5037		6539.1	0			0.0	0
1/17/2025		5052.8		6539.1	0			0.0	0
1/24/2025		5086.9		6539.1	0			0.0	0
1/31/2025		5121.6		6539.1	0	14864	15126	262.0	1257600
2/7/2025		5173.6		6539.1	0			0.0	0
2/14/2025		5189.8		6539.1	0			0.0	0
2/21/2025		5242.6		6539.1	0			0.0	0
2/28/2025		5242.6		6539.1	4320	15126	15126	0.0	0
				6540					
		Totals:			7432800				11068800

Appendix E

Gradient Control and Total Leachate Volumes

9-1-2024 thru 2-28-2025

	Leachate Pump #1	Leachate Pump #2	GCS Pumps
Pump Station #1	0	550,560	1,059,840
Pump Station #2	0	698,400	–
Pump Station #3		106,560	–
Pump Station #4		7,432,800	11,068,800
	0	8,788,320	

Total Leachate (gal) 8,788,320 Total GCS (gal) 12,128,640

Total Leachate Disposed to the LR Waste Water Utilities (gal) 3,981,088

2nd Half Leachate Analytical Report

Client Sample ID: Trip Blank - Lab

Lab Sample ID: 192-24114-10

Date Collected: 08/27/25 00:00

Matrix: Water

Date Received: 08/27/25 14:07

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	<2.0	*3	5.0	2.0	ug/L			08/30/25 00:41	1
Trichlorofluoromethane	<3.2	*3	5.0	3.2	ug/L			08/30/25 00:41	1
1,2,3-Trichloropropane	<1.5		5.0	1.5	ug/L			08/30/25 00:41	1
1,2,4-Trimethylbenzene	<1.8		5.0	1.8	ug/L			08/30/25 00:41	1
1,3,5-Trimethylbenzene	<1.8		5.0	1.8	ug/L			08/30/25 00:41	1
Vinyl acetate	<5.8	*3	10	5.8	ug/L			08/30/25 00:41	1
Vinyl chloride	<1.6	*3	2.0	1.6	ug/L			08/30/25 00:41	1
m,p-Xylenes	<5.9		10	5.9	ug/L			08/30/25 00:41	1
o-Xylene	<1.8		5.0	1.8	ug/L			08/30/25 00:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*93*	*3	*80 - 120*		*08/30/25 00:41*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*08/30/25 00:41*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*08/30/25 00:41*	*1*

Client Sample ID: Leachate

Lab Sample ID: 192-24114-11

Date Collected: 08/27/25 10:23

Matrix: Water

Date Received: 08/27/25 14:07

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<6.3		10	6.3	ug/L			08/30/25 01:10	1
Benzene	<1.5		5.0	1.5	ug/L			08/30/25 01:10	1
Acrylonitrile	<5.6		10	5.6	ug/L			08/30/25 01:10	1
Bromochloromethane	<2.0		5.0	2.0	ug/L			08/30/25 01:10	1
Bromodichloromethane	<1.1		5.0	1.1	ug/L			08/30/25 01:10	1
Bromoform	<1.3		5.0	1.3	ug/L			08/30/25 01:10	1
Bromomethane	<2.8		5.0	2.8	ug/L			08/30/25 01:10	1
2-Butanone (MEK)	<3.3		10	3.3	ug/L			08/30/25 01:10	1
Carbon disulfide	<5.8		10	5.8	ug/L			08/30/25 01:10	1
Carbon tetrachloride	<1.8		2.0	1.8	ug/L			08/30/25 01:10	1
Chlorobenzene	<1.1		5.0	1.1	ug/L			08/30/25 01:10	1
Chloroethane	<2.9		5.0	2.9	ug/L			08/30/25 01:10	1
Chloroform	<2.1		4.0	2.1	ug/L			08/30/25 01:10	1
Chloromethane	<2.7		5.0	2.7	ug/L			08/30/25 01:10	1
1,2-Dibromo-3-Chloropropane	<1.6		5.0	1.6	ug/L			08/30/25 01:10	1
Dibromochloromethane	<1.1		5.0	1.1	ug/L			08/30/25 01:10	1
1,2-Dibromoethane	<1.2		5.0	1.2	ug/L			08/30/25 01:10	1
Dibromomethane	<1.2		5.0	1.2	ug/L			08/30/25 01:10	1
1,2-Dichlorobenzene	<1.3		5.0	1.3	ug/L			08/30/25 01:10	1
1,4-Dichlorobenzene	<1.4		5.0	1.4	ug/L			08/30/25 01:10	1
1,1-Dichloroethane	<1.4		5.0	1.4	ug/L			08/30/25 01:10	1
1,2-Dichloroethane	<1.3		5.0	1.3	ug/L			08/30/25 01:10	1
1,1-Dichloroethene	<2.6		5.0	2.6	ug/L			08/30/25 01:10	1
cis-1,2-Dichloroethene	<1.0		5.0	1.0	ug/L			08/30/25 01:10	1
trans-1,2-Dichloroethene	<1.5		2.0	1.5	ug/L			08/30/25 01:10	1
1,2-Dichloropropane	<1.2		5.0	1.2	ug/L			08/30/25 01:10	1
cis-1,3-Dichloropropene	<1.2		5.0	1.2	ug/L			08/30/25 01:10	1
trans-1,3-Dichloropropene	<2.5		5.0	2.5	ug/L			08/30/25 01:10	1
Ethylbenzene	<2.0		5.0	2.0	ug/L			08/30/25 01:10	1

Client Sample ID: Leachate

Date Collected: 08/27/25 10:23
Date Received: 08/27/25 14:07

Lab Sample ID: 192-24114-11

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iodomethane	<6.3		10	6.3	ug/L			08/30/25 01:10	1
2-Hexanone	<3.8		10	3.8	ug/L			08/30/25 01:10	1
4-Methyl-2-pentanone	<2.9		10	2.9	ug/L			08/30/25 01:10	1
Methylene Chloride	<4.7		5.0	4.7	ug/L			08/30/25 01:10	1
Styrene	<3.0		5.0	3.0	ug/L			08/30/25 01:10	1
1,1,1,2-Tetrachloroethane	<1.1		5.0	1.1	ug/L			08/30/25 01:10	1
1,1,2,2-Tetrachloroethane	<1.4		5.0	1.4	ug/L			08/30/25 01:10	1
Tetrachloroethene	<2.6		5.0	2.6	ug/L			08/30/25 01:10	1
Toluene	<3.2		5.0	3.2	ug/L			08/30/25 01:10	1
1,1,1-Trichloroethane	<2.2		5.0	2.2	ug/L			08/30/25 01:10	1
1,1,2-Trichloroethane	<1.3		5.0	1.3	ug/L			08/30/25 01:10	1
Trichloroethene	<2.0		5.0	2.0	ug/L			08/30/25 01:10	1
Trichlorofluoromethane	<3.2		5.0	3.2	ug/L			08/30/25 01:10	1
1,2,3-Trichloropropane	<1.5		5.0	1.5	ug/L			08/30/25 01:10	1
1,2,4-Trimethylbenzene	<1.8		5.0	1.8	ug/L			08/30/25 01:10	1
1,3,5-Trimethylbenzene	<1.8		5.0	1.8	ug/L			08/30/25 01:10	1
Vinyl acetate	<5.8		10	5.8	ug/L			08/30/25 01:10	1
Vinyl chloride	<1.6		2.0	1.6	ug/L			08/30/25 01:10	1
m,p-Xylenes	<5.9		10	5.9	ug/L			08/30/25 01:10	1
o-Xylene	<1.8		5.0	1.8	ug/L			08/30/25 01:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*93*		*80 - 120*		*08/30/25 01:10*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*08/30/25 01:10*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*08/30/25 01:10*	*1*

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**170**		2.0	1.5	mg/L			09/05/25 04:23	10
Sulfate	**31**		2.0	1.2	mg/L			09/05/25 04:23	10

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.055**		0.0020	0.00058	mg/L		09/04/25 15:20	09/04/25 17:42	1
Beryllium	<0.00016		0.00050	0.00016	mg/L		09/04/25 15:20	09/04/25 17:42	1
Cadmium	<0.0011		0.0040	0.0011	mg/L		09/04/25 15:20	09/04/25 17:42	1
Chromium	**0.0054**	**J**	0.010	0.0032	mg/L		09/04/25 15:20	09/04/25 17:42	1
Cobalt	<0.0032		0.010	0.0032	mg/L		09/04/25 15:20	09/08/25 13:15	1
Copper	<0.0054		0.010	0.0054	mg/L		09/04/25 15:20	09/04/25 17:42	1
Iron	**0.12**		0.050	0.017	mg/L		09/04/25 15:20	09/04/25 17:42	1
Manganese	**0.75**		0.020	0.0076	mg/L		09/04/25 15:20	09/08/25 13:17	10
Nickel	**0.0049**	**J**	0.010	0.0039	mg/L		09/04/25 15:20	09/04/25 17:42	1
Silver	<0.0014		0.0070	0.0014	mg/L		09/04/25 15:20	09/08/25 13:15	1
Vanadium	<0.0029		0.010	0.0029	mg/L		09/04/25 15:20	09/04/25 17:42	1
Zinc	<0.0050		0.010	0.0050	mg/L		09/04/25 15:20	09/04/25 17:42	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0029		0.010	0.0029	mg/L		08/28/25 10:33	08/28/25 17:52	1
Arsenic	**0.0085**		0.00050	0.00035	mg/L		08/28/25 10:33	08/28/25 17:52	1

Client Sample ID: Leachate

Lab Sample ID: 192-24114-11

Date Collected: 08/27/25 10:23

Matrix: Water

Date Received: 08/27/25 14:07

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.00062**		0.00050	0.00021	mg/L		08/28/25 10:33	08/28/25 17:52	1
Selenium	**0.0032**		0.0020	0.00072	mg/L		08/28/25 10:33	08/28/25 17:52	1
Thallium	<0.000045		0.00050	0.000045	mg/L		08/28/25 10:33	08/28/25 17:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540 C-2020)	**770**		25	25	mg/L			08/29/25 12:58	1
Total Organic Carbon (SM 5310 C-2014)	**70**		2.0	0.40	mg/L			08/28/25 18:58	2

Client Sample ID: Dupe

Lab Sample ID: 192-24114-12

Date Collected: 08/26/25 12:05

Matrix: Water

Date Received: 08/27/25 14:07

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<6.3		10	6.3	ug/L			08/30/25 01:40	1
Benzene	<1.5		5.0	1.5	ug/L			08/30/25 01:40	1
Acrylonitrile	<5.6		10	5.6	ug/L			08/30/25 01:40	1
Bromochloromethane	<2.0		5.0	2.0	ug/L			08/30/25 01:40	1
Bromodichloromethane	<1.1		5.0	1.1	ug/L			08/30/25 01:40	1
Bromoform	<1.3		5.0	1.3	ug/L			08/30/25 01:40	1
Bromomethane	<2.8		5.0	2.8	ug/L			08/30/25 01:40	1
2-Butanone (MEK)	<3.3		10	3.3	ug/L			08/30/25 01:40	1
Carbon disulfide	<5.8		10	5.8	ug/L			08/30/25 01:40	1
Carbon tetrachloride	<1.8		2.0	1.8	ug/L			08/30/25 01:40	1
Chlorobenzene	<1.1		5.0	1.1	ug/L			08/30/25 01:40	1
Chloroethane	<2.9		5.0	2.9	ug/L			08/30/25 01:40	1
Chloroform	<2.1		4.0	2.1	ug/L			08/30/25 01:40	1
Chloromethane	<2.7		5.0	2.7	ug/L			08/30/25 01:40	1
1,2-Dibromo-3-Chloropropane	<1.6		5.0	1.6	ug/L			08/30/25 01:40	1
Dibromochloromethane	<1.1		5.0	1.1	ug/L			08/30/25 01:40	1
1,2-Dibromoethane	<1.2		5.0	1.2	ug/L			08/30/25 01:40	1
Dibromomethane	<1.2		5.0	1.2	ug/L			08/30/25 01:40	1
1,2-Dichlorobenzene	<1.3		5.0	1.3	ug/L			08/30/25 01:40	1
1,4-Dichlorobenzene	<1.4		5.0	1.4	ug/L			08/30/25 01:40	1
1,1-Dichloroethane	<1.4		5.0	1.4	ug/L			08/30/25 01:40	1
1,2-Dichloroethane	<1.3		5.0	1.3	ug/L			08/30/25 01:40	1
1,1-Dichloroethene	<2.6		5.0	2.6	ug/L			08/30/25 01:40	1
cis-1,2-Dichloroethene	<1.0		5.0	1.0	ug/L			08/30/25 01:40	1
trans-1,2-Dichloroethene	<1.5		2.0	1.5	ug/L			08/30/25 01:40	1
1,2-Dichloropropane	<1.2		5.0	1.2	ug/L			08/30/25 01:40	1
cis-1,3-Dichloropropene	<1.2		5.0	1.2	ug/L			08/30/25 01:40	1
trans-1,3-Dichloropropene	<2.5		5.0	2.5	ug/L			08/30/25 01:40	1
Ethylbenzene	<2.0		5.0	2.0	ug/L			08/30/25 01:40	1
Iodomethane	<6.3		10	6.3	ug/L			08/30/25 01:40	1
2-Hexanone	<3.8		10	3.8	ug/L			08/30/25 01:40	1
4-Methyl-2-pentanone	<2.9		10	2.9	ug/L			08/30/25 01:40	1
Methylene Chloride	<4.7		5.0	4.7	ug/L			08/30/25 01:40	1
Styrene	<3.0		5.0	3.0	ug/L			08/30/25 01:40	1

Appendix D:

Updated Financial Assurance Report

2025 Financial Assurance Report

City of Little Rock

Class 1 Landfill / Class 4 Landfill / Yard Waste Compost Facility

Prepared for:

CITY OF LITTLE ROCK

City of Little Rock – Dept of Public Works
Division of Solid Waste Services
10803 Ironton Cutoff
Little Rock, AR 72206

Table of Contents

Tables

Figures

1 Introduction

1.1 Terms of Reference

Terracon Consultants, Inc. (Terracon) prepared this 2025 Financial Assurance Report (Report) for the active municipal solid waste (MSW) landfills at the City of Little Rock Landfill Facility (CLRLF) in Little Rock, Arkansas.

1.2 Project Background

The City of Little Rock (City) owns and operates the landfill facility located at 10803 Ironton Cutoff Rd. in Little Rock, Arkansas with Global Position System coordinates latitude N 34° 38' 57.02514" and longitude 92° 18' 06.42839". The facility includes an active Class 1 landfill (Permit No. 0266-S1), an active Class 4 landfill (Permit No. 0266-S4J), and a yard waste composting facility (Permit No. 0031-SCYW). The most recent financial assurance report for the MSW facility was prepared by Terracon in March 2025. The general geographic location of the site is shown in **Figure 1.1**. The general layout and site orientation is shown in **Figure 1.2**.

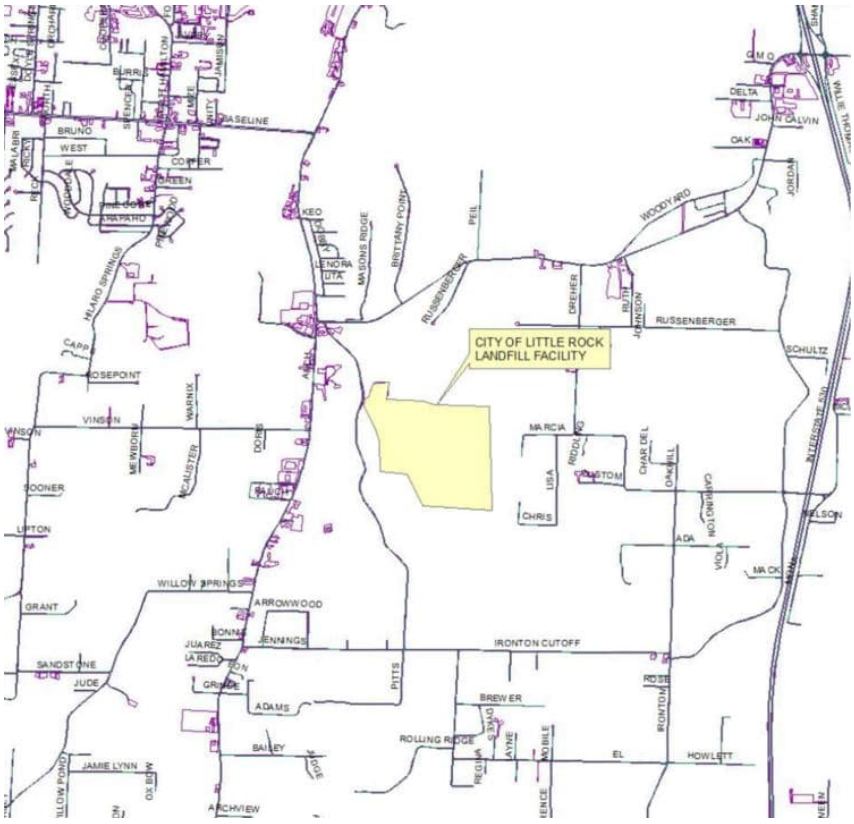


Figure 1.1 – Site Location Map

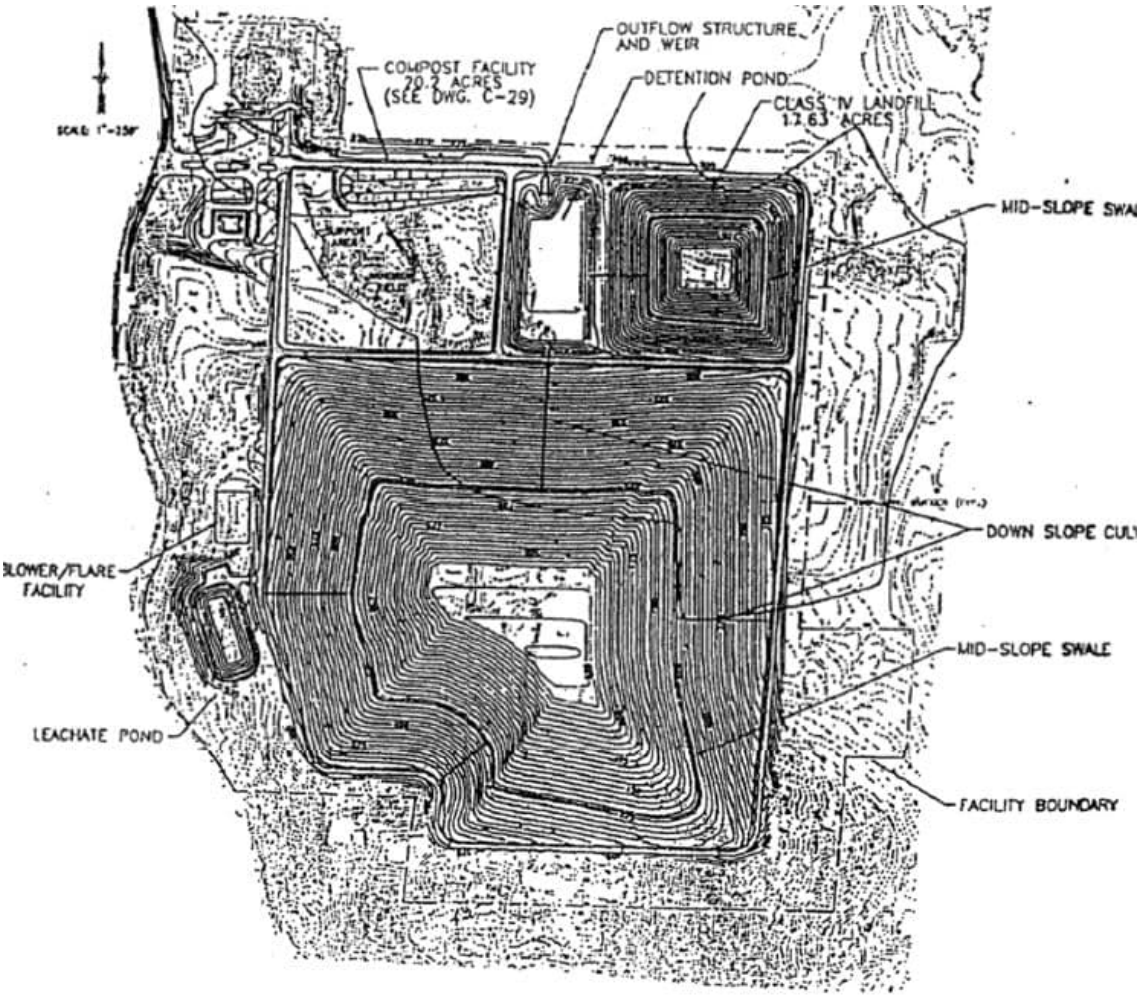


Figure 1.2 – General Site Layout

1.3 Purpose and Scope

This report was prepared to assist the City with financial assurance at the landfill facility for both the active MSW and C&D landfills. The scope of this report includes the closure plan, post-closure plan, calculations for the overall and remaining airspace volumes, in-place waste density (i.e. airspace utilization factor), tonnage data provided by the City, and overall and remaining site life for each landfill. The assumptions and the limits used to calculate the airspace volume are also presented in this report.

1.4 Organization of Report

The remainder of this report is organized as follows:

- Section 2 presents the airspace volume calculations for the MSW landfill;
- Section 3 presents the airspace volume calculations for the C&D landfill; and
- Section 4 provides a summary of the airspace management report.

2 Design and Operation Considerations

Class 1 landfills can accept all types of household waste including putrescible waste, non-hazardous industrial waste, and commercial waste. Due to the nature of the waste materials received, specific siting, design, and operating standards must be considered when developing Class 1 landfills. These standards assist in minimizing the potential for environmental impact associated with the waste disposal operations.

Class 4 landfills, as defined by Regulation No. 22, are eligible to receive non-hazardous C&D waste, furniture, appliances, and other materials that are considered inert. These materials are generally considered “non-putrescible” because they degrade very slowly or not at all. Due to the nature of the waste stream, less-stringent environmental controls are required for Class 4 landfills.

Composting facilities, as defined by Regulation No. 22, are eligible to receive yard waste and other vegetative materials such as grass clippings, leaves, and shredded or chipped brush and tree limbs.

At the CLR solid waste facility, the Class 1, Class 4, and composting operations are managed in separate areas. The Class 1 and Class 4 landfills are divided into cells of varying capacity in order to effectively control the incoming waste stream while managing the separation of leachate and stormwater runoff. For the Class 1 landfill, cell construction generally involves clearing, excavation to established subgrade, preparation of a clay liner, installation of geomembrane (60-mil high-density polyethylene [HDPE]), construction of a leachate collection system, construction of a road for landfill operations, and construction of related drainage improvements. A Class 4 waste disposal cell is similar in design but generally does not include a geomembrane and a leachate collection system. Once a cell or isolated waste disposal area has been prepared, the construction must be certified by an Arkansas-licensed professional engineer and approved by the DEQ Regulated Waste Program, formerly the Solid Waste Management Division.

As waste is deposited in a prepared cell, interim cover soil or an approved alternate daily cover material must be installed on a regular basis to control blowing litter, fires, and disease vectors. During the utilization of a cell, waste is confined to the smallest practical area using heavy compaction equipment. In addition, measures are employed to divert, collect, and manage leachate derived from the waste disposal operations (Class 1 landfill only).

As a portion of a landfill cell is filled to the designed and permitted capacity, that portion of the cell or area of the landfill unit is “closed” in accordance with state and federal regulations. Depending on the landfill unit, closure may consist of placing an impermeable final layer on the landfill, providing topsoil, seeding, constructing drainage or erosion control improvements, installing gas collection systems, and constructing other environmental controls.

After the final cell of the landfill is filled to permitted capacity, and final closure work is completed, there is a mandatory post-closure care period that varies from 30 years for the Class 1 landfill to 2 years for the Class 4 landfill. During this time, CLR must maintain the site by repairing erosion and settlement associated with the Class 1 and Class 4 waste disposal areas. In addition, all systems and environmental controls at the site, including the groundwater monitoring system, leachate collection and treatment systems, and landfill gas control systems, must be maintained.

The CLR composting facility was built in accordance with Regulation No. 22 to include a surface that can withstand heavy equipment loads as well as stormwater management controls to prevent ponding and run-on to the work area. Incoming yard waste materials are processed to produce boiler fuel, mulch, and compost.

2.1 Landfill Operations

In Arkansas, each landfill is required to have a written operating plan that identifies, among other things, the operating sequence of the landfill. CLR has developed operating plans for both the Class 1 and Class 4 waste disposal areas.

The Class 1 landfill is to be developed in nine landfill cells or units. Cells 1 through 8 require bottom liner and leachate collection system construction. Cell 9 expands the height of the landfill by filling over Cells 1 through 8. As portions of each landfill cell are filled to capacity, portions of those areas of the landfill are closed. These areas are designated in the original permit and operating plan as “closure areas.” It should be noted that closure areas do not correspond in size with cell areas. As the landfill is developed, closure work is done only on those areas of the landfill that will not receive waste in the future, primarily completed outer slopes.

To date, Cells 1, 2 and 4 of the Class 1 landfill have been filled to the capacities listed in the original permit, and partial closure of Cells 1 and 2 has been completed. A permanent grass cover has been established on portions of Cells 1 and 2. Partial closure of the east slope of Cell 4 was completed in 2021.

As the footprint of the landfill expands, waste can be placed at higher elevations. During 2016, waste in Cells 1, 2 and 4 reached levels within Cell 9, the upper cell covering Cells 1 through 8. Operationally, it is more cost effective to maximize the height of the open area before expanding horizontally by constructing a new cell.

Originally, the Class 1 cells were to be developed in sequence from one through nine. Due to the cost of rock excavation in Cell 3, the planned utilization sequence has changed. In the future, disposal operations will move to the western, remaining portion of Cell 5, and progress to Cells 3, 6, 7, and 8. Waste will continue to be placed within Cell 9 as the landfill develops.

For the Class 4 landfill, the unit is divided into four operating cells that are to be developed in sequence from Cells 1 through 4. As of the date of this report, Cells 1 and 2 are at capacity and filling operations have moved to Cell 3. The next cell to be developed at the Class 4 landfill will be Cell 4. Figure 2.1 illustrates the revised general layout and orientation of the Class 1 and Class 4 waste disposal areas.

2.2 Final Cover System Design

According to applicable state (DEQ) and federal (EPA) solid waste management regulations, municipal solid waste landfills (Class 1, as defined by Regulation No. 22) must be designed and constructed with a final cover system that will minimize infiltration of surface water while controlling drainage and preventing erosion of soils. The final cover system also serves to reduce landfill gas emissions that can adversely affect air quality.

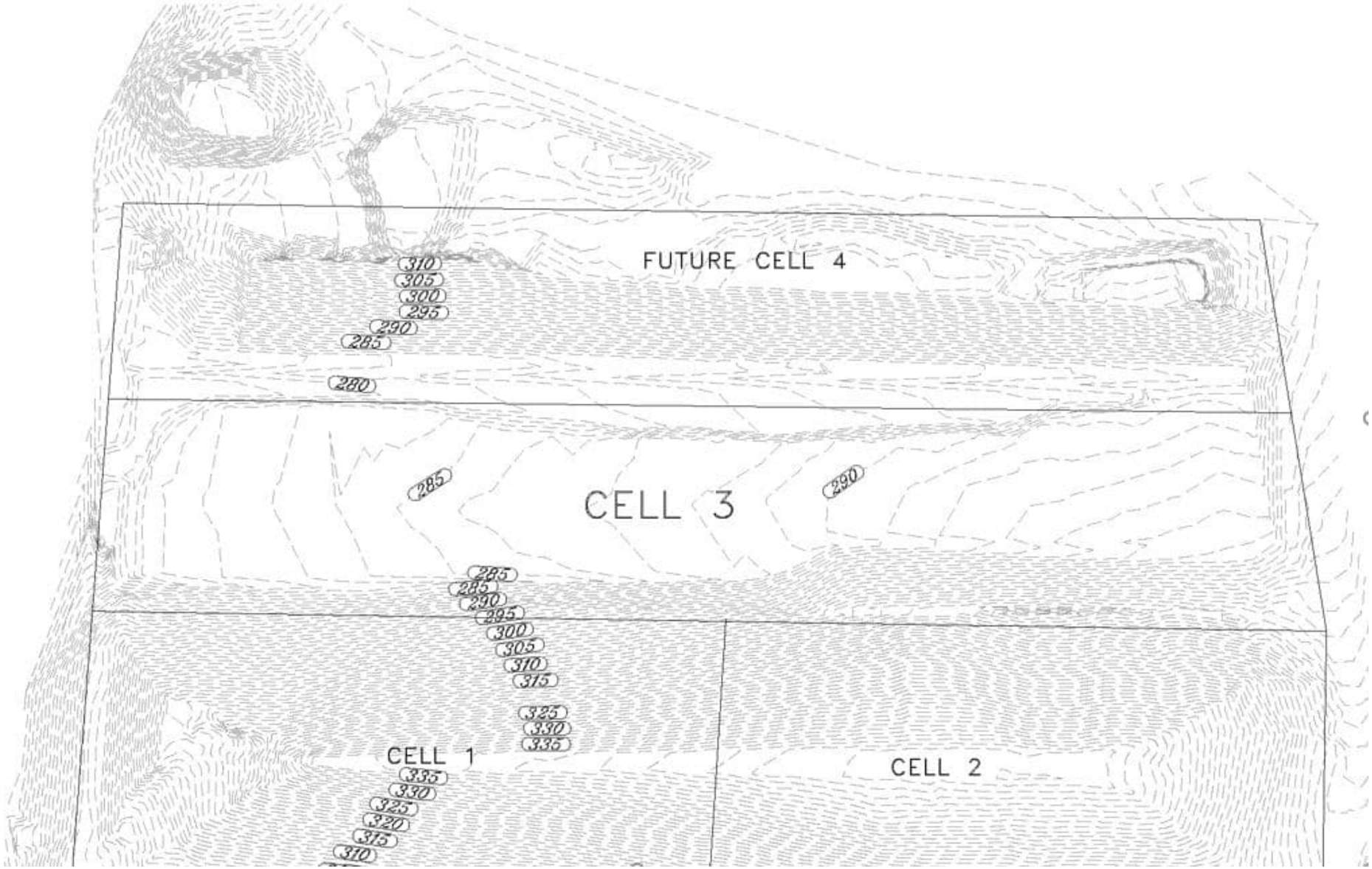


Figure 2.1 – Revised General Layout of Class 4 Waste Disposal Areas

The final cover system design for the Class 1 landfill includes the following general cross-section from top to bottom:

- A 6-inch topsoil layer;
- A 12-inch protective cover layer (onsite sandy, silty soil);
- A 12-inch drainage layer of sand, or a geocomposite, or geotextile;
- A geomembrane layer (40-mil very-low-density polyethylene [VLDPE]);
- A compacted clay cover (24-inch minimum thickness, k < 1.0x10-7 cm/s); and
- A 12-inch foundation layer (onsite sandy, silty soil).

On March 29, 2004, DEQ approved an alternative final cover system for the closure of Cells 2 through 9. The alternative final cover system design includes the following general cross-section from top to bottom:

- A vegetative cover/erosion layer with a minimum thickness of 18 inches,
- A protective cover with a minimum thickness of 18 inches,
- A drainage geocomposite layer,
- A low-permeability geosynthetic clay liner (GCL), and
- Daily and intermediate cover layers over the waste (with a minimum thickness of
- 18 inches).

The Class 4 waste disposal area will receive a final cover system that includes at least 24 inches of compacted clay cover and 6 inches of topsoil. The compacted clay cover for the Class 4 waste disposal area must demonstrate a maximum hydraulic conductivity of 1.0x10-5 cm/s.

The final cover systems for both the Class 1 and Class 4 waste disposal areas will be placed over the entire surface of the completed portions of the landfill as soon as practicable once final contours are achieved. Once the final cover layers have been placed, the completed areas will be graded and hydroseeded. Erosion control measures will be employed as needed and required to control soil loss from the area.

2.3 Closure Requirements

Each landfill owner or operator must have a written closure plan, as required by Regulation No. 22, describing the steps necessary to close all facility operations at any point during its active life, and an estimate of the cost to hire a third party to conduct closure activities. The plan is developed as part of the initial permitting of the facility and updated as necessary.

2.4 Post-Closure Care Requirements

Each landfill owner or operator must have a written post-closure care plan, as required by Regulation No. 22, that describes the monitoring and maintenance that will be performed during the post-closure care period, a description of planned land uses, and the person or office responsible for post-closure activities. This plan is also developed as part of the initial permitting of the facility and updated as necessary.

3 Municipal Solid Waste Landfill

3.1 Introduction

The CLRLF has been serving the disposal needs of the City since 1993, utilizing the Class 1 landfill. The landfill is permitted to comply with Subtitle D of Title 40 Code of Federal Regulations (CFR) Part 258. The landfill accepts household waste and non-hazardous industrial waste (NHIW). The landfill has a permitted volume of 19,860,298 cubic yards over an area of approximately 110 acres. The landfill will hold approximately 8,003,987 tons of waste.

3.2 Estimated Volumes

Table 3.1 presents the acreage, estimated volume, and estimated tonnage data of MSW accepted and disposed in Cells 1 - 9.

TABLE 3.1
CELL AREAS AND ASSOCIATED WASTE DISPOSAL CAPACITIES
CLASS 1 LANDFILL

Cell/ Area	Cell Acreage [1][4] (Acres)	Partial Closure Area [4] (Acres)	Estimated Volume [2][4] (CY)	Estimated Waste [3][5] (Tons)
1	12.30	4.22	821,527	331,942
2	12.60	4.41	1,269,075	527,340
3	12.00	7.82	865,800	338,203
4	18.86	16.61	2,280,617	1,094,284
5 EAST	6.36	0.00	1,676,654	654,943
5 WEST	9.80	0.00	2,728,831	1,065,950
6	11.00	7.00	2,146,200	838,359
7	17.08	23.04	4,507,970	1,760,926
8	10.00	25.50	2,131,300	832,539
9	0.00	21.40	1,432,324	559,502
TOTAL	**110.00**	**110.00**	**19,860,298**	**8,003,987**

Notes:
[1] Cells 1 and 2 updated in 1999 to reflect actual surveyed area of the completed cells
[2] Volumes for Cell 1 and 2 are final measured volumes
[3] Cell 1 and Cell 2 tonnage is actual amount recorded
[4] Closure Area and Estimated Volume and Waste reflect the 2001 size increase of Cells 4 and 5 and the corresponding decrease in size of Cell 7.
[5] Estimated tons for Cells 3 and 5 through 9 calculated as Estimated Volume/2.56

3.3 Airspace Volume Calculations

AutoCAD® Civil 3D® [Autodesk, 2025] was used to compute the airspace volumes. Civil 3D® calculates volumes from a digital terrain model that represents each surface of interest (i.e., base surface and comparison surface). From these surfaces, Civil 3D® calculates the respective difference in elevations and generates isopachous (isopach) maps (i.e., contour lines of equal thickness over an area). The volume is then calculated by integrating the isopachs over the area being considered.

3.3.1 Consumed Operating Airspace

An aerial survey was completed by Terracon in March 2026 to measure the total volume of waste that had been placed in open cells between March 6, 2025 and March 19, 2026. To maintain consistency between reporting periods, a factor of approximately 0.986 was used to adjust for the aerial survey being taken on March 19, 2026 as opposed to March 6, 2026. The consumed operating airspace as of March 2026 was 7,261,073 cubic yards and encompassed Cells 1, 2, 4, 5, & 9 of the landfill. According to the most recent financial assurance report, the total consumed operating airspace as of March 2025 was 7,034,648 cubic yards. From March 2025 to March 2026, approximately 212,095 cubic yards was placed in the active cells of the landfill, with 3,234 cubic yards being filled in Cell 1, 41,862 cubic yards being filled in Cell 2, 5,863 cubic yards being filled in Cell 4, and 161,136 cubic yards being filled in Cell 5. All fill volumes for Cells 1, 2, and 4 are included as Cell 9 volumes. These volumes are shown in **Table 3.2**.

3.3.2 Effective In-Place Density

Table 3.2 presents the summary of the gross fill volumes, tonnages, landfill utilization, effective in-place densities, and daily/ intermediate cover based on survey data ranging from March 2025 & March 2026 and also based on information provided by the City. The effective waste density is a measure of the tons of waste disposed divided by the overall (gross) airspace consumed during the period in question. The volume includes waste, cover soil, construction materials, gas system materials and anything else that consumes landfill space. As shown in **Table 3.2**, the airspace utilization rate for 2025 was 1.72 cubic yards per ton and the effective waste density was 1,164 pounds per cubic yard.

3.3.3 Remaining Operational Airspace

Based on the recent aerial survey, the remaining useable airspace as of March 2026 was 2,122,360 cubic yards, with Cell 5 having 1,417,264 cubic yards of useable airspace and Cell 9 having 705,096 cubic yards of remaining useable airspace. These volumes were obtained by comparing the existing contours to an intermediate surface developed for Cells 1 – 5 and Cell 9. The overall remaining permitted airspace for the entire Class 1 landfill as of March 2026 was 6,363,014 cubic yards with the remaining permitted airspace in Cell 5 of 2,707,234 cubic yards and remaining permitted airspace in Cell 9 of 3,655,780 cubic yards.

TABLE 3.2
UTILIZATION RATE SUMMARY - CLASS 1 LANDFILL

Year	Gross Fill Volume [1]		Waste Tonnage		Landfill Utilization [2]		Effective Waste Density [3]		Daily/Intermediate Cover		
	This Year (CY)	To Date (CY)	This Year (TONS)	To Date (TONS)	This Year (CY/TON)	To Date (CY/TON)	This Year (LBS/CY)	To Date (LBS/CY)	This Year (CY)	To Date (CY)	Percent of Fill (%/YEAR)
1993	17,920	17,920	3,122	3,122	5.74	5.74					
1994	215,036	232,956	83,793	86,915	2.57	2.68	779	746	48,945	48,945	23%
1995	211,731	444,687	118,890	205,805	1.78	2.16	1,123	926	89,290	138,235	42%
1996	242,590	687,277	76,222	282,027	3.18	2.44	628	821	61,109	199,344	25%
1997	264,366	951,643	93,993	376,020	2.81	2.53	711	790	71,560	270,904	27%
1998	230,140	1,181,783	87,695	463,715	2.62	2.55	762	785	78,681	349,585	34%
1999	174,950	1,356,733	85,270	548,985	2.05	2.47	975	809	90,566	440,151	52%
2000	202,920	1,559,653	84,557	633,542	2.40	2.46	833	812	93,461	533,612	46%
2001	225,293	1,784,946	86,118	719,660	2.62	2.48	764	806	77,957	611,569	35%
2002	157,269	1,942,215	79,584	799,244	1.98	2.43	1,012	823	70,006	681,575	45%
2003	187,610	2,129,825	75,047	874,291	2.50	2.44	800	821	97,895	779,470	52%
2004	192,998	2,322,823	76,257	950,548	2.53	2.44	790	818	70,784	850,254	37%
2005	206,062	2,528,885	71,518	1,022,066	2.88	2.47	694	808	83,818	934,072	41%
2006	232,333	2,761,218	97,770	1,119,836	2.38	2.47	842	811	84,083	1,018,155	36%
2007	261,334	3,022,552	113,311	1,233,147	2.31	2.45	867	816	86,606	1,104,761	33%
2008	228,998	3,251,550	106,942	1,340,089	2.14	2.43	934	824	67,325	1,172,086	29%
2009	159,997	3,411,547	97,346	1,437,435	1.64	2.37	1,217	843	51,207	1,223,293	32%
2010	162,109	3,573,656	87,406	1,524,841	1.85	2.34	1,078	853	61,270	1,284,563	38%
2011	250,402	3,824,058	93,131	1,617,972	2.69	2.36	744	846	92,454	1,377,017	37%
2012	221,129	4,045,187	97,699	1,715,671	2.26	2.36	884	848	98,687	1,475,704	45%
2013	211,617	4,256,804	131,758	1,847,429	1.61	2.30	1,245	868	117,821	1,593,525	56%
2014	272,415	4,529,219	106,137	1,953,566	2.57	2.32	779	863	82,340	1,675,865	30%
2015	263,673	4,792,892	124,617	2,078,183	2.12	2.31	945	867	92,556	1,768,421	35%
2016	254,940	5,047,832	118,704	2,196,887	2.15	2.30	931	870	118,892	1,887,313	47%
2017	261,030	5,308,862	115,074	2,311,961	2.27	2.30	882	871	88,371	1,975,684	34%
2018	274,980	5,583,842	123,796	2,435,757	2.22	2.29	900	872	99,725	2,075,409	36%
2019	221,670	5,805,512	129,706	2,565,463	1.71	2.26	1,170	884	90,014	2,165,423	41%
2020	153,610	5,959,122	77,985	2,643,448	1.97	2.25	1,015	887	58,132	2,223,555	32%
2021	311,820	6,270,942	132,439	2,775,887	2.35	2.26	849	885	140,322	2,363,877	37%
2022	242,246	6,513,188	131,442	2,907,329	1.84	2.24	1,085	893	109,884	2,473,762	52%
2023	329,659	6,842,847	170,878	3,078,207	1.93	2.22	1,037	900	158,176	2,631,938	42%
2024	206,131	7,048,978	132,879	3,211,086	1.55	2.20	1,289	911	177,219	2,809,157	86%
2025	212,095	7,261,073	123,473	3,334,559	1.72	2.18	1,164	918	181,019	2,990,176	85%
Cell Estimates [4]: **Total Cell 1:**	3,234	1,027,364	--	412,169	--	--	--	--	--	--	--
Total Cell 2:	41,862	1,556,242	--	624,351	--	--	--	--	--	--	--
Total Cell 4:	5,863	2,964,886	--	1,189,486	--	--	--	--	--	--	--
Total Cell 5:	161,136	1,698,251	--	681,323	--	--	--	--	--	--	--
5-Year Average:	**260,390**	--	**138,222**	--	**1.88**	**2.22**	**1,085**	**901**	**153,324**	--	60%
Planned Average:	--	--	--	--	--	2.25	--	1,042	--	--	--

[1] Total in-place landfill volume utilized for waste and earthen/grindings berms and cover, in cubic yards.

[2] Cubic yard volume of landfill space utilized per ton of waste.

[3] Effective density of compacted waste in landfill with soil berms, roads and interim cover.

3.4 Life Expectancy

Table 3.3 presents the life expectancy for the entire landfill based on the calculated remaining airspace discussed in Section 3.3.3. Life expectancy is calculated adding the estimated yearly airspace depleted to the total airspace depleted to date.

TABLE 3.3
PROJECTIONS OF REMAINING LIFE - CLASS 1 LANDFILL [1]

Scenario	Projected 2026 Waste (CY)	Estimated Site Life (Years)
Current Utilization Rate, No Growth	212,095	59
Current Utilization Rate Plus 1% Annual Growth	214,216	54
5-Year Historical Average Utilization Rate Plus 1% Annual	262,994	39
5-Year Historical Average Utilization Rate Plus 3% Annual	268,202	29

[1] As of March 2026.

The lifetime is calculated for no growth, an average of 1% annual growth, a 5-year historical average plus 1% annual growth, and a 5-year historical average plus 3% annual growth. For purposes of annual financial projections, it is recommended that the 5-year historical average landfill utilization rate plus and a 1% annual growth rate used for this year and years after. Under this scenario, the timing of cell construction, closure, and post-closure care would be approximately as described in **Table 3.4**.

TABLE 3.4
PROJECTION OF USEFUL LIFE BASED ON 5-YEAR AVERAGE UTILIZATION RATE, 1% GROWTH

End of Year	Operation in Cell	Volume Added in New Construction	Volume Depleted	Total Depleted To Date	Constructed Volume Remaining
1993	1	821,527	17,920	17,920	803,607
1994	1		215,036	232,956	588,571
1995	1		211,731	444,687	376,840
1996	1		242,590	687,277	134,250
1997	1&2	1,260,019	264,366	951,643	1,129,903
1998	2		230,140	1,181,783	899,763
1999	2		174,950	1,356,733	724,813
2000	2		202,920	1,559,653	521,893
2001	2		225,293	1,784,946	296,600
2002	2		157,269	1,942,215	139,331
2003	2&4	2,239,718	187,610	2,129,825	2,191,439
2004	4		192,998	2,322,823	1,998,441
2005	4		206,062	2,528,885	1,792,379
2006	4		232,333	2,761,218	1,560,046
2007	4		261,334	3,022,552	1,298,712
2008	4		228,998	3,251,550	1,069,714
2009	4		159,997	3,411,547	909,717
2010	4		162,109	3,573,656	747,608
2011	4		250,402	3,824,058	497,206
2012	4		221,129	4,045,187	276,077
2013	4		211,617	4,256,804	64,460
2014	4 & 5 E	1,676,654	272,415	4,529,219	1,468,699
2015	5 EAST		263,673	4,792,892	1,205,026
2016	5 EAST		254,940	5,047,832	950,086
2017	5 EAST		261,030	5,308,862	689,056
2018	5 EAST		274,980	5,583,842	414,076
2019	5 EAST		221,670	5,805,512	192,406
2020	5E & 5W	2,728,831	153,610	5,959,122	2,767,627
2021	5 WEST		311,820	6,270,942	2,455,807
2022	5 WEST		242,246	6,513,188	2,213,561
2023	5 WEST		329,659	6,842,847	1,883,902
2024	5 WEST		206,131	7,048,978	1,677,771
2025	**5 WEST**		**212,095**	**7,261,073**	**1,465,676**
2026	5 WEST		262,994	7,524,067	1,202,682
2027	5 WEST		265,624	7,789,691	937,058
2028	5 WEST		268,280	8,057,971	668,778
2029	5 WEST		270,963	8,328,934	397,815
2030	5 WEST		273,673	8,602,607	124,142

TABLE 3.4 PROJECTION OF USEFUL LIFE BASED ON 5-YEAR AVERAGE UTILIZATION RATE, 1% GROWTH					
End of Year	Operation in Cell	Volume Added in New Construction	Volume Depleted	Total Depleted To Date	Constructed Volume Remaining
2031	5 W & 3/6	3,012,000	276,409	8,879,016	2,859,733
2032	3/6		279,174	9,158,190	2,580,559
2033	3/6		281,965	9,440,155	2,298,594
2034	3/6		284,785	9,724,940	2,013,809
2035	3/6		287,633	10,012,573	1,726,176
2036	3/6		290,509	10,303,082	1,435,667
2037	3/6		293,414	10,596,496	1,142,253
2038	3/6		296,348	10,892,844	845,905
2039	3/6		299,312	11,192,156	546,593
2040	3/6		302,305	11,494,461	244,288
2041	3/6 & 7	4,507,970	305,328	11,799,789	4,446,930
2042	7		308,381	12,108,170	4,138,549
2043	7		311,465	12,419,635	3,827,084
2044	7		314,580	12,734,215	3,512,504
2045	7		317,725	13,051,940	3,194,779
2046	7		320,903	13,372,843	2,873,876
2047	7		324,112	13,696,955	2,549,764
2048	7		327,353	14,024,308	2,222,411
2049	7		330,626	14,354,934	1,891,785
2050	7		333,933	14,688,867	1,557,852
2051	7		337,272	15,026,139	1,220,580
2052	7		340,645	15,366,783	879,936
2053	7		344,051	15,710,835	535,884
2054	7		347,492	16,058,326	188,393
2055	7 & 8	2,131,300	350,967	16,409,293	1,968,726
2056	8		354,476	16,763,769	1,614,250
2057	8		358,021	17,121,790	1,256,229
2058	8		361,601	17,483,391	894,628
2059	8		365,217	17,848,609	529,410
2060	8		368,869	18,217,478	160,541
2061	8 & 9	1,482,279	372,558	18,590,036	1,270,262
2062	9		376,284	18,966,320	893,978
2063	9		380,047	19,346,367	513,931
2064	9		383,847	19,730,214	130,084
2065	9		387,685	20,117,899	-257,601
Totals		19,860,298	19,860,298		
Final Closure:		5/3/2065			

Table 3.5 presents the useable life expectancy and the permitted life expectancy for the permitted cells of the landfill (Cells 1 - 5, & 9).

TABLE 3.5
PERCENTAGE OF CLASS 1 LANDFILL DEPLETION [1]

Cell	Permitted Total Volume (CY)	Estimated Volume Used to Date (CY)	Estimated Utilization To Date (%)	Usable Remaining Volume [2] (CY)	Usable Remaining Life [3] (Years)	Permitted Remaining Volume (CY)	Permitted Remaining Life [3] (Years)
Constructed Cells:							
Cell 1	821,527	821,527	100.0%	0	0.0	0	0
Cell 2	1,269,075	1,269,075	100.0%	0	0.0	0	0
Cell 4	2,280,617	2,280,617	100.0%	0	0.0	0	0
Cell 5	4,405,485	1,698,251	38.5%	1,417,264	5.4	2,707,234	10
Cell 9	1,432,324	1,177,273	82.2%	705,096	2.7	3,655,780	13
TOTAL	**10,209,028**	**7,246,743**	**71.0%**	**2,122,360**	**8.1**	**6,363,014**	**23**
All Cells:							
Cells 1-9	19,860,298	7,246,743	36.5%			12,613,555	39
Depreciation of Capital Improvements:							
Construction Cost for Cell 1			100.0%				
Construction Cost for Cell 2			100.0%				
Construction Cost for Cell 4			100.0%				
Construction Cost for Cell 5			100.0%				
General Class 1 Landfill Capital Improvements			36.5%				
Depreciation of Capital Improvements:							
Cell 1 Phased Closure Cost			100.0%				
Cell 2 Phased Closure Cost			100.0%				
Cell 4 Phased Closure Cost			27.7%	(4.6 acres closed)			
Cell 5 Phased Closure Cost			N/A	(Internal cell)			
Class 1 Closure Cost (Area Closed / Total Area)			13.6%				

[1] As of March 2026.
[2] Usable remaining volume/life based upon estimated maximum fill elevation before a new cell must be constructed.
[3] Estimated. Based on 5-year historical average utilization rate plus 1%.

4 Construction & Demolition Landfill

4.1 Introduction

The Class 4 landfill has been receiving waste since 1993 and is permitted to comply with Subtitle D of Title 40 Code of Federal Regulations (CFR) Part 258. The landfill accepts construction and demolition (C&D) waste. The landfill has a permitted volume of 1,217,800 cubic yards over an area of approximately 18 acres. The landfill will hold approximately 900,052 tons of waste.

4.2 Estimated Volumes

Table 4.1 presents the acreage, estimated volume, and estimated tonnage data of C&D waste accepted and disposed in Cells 1 - 4.

TABLE 4.1
LANDFILL CAPACITY SUMMARY - CLASS 4 LANDFILL

Cell	Total Area (Ac)	Phased Closure Area (Ac)	Gross Volume (CY)	Total Waste Capacity (Tons)
1	4.5	2.1	181,860	127,925
2	4.5	2.1	229,100	195,812
3	4.3	2.3	351,534	251,095
4	4.7	11.5	455,306	325,220
TOTAL	**18.0**	**18.0**	**1,217,800**	**900,052**

4.3 Airspace Volume Calculations

AutoCAD® Civil 3D® [Autodesk, 2025] was used to compute the airspace volumes. Civil 3D® calculates volumes from a digital terrain model that represents each surface of interest (i.e., base surface and comparison surface). From these surfaces, Civil 3D® calculates the respective difference in elevations and generates isopachous (isopach) maps (i.e., contour lines of equal thickness over an area). The volume is then calculated by integrating the isopachs over the area being considered.

4.3.1 Consumed Operating Airspace

An aerial survey was completed by Terracon in March 2026 to measure the total volume of waste that had been placed in open cells between March 2025 and March 2026. To maintain consistency between reporting periods, a factor of approximately 0.986 was used to adjust for the aerial survey being taken on March 19, 2026 as opposed to March 6, 2026. The consumed operating airspace as of March 2026 was 648,861 cubic yards and encompassed Cells 1, 2, & 3 of the landfill. According to the most recent financial assurance report, the total consumed operating airspace as of March 2025 was 637,620 cubic yards. From March 2025 to March 2026, approximately 7,741 cubic yards was placed in the active cells of the landfill, with all waste being placed in Cell 3.

4.3.2 Effective In-Place Density

Table 4.2 presents the summary of the gross fill volumes, tonnages, landfill utilization, effective in-place densities, and daily/ intermediate cover based on survey data ranging from March 2025 & March 2026 and also based on information provided by the City. The effective waste density is a measure of the tons of waste disposed divided by the overall (gross) airspace consumed during the period in question. The volume includes waste, cover soil, construction materials, gas system materials and anything else that consumes landfill space. As shown in **Table 4.2**, the airspace utilization rate for 2025 was 1.99 cubic yards per ton and the effective waste density was 1,006 pounds per cubic yard.

TABLE 4.2
UTILIZATION RATE SUMMARY - CLASS 4 LANDFILL

Year	Gross Fill Volume [1]		Waste Tonnage		Landfill Utilization [2]		Effective Waste Density [3]		Daily/Intermediate Cover	
	This Year (CY)	To Date (CY)	This Year (TONS)	To Date (TONS)	This Year (CY/TON)	To Date (CY/TON)	This Year (LBS/CY)	To Date (LBS/CY)	This Year (CY)	Percent of Fill (%/YEAR)
1993	1,524	1,524	343	343	4.44	4.44	450	450		
1994	18,284	19,808	3,675	4,018	4.97	4.93	402	406		
1995	18,284	38,092	16,030	20,049	1.14	1.90	1,753	1,053		
1996	47,896	85,988	20,053	40,101	2.39	2.14	837	933		
1997	71,411	157,399	73,161	113,262	0.98	1.39	2,049	1,439		
1998	24,555	181,954	10,775	124,037	2.28	1.47	878	1,363		
1999	33,489	215,443	36,430	160,467	0.92	1.34	2,176	1,490		
2000	20,135	235,578	17,937	178,403	1.12	1.32	1,782	1,515		
2001	25,348	260,926	37,197	215,600	0.68	1.21	2,935	1,653		
2002	33,550	294,476	15,002	230,602	2.24	1.28	894	1,566		
2003	17,424	311,900	9,253	239,855	1.88	1.30	1,062	1,538		
2004	13,582	325,482	11,879	251,735	1.14	1.29	1,749	1,547		
2005	16,904	342,386	10,249	261,984	1.65	1.31	1,213	1,530		
2006	15,160	357,546	10,612	272,596	1.43	1.31	1,400	1,525		
2007	32,200	389,746	22,950	295,546	1.40	1.32	1,425	1,517		
2008	3,108	392,854	2,220	297,766	1.40	1.32	1,429	1,516		
2009	3,570	396,424	2,550	300,316	1.40	1.32	1,429	1,515		
2010	8,879	405,303	15,051	315,367	0.59	1.29	3,390	1,556		
2011	3,500	408,803	8,150	323,517	0.43	1.26	4,657	1,583		
2012	2,100	410,903	6,526	330,043	0.32	1.24	6,215	1,606		
2013	20	410,923	14	330,057	1.42	1.25	1,409	1,606		
2014	24,706	435,629	12,813	342,870	1.93	1.27	1,037	1,574		
2015	27,523	463,152	16,481	359,351	1.67	1.29	1,198	1,552		
2016	44,658	507,810	16,400	375,751	2.72	1.35	1,042	1,480	13,173	29%
2017	18,655	526,465	19,678	395,429	0.95	1.33	2,659	1,502	3,855	21%
2018	19,370	545,835	12,463	407,892	1.55	1.34	1,555	1,495	3,343	17%
2019	27,592	573,427	13,314	421,206	2.07	1.36	1,111	1,469	3,622	13%
2020	17,270	590,697	8,420	429,626	2.05	1.37	1,313	1,455	4,445	22%
2021	20,299	610,996	9,081	438,707	2.24	1.39	1,124	1,436	4,140	18%
2022	9,888	620,884	8,563	447,270	1.15	1.39	3,661	1,441	5,210	46%
2023	10,038	630,922	6,685	453,956	1.50	1.39	2,389	1,439	4,441	38%
2024	10,197	641,119	10,065	464,021	1.01	1.38	1,974	1,448	0	0%
2025	7,741	648,861	3,892	467,913	1.99	1.39	1,006	1,442	0	0%
Total Cell 1:	0	181,860		127,925		1.42		1,407		
Total Cell 2:	0	229,100		202,132		1.13		1,765		
Total Cell 3:	7,741	237,901		137,856		1.73		1,159		
3-Year Average:	**9,326**		**6,881**			**1.39**	**1,789**			

[1] Total in-place landfill volume utilized for waste and earthen berms and cover, in cubic yards.

[2] Cubic yard volume of landfill space utilized per ton of waste.

4.3.3 Remaining Operational Airspace

Based on the recent aerial survey, the remaining permitted airspace as of March 2026 was 113,633 cubic yards, with all remaining airspace being in Cell 3. The overall remaining permitted airspace for the entire Class 1 landfill as of March 2026 was 568,939 cubic yards with the remaining permitted airspace in Cell 3 of 113,633 cubic yards and remaining permitted airspace in Cell 4 of 455,306 cubic yards. Note that Cell 4 has not yet been constructed. These volumes were obtained by comparing the topographic map generated from the March 2025 aerial survey with the March 2026 aerial survey.

4.4 Life Expectancy

Table 4.3 presents the life expectancy for the entire landfill based on the calculated remaining airspace discussed in Section 4.3.3.

TABLE 4.3
PROJECTION OF USEFUL LIFE BASED ON 3-YEAR AVERAGE UTILIZATION RATE, 1% GROWTH

End of Year	Operation in Cell	Volume Added in New Construction	Volume Depleted	Total Depleted To Date	Constructed Volume Remaining
1993	1	181,860	1,524	1,524	180,336
1994	1		18,284	19,808	162,052
1995	1		18,284	38,092	143,768
1996	1		47,896	85,988	95,872
1997	1		71,411	157,399	24,461
1998	1&2	229,100	24,555	181,954	229,006
1999	2		33,489	215,443	195,517
2000	2		20,135	235,578	175,382
2001	2		25,348	260,926	150,034
2002	2		33,550	294,476	116,484
2003	2		17,424	311,900	99,060
2004	2		13,582	325,482	85,478
2005	2		16,904	342,386	68,574
2006	2		15,160	357,546	53,414
2007	2		32,200	389,746	21,214
2008	2		3,108	392,854	18,106
2009	2		3,570	396,424	14,536
2010	2		8,879	405,303	5,657
2011	2		3,500	408,803	2,157
2012	2		2,100	410,903	57
2013	2		20	410,923	37
2014	3	351,534	24,706	435,629	326,865
2015	3		27,523	463,152	299,342
2016	3		44,658	507,810	254,684
2017	3		18,655	526,465	236,029
2018	3		19,370	545,835	216,659
2019	3		27,592	573,427	189,067
2020	3		17,270	590,697	171,797
2021	3		20,299	610,996	151,498
2022	3		9,888	620,884	141,610

TABLE 4.3 PROJECTION OF USEFUL LIFE BASED ON 3-YEAR AVERAGE UTILIZATION RATE, 1% GROWTH					
End of Year	Operation in Cell	Volume Added in New Construction	Volume Depleted	Total Depleted To Date	Constructed Volume Remaining
2023	3		10,038	630,922	131,572
2024	3		10,197	641,119	121,375
2025	**3**		**7,741**	**648,861**	**113,633**
2026	3		9,326	658,186	104,308
2027	3		9,419	667,605	94,889
2028	3		9,513	677,118	85,376
2029	3		9,608	686,726	75,768
2030	3		9,704	696,430	66,064
2031	3		9,801	706,231	56,263
2032	3		9,899	716,131	46,363
2033	3		9,998	726,129	36,365
2034	3		10,098	736,227	26,267
2035	3		10,199	746,426	16,068
2036	3		10,301	756,727	5,767
2037	3&4	455,306	10,404	767,132	450,668
2038	4		10,508	777,640	440,160
2039	4		10,613	788,253	429,547
2040	4		10,719	798,973	418,827
2041	4		10,827	809,799	408,001
2042	4		10,935	820,734	397,066
2043	4		11,044	831,778	386,022
2044	4		11,155	842,933	374,867
2045	4		11,266	854,199	363,601
2046	4		11,379	865,578	352,222
2047	4		11,493	877,071	340,729
2048	4		11,608	888,679	329,121
2049	4		11,724	900,402	317,398
2050	4		11,841	912,243	305,557
2051	4		11,959	924,203	293,597
2052	4		12,079	936,282	281,518
2053	4		12,200	948,481	269,319
2054	4		12,322	960,803	256,997
2055	4		12,445	973,248	244,552
2056	4		12,569	985,818	231,982
2057	4		12,695	998,513	219,287
2058	4		12,822	1,011,335	206,465
2059	4		12,950	1,024,285	193,515
2060	4		13,080	1,037,365	180,435
2061	4		13,211	1,050,575	167,225
2062	4		13,343	1,063,918	153,882
2063	4		13,476	1,077,394	140,406
2064	4		13,611	1,091,005	126,795
2065	4		13,747	1,104,752	113,048
2066	4		13,884	1,118,636	99,164
2067	4		14,023	1,132,660	85,140
2068	4		14,164	1,146,823	70,977
2069	4		14,305	1,161,128	56,672
2070	4		14,448	1,175,576	42,224
2071	4		14,593	1,190,169	27,631
2072	4		14,739	1,204,908	12,892
2073	4		14,886	1,219,794	-1,994
Totals		**1,217,800**	**1,161,128**		
			Final Closure:	11/13/2073	

Life expectancy is calculated adding the estimated yearly airspace depleted to the total airspace depleted to date. The lifetime is calculated for a 3-year average plus 1% annual growth.

Table 4.4 presents the useable life expectancy and the permitted life expectancy for the permitted cells of the landfill (Cells 1 - 4).

TABLE 4.4
PERCENTAGE OF CLASS 4 LANDFILL DEPLETION [1]

Cell	Permitted Total Volume (CY)	Estimated Volume Used to Date (CY)	Estimated Utilization To Date (%)	Permitted Remaining Volume (CY)	Permitted Remaining Life (Years)[2]
Constructed Cells:					
Cell 1	181,860	181,860	100.0%	0	0
Cell 2	229,100	229,100	100.0%	0	0
Cell 3	351,534	237,901	67.7%	113,633	10.8
TOTAL	**762,494**	**648,861**	**85.1%**	**113,633**	**10.8**
All Cells:					
Cells 1-4	1,217,800	648,861	53.3%	568,939	47
Depreciation of Capital Improvements:					
	Construction Cost for Cell 1				100.0%
	Construction Cost for Cell 2				100.0%
	Construction Cost for Cell 3				67.7%
	General Class 4 Landfill Capital Improvements				53.3%
Depreciation of Capital Improvements:					
	Cell 1 Closure Cost				100.0%
	Cell 2 Closure Cost				100.0%
	Cell 3 Closure Cost				0.0%
	Class 4 Closure Cost				53.3%

[1] As of March 2026.
[2] Based on 3-year historical average utilization rate plus 1% annual growth (Table 4.3)

5 Closure/ Post-Closure

The following information provides cost estimates for the closure of the composting facility, and cell preparation, closure, and post-closure care associated with the Class 1 and Class 4 landfills. Unit costs for the estimates are based on actual construction/maintenance costs associated with similar operations in Arkansas.

5.1 Closure Liability of the Class 1 Landfill

The costs for landfill closure associated with the Class 1 landfill are summarized in T**able 5.1**. These costs are based on the design considerations outlined in Section 2 and the facility closure plan. The current estimated cost per acre for landfill closure is shown below. According to Regulation No. 22, estimates involving closure for the purpose of establishing financial assurance are to be updated at least annually to consider inflation, design changes, etc.

TABLE 5.1
ESTIMATED CLOSURE CONSTRUCTION COSTS PER ACRE - CLASS 1 LANDFILL

Item Description	Unit Cost for Closure Areas with Acreage Between:		
	0 and 10 Acres [1]	10 and 20 Acres [1]	20 and 30 Acres [1]
Top soil/Compost Layer [2]	$11,709.96	$10,542.08	$9,487.88
Soil Cover Layer	$28,493.36	$25,651.59	$23,086.45
Geocomposite	$24,365.08	$21,935.05	$19,741.56
Geosynthetic Clay Liner (GCL)	$26,562.36	$23,913.19	$21,521.88
Subgrade preparation (foundation by CLR)	$3,160.83	$2,845.59	$2,561.03
Seeding	$3,024.14	$2,722.53	$2,450.28
Gas Collection Wells	$11,018.33	$9,919.43	$8,927.49
Drainage Improvements	$17,133.14	$15,424.38	$13,881.95
Erosion Control	$3,101.12	$2,791.83	$2,512.65
Mobilization	$18,144.85	$16,335.19	$14,701.68
Preparation of Plans and Specifications	$6,048.28	$5,445.06	$4,900.56
Construction Quality Assurance	$13,824.65	$12,445.86	$11,201.28
Contingencies - 5%	$8,329.31	$7,498.59	$6,748.73
TOTAL CLOSURE COST PER ACRE	**$174,915.41**	**$157,470.36**	$141,723.42
Largest area (acres) ever needing final cover (Area 7):			69.26
Largest area unit closure cost ($/acre):			$141,723.42
TOTAL FINANCIAL ASSURANCE CLOSURE COST:			**$9,815,764.40**

[1] Cost per acre, as estimated based on 2020 bid unit prices.
Adjusted by DEQ Inflation factor (2021: 1.016, 2022: 1.062, 2023: 1.065, 2024: 1.027, 2025: 1.025)
[2] Includes letdowns, swales, toe drains, culverts, ditches.
[3] Includes permitting, pre- and post-construction BMPs, and maintenance.

The estimated costs associated with each Class 1 landfill closure area are summarized in **Table 5.2**. To satisfy state and federal regulations (Regulation No. 22 and Subtitle D of 40 CFR 258), the largest area of the landfill that will need final cover at one time must be determined. This area will not correspond to the largest closure area identified in **Table 5.2**, but rather would be the largest open (unclosed) area that would have to be

closed should state or federal regulators order the landfill to close before it reaches the end of its operating life. This is a worst-case scenario.

TABLE 5.2
CLOSURE SEQUENCE AND ASSOCIATED COST ESTIMATES - CLASS 1 LANDFILL

Event	Acreage Closed	Acreage Closed	Total Acreage Needing Final Cover	Approximate Year [1]	Estimated Closure Cost [2]
Construction of Cell 1	12.30	0.00	12.30	1993	
Construction of Cell 2	12.60	0.00	24.90	1997	
Closure of Area 1		4.22	20.68	2000	COMPLETED
Construction of Cell 4	18.86	0.00	39.54	2002	
Closure of Area 2		4.41	35.13	2004/2005	COMPLETED
Construction of Cell 5 EAST 40%	6.36	0.00	41.49	2014	
Closure of Area 4		5.50	35.99	2021	COMPLETED
Construction of Cell 5 WEST 60%	9.80	0.00	45.79	2020	
Construction of Cell 3/6[3]	23.00	0.00	68.79	2031	
Closure of Area 5		16.61	52.18	2033	N/A [4]
Construction of Cell 7	17.08	0.00	69.26	2041	
Closure of Area 3/6 [2]		14.82	54.44	2043	$2,333,710.79
Construction of Cell 8	10.00	0.00	64.44	2056	
Closure of Area 7		23.04	41.40	2058	$3,265,307.71
Filling in Area 9, No Construction	0.00	0.00	41.40	2060	
Closure of Area 8		25.50	15.90	2064	$3,613,947.33
Final Closure, Area 9		15.90	0.00	2066	$2,503,778.78
TOTAL	**110**	**110**			**$11,716,744.60**

[1]Based on 5-year historical average LF utilization plus 1% annual growth (see Table 3.4)
[2]Cell 3 and Cell 6 will be constructed together and are hereby noted as Cell 3/6
[3]See Table 4.1 for Estimated Closure Costs per Acre.
[4]Cell 5 is internal cell. No closure required.

As can be seen from **Table 5.2**, the largest area needing final cover during the operating life of the landfill (69.26 acres) occurs when Cell 7 is placed in service but before the partial closure designated for Cells 3 and 6 is completed. This is projected to potentially occur in 2041 (see **Table 5.2**). The projected cost for this closure in December 2025 dollars would be $2,333,710.79 (see **Table 5.2**). After Cells 3 and 6 are closed, financial assurance liability would be reduced for the remainder of the operating life. The final closure liability is projected to occur around 2067 when Cell 9 is filled to capacity (**Table 3.4).** At that time, $2,503,778.78 (in December 2025 dollars) would be needed to perform closure activities (**Table 5.2**).

5.2 Post-Closure Liability of the Class 1 Landfill

The current post-closure liability is estimated to be $10,349,097.08 (see **Table 5.3**) and post-closure is projected to begin in 2067. Because so many costs are fixed, this liability will remain substantially the same regardless of the actual year final closure occurs or the number of landfill cells that are actually constructed and filled. However, the estimated post-closure care cost is reviewed and adjusted each year (if needed) to consider inflation as required by the regulations.

TABLE 5.3
POST-CLOSURE COST ESTIMATE - CLASS 1 LANDFILL

Item Description	Basis of Cost	Units	Estimated Quantity	Unit Cost [1]	Total Cost
Site Inspection	Includes site inspection and summary report, quarterly for 30 years	each	4	$1,451.59	$5,806.35
Groundwater Monitoring	Semiannual sampling, analysis, and report writing for 12 GW wells	$/well	24	$4,092.67	$98,224.13
Groundwater Well Maintenance	Twelve GW wells, maintenance and occasional replacement as needed	$/well	12	$502.01	$6,024.09
Gas Monitoring	Eight locations tested quarterly for monitoring	$/well	32	$423.38	$13,548.16
Gas Probe & Gas Meter	Eight gas probes, general maintenance and replacement as needed	$/well	8	$6,659.16	$53,273.28
Leachate Collection System	Annual O&M of leachate collection and recirculation systems	each	1	$20,806.10	$20,806.10
Leachate Treatement	Leachate Treatment cost at Little Rock Wastewater Utility	gallons	100,000	$0.00	$483.86
Leachate Pretreatement	Costs associated with pumping then aerobically treating leachate	gallons	100,000	$0.00	$483.86
Pump Station Maintenance	Pump Station Maintance, Including pumps and electrical	each	6	$4,838.63	$29,031.76
Electrical Power	Electrical power costs	kilowatts	175,000	$0.15	$25,402.79
Gas System Operation & Maintenance	O&M Costs for gas extraction and methane flaring system	system	1	$51,410.41	$51,410.41
Site Maintenance	Site Maintenance. Assumes one acre of surface repair each year	acre	1	$4,233.80	$4,233.80
Site Mowing	Site Mowing. Assumes four mowings per year	acre	117	$169.35	$19,814.18
Administration	General expenses for administration and supervision	lump sum	1	$0.00	$16,427.14
				Total Annual Cost for Post-Closure Care:	**$344,969.90**
				Total Post-Closure Cost for 30 Years:	**$10,349,097.08**

[1] Cost per acre, as estimated based on 2020 actual unit prices.
Adjusted by DEQ Inflation factor (2021: 1.016, 2022: 1.062, 2023: 1.065, 2024: 1.027, 2025: 1.025)

Liability associated with certain landfill fixed costs such as pump station and force main construction, treatment facilities, leachate injection systems, roads, and drainage improvements should be depreciated throughout the operating life of the landfill. Also,

the financial capability of CLR to cover this cost must be demonstrated and assured with an acceptable financial assurance mechanism as required by the regulations.

5.3 Closure Liability of the Class 4 Landfill

The current estimated cost per acre for closure of the Class 4 landfill is shown in **Table 5.4**. Each year these costs are updated based on the current inflation rate or actual current costs. This report shows current costs as of December 2025. It should be noted that the Class 4 landfill does not have to meet the same stringent closure criteria as the Class 1 landfill.

TABLE 5.4
ESTIMATED CLOSURE COSTS PER ACRE - CLASS 4 LANDFILL

Item Description	Cost / Acre [(1)]
Clay Liner	$56,634.84
Soil Cover Layer	$18,598.55
Subgrade Preparation	$3,160.83
Seeding	$3,024.14
Mobilization	$1,814.49
Preparation of Plans and Specifications	$2,540.28
Construction Quality Assurance	$6,169.25
Contingencies - 5%	$4,597.12
Total Closure Cost per Acre:	$96,539.50
Total Finnancial Assurance Closure Cost:	**$1,332,245.06**

[(1)] Cost per acre, as estimated based on 2020 bid unit prices.
Adjusted by DEQ Inflation factor:
(2021: 1.016, 2022: 1.062, 2023: 1.065, 2024: 1.027, 2025: 1.025)

To satisfy state and federal regulations, a worst-case scenario must be determined using the largest area of the Class 4 landfill that will ever need final cover, should state regulators order the landfill to close before it reaches the end of its operating life.

As can be seen from **Table 5.5**, the largest area ever needing final cover during the operating life of the landfill (13.8 acres) occurs when Cell 4 is placed in service but before partial closure of Cell 3 is completed. This is projected to occur around 2037 (see **Table 5.5**). The projected cost for closure of this area in December 2025 dollars would be $222,040.84 (see **Table 5.5**).

After Cell 3 is closed, financial assurance liability is reduced for the remainder of the operating life. The final closure liability is projected to occur around 2073 when Cell 4 is filled to capacity (**Table 4.3**). At that time, $1,110,204.22 would be needed to perform closure activities (**Table 5.5**).

TABLE 5.5 CLOSURE AREA SEQUENCE AND ASSOCIATED COST - CLASS 4 LANDFILL					
Event	Acreage Added to Landfill	Acreage Closed	Total Acreage Needing Final Cover	Approximate Year	Estimated Closure Cost
Construction of Cell 1	4.5	0.0	4.5	1993	--
Construction of Cell 2	4.5	0.0	9.0	1998	--
Construction of Cell 3	4.3	0.0	13.3	2015	--
Closure of Area 1	0.0	2.1	11.2	2023	$202,732.94
Closure of Area 2	0.0	2.1	9.1	2023	$202,732.94
Construction of Cell 4	4.7	0.0	13.8	2037	--
Closure of Area 3	0.0	2.3	11.5	2041	$222,040.84
Closure of Area 4	0.0	11.5	0.0	2073	$1,110,204.22
TOTAL	18	18			$1,737,710.95
2025 Closure Cost per Acre: **$96,539.50**					

5.4 Post-Closure Liability of the Class 4 Landfill

The current post-closure liability is projected to be $27,304.37 (see **Table 5.6**) and post-closure is projected to begin around 2073. This liability will remain substantially the same regardless of the actual year final closure occurs. The financial capability of CLR to cover this cost must be demonstrated and assured with an acceptable financial assurance mechanism as required by regulation.

TABLE 5.6 POST-CLOSURE COST ESTIMATE - CLASS 4 LANDFILL					
Item	Basis of Cost	Units	Estimated Quantity	Unit Cost [1]	Total Cost per Year
Site Inspection	Site insp.and summary report, quarterly for 2 years	each	4	$1,451.59	$5,806.35
Site Maintenance	Assumes one acre of surface needs repair each year	acre	1	$4,233.80	$4,233.80
Site Mowing	Assumes four mowing per year	acre	14	$169.35	$2,370.93
Administration	General exp. for administrative and supervision (10%)	LS	1	--	$1,241.11
				Total Annual Cost for Closure Care:	**$13,652.19**
				Total Post-Closure Cost for 2 Years:	**$27,304.37**

[1] Cost per acre, as estimated based on 2020 actual unit prices.
Adjusted by DEQ Inflation factor (2021: 1.016, 2022: 1.062, 2023:1.065, 2024: 1.027, 2025: 1.025)

5.5 Closure Liability of the Composting Facility

The current estimated closure cost for the composting facility, in December 2025 dollars, is $225,627.52, as shown in **Table 5.7**. As required by DEQ, the cost is calculated by multiplying the maximum design storage capacity of 36,000 tons by 150% (45,000 tons), subtracting 36,000 tons that would be distributed to other CLR agencies, and multiplying the remainder (9,000 tons) by the cost to process and remove the remaining materials ($25.07 per ton).

TABLE 5.7
ESTIMATED CLOSURE COSTS - YARD WASTE COMPOSTING FACILITY

Item Description	Units	Estimated Quantity	Unit Cost (1)	Total Cost
Hauling & redistribution of compost material to parks	ton	36,000	$0.00	$0.00
Processing and distribution of remaining yard waste by private contractor	ton	9,000	$25.07	$225,627.52
Total Financial Assurance Closure Cost:				**$225,627.52**

(1) Cost per acre, as estimated by Edwards Engineering, P.A. on January 2008 adjusted annually for inflation.

6 Requirements for Financial Assurance

Under state and federal regulations, each facility owner or operator must provide financial assurance to the state permitting authority. The purpose is to show that the owner or operator has the financial ability to close the composting facility and, for the Class 1 and Class 4 landfills, to close the largest open area of each landfill and to conduct post-closure care. A financial assurance mechanism must be in place throughout the operating life of the facilities, and the instrument must be updated annually.

Originally, CLR used a “contract of obligation” as the mechanism to satisfy financial assurance. A contract of obligation is essentially a resolution from the City Board recognizing the liability associated with landfill operations, a pledge to meet that obligation, and an agreement to allow the state to garnish turn-back money if CLR fails to fully meet the obligations. However, since that time, changes in state law removed the contract of obligation from the list of acceptable financial assurance mechanisms.

In 2002, CLR decided to utilize a financial test as the financial assurance mechanism. Under this option, an accounting demonstration is used to show that sufficient funds are available to meet all needs for closure and post-closure care. If a successful demonstration can be made, the governing body can use that demonstration to guarantee financial assurance through a formal resolution.

According to DEQ, the total amount to be placed in the financial assurance instrument is calculated as 100% of the combined closure cost estimates plus 20% of the combined post-closure cost estimates. **Table 6.1** provides a summary of closure and post-closure costs for all three facilities.

The total financial assurance amount for the whole facility is the sum of the financial assurance for the Class 1 landfill, the Class 4 landfill, and the composting facility. Therefore, $13,120,895 must be guaranteed by the financial assurance instrument utilized by CLR.

TABLE 6.1
ESTIMATED CLOSURE COSTS - CLASS 1, CLASS 4, & COMPOST FACILITY

Item Description	Source	Cost
100% of Closure Cost Estimates of Class 1 LF	From Table 5.1	$9,815,764
20% of Post-Closure Cost Estimates of Class 1	From Table 5.3	$2,069,819
Total Financial Assurance of Class 1		**$11,885,584**
100% of Closure Cost Estimates of Class 4 LF	From Table 5.4	$1,332,245
20% of Post Closure Estimates of Class 4	From Table 5.6	$5,461
Total Financial Assurance of Class 4		**$1,337,706**
100% of Closure Cost Estimate of Compost	From Table 5.7	$225,628
Total Financial Assurance of Composting Facility		**$225,628**
TOTAL FINANCIAL ASSURANCE		**$13,448,917**