

Haley Griffith (adpce.ad)

Subject: RE: Eco-Vista Class 4 Landfill - 2023 AEIR (Permit 0290-S4-R2; AFIN: 72-00144)

From: Brad Fureigh [<mailto:bfureigh@promusengineering.com>]

Sent: Friday, March 29, 2024 4:28 PM

To: Greg Banic (adpce.ad) <Greg.Banic@adeq.state.ar.us>; Jason Gilkey (adpce.ad) <jason.gilkey@adeq.state.ar.us>

Cc: Simmons, Carl <csimmons@wm.com>; Small, Blake <bsmall@wm.com>; Tennison, Don <dtenniso@wm.com>;

Reynolds, Jodi <jreyno10@wm.com>; Conrad, David <DConrad@wm.com>; Jonathan King

<jking@promusengineering.com>

Subject: Eco-Vista Class 4 Landfill - 2023 AEIR (Permit 0290-S4-R2; AFIN: 72-00144)

Good afternoon Greg,

Please see attached the 2023 Annual Engineering Inspection Report for the Eco-Vista Class 4 Landfill (Permit 0290-S4-R2; AFIN: 72-00144). Please let us know if you have any questions or comments.

Thanks!

Brad N. Fureigh, PE

Principal Engineer | Promus Engineering, LLC

M: (501) 554-4547

bfureigh@promusengineering.com

www.promusengineering.com

AFIN: 72-00144

PMT#: 0290-S4-R2

Received

By Haley Griffith at 9:28 am, Apr 1, 2024

DOC ID#: 85298

TO: GB>FILE <HG

2023 ANNUAL ENGINEERING INSPECTION REPORT

WM Eco-Vista Class 4 Landfill Springdale, Arkansas

Permit No. 0290-S4-R2
AFIN: 72-00144

March 29, 2024
Promus Project No. 240011

Prepared for:
Eco-Vista, LLC.



Prepared by:



ANNUAL ENGINEERING INSPECTION REPORT (AEIR) FORM

Reporting Year: 2023

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

Facility Name: Waste Management Eco-Vista Class 4 Landfill AFIN: 72-00144 Permit #: 0290-S4-R2 Landfill Class: 4



Report Submittal Date: March 29, 2024 Date of Landfill Site Inspection by Certifying Engineer: March 21, 2024

<i>Complete the form as indicated Instructions are bolded and italicized.</i>			<i>COLUMN TO BE COMPLETED BY REPORTER</i>	
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 cell.	a) <u>309,700</u> cubic yards	
		Projected date of opening new cell.	b) Date: <u>2025</u>	
2	22.423(b)(2) 22.522(a)(2) 22.619(b)(2)	Remaining volume of all permitted units.	a) <u>1,369,000</u> cubic yards	
		Total air space used during the reporting period.	b) <u>221,140</u> 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: Landfill unit/cell <u>Cells 1-8A</u> , <u>1.4</u> years. Landfill unit/cell _____, ____ years. Landfill unit/cell _____, ____ years. d) Entire permitted landfill: <u>6.2</u> years remaining life.	
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: <u>Currently, the active landfill footprint that is prepared for disposal of waste consists of Cells 1-8A. During the reporting period, waste was placed throughout the active landfill footprint. The cells are being filled to the maximum capacity that can be achieved without affecting the efficiency of waste placement. Cells 1-8A are approximately 91% filled. Based on the review of the Permit Application Drawings, the landfill appears to be following the permitted fill progression.</u>	

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)? <u>Y</u> b) Photos of AEIR inspection attached (Y/N)? <u>Y</u> c) Waste volume in and out records exist (Y/N)? <u>Y</u> d) Unauthorized waste forms exist (Y/N)? <u>Y</u> e) Daily/weekly cover adequate at time of inspection (Y/N)? <u>Y</u> f) Alternative Daily Cover (ADC) Plan located onsite (Y/N)? <u>N/A</u> Operations in compliance with ADC Plan (Y/N)? <u>N/A</u> g) Liquid Waste Management (LWM) Plan located onsite (Y/N)? <u>N/A</u> Operations in compliance with LWM Plan (Y/N)? <u>N/A</u> h) Liquids received to be bulked during reporting period: <u>N/A</u> gallons <u> </u> tons i) Waste cover of inactive areas maintained adequately (Y/N)? <u>Y</u> j) Net amount of waste disposed in landfill during reporting period: <u> </u> cubic yards <u>122,781</u> tons k) Leachate head level less than 1' on liner at time of inspection (Y/N)? <u>Y</u>	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)? <u>Y</u> b) Final cover permit drawing attached (Y/N)? <u>Y</u> c) List all discrepancies here: <u>N/A</u> d) Is there an overfill condition (Y/N)? <u>N</u> * Isolated areas appeared above permitted final grades. The site excavated test pits to show the material above grade was soil cover.	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). (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. <i>Reminder: Reporting period is calendar</i>	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)? <u>Y</u> b) If not, where will deficiency shortfalls be obtained (be specific)? <u> </u> c) Is the current Design Narrative earthwork balance accurate (Y/N)? <u>Y</u> a) Name: <u>Southern Resources Mapping</u> b) Name of person using the data to produce contour map: <u>John Matthews, P.E.</u> c) Date survey data was collected: <u>December 5, 2023</u>	

		<i>year. Survey data should be collected to reflect the AEIR reporting period.</i>		
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: <u>3,074,805</u> gallons b) Leachate Disposed: <u>3,074,805</u> gallons c) Leachate Recirculated: <u>0</u> gallons d) Leachate Recirculation Plan exists (Y/N)? <u>N</u> ADEQ approval Doc # <u>N/A</u> e) Leachate operating records exist (Y/N)? <u>Y</u> f) Leachate analytical report attached (Y/N)? <u>N</u> (See Doc ID: 84226, 84982). g) Leachate narrative (collection, measurements and disposal): <u>Leachate is collected and pumped from cell sumps via a dual contained forcemain and conveyed to either above ground storage tanks for temporary storage or direct transmission. Leachate is pumped from the tanks to the NACA Wastewater Treatment Plant via forcemain.</u> h) Leachate narrative (verifying <1' head on liner system): <u>The two sumps are constructed with a leachate collection system consisting of a sump and 18-inch diameter side slope riser. An automatically activated pump equipped with pressure transducers, with pre-set elevations (head levels) to turn the pump on and off, is located in the side slope riser pipes. The head levels are displayed on the control panels and are recorded by site personnel. Leachate head level table from the site inspection can be found in Attachment C</u>	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) <i>Briefly list maintenance activities and upset conditions here:</i> <u>Prior to any offsite discharges, storm water is diverted to on-site sedimentation basins via drainage berms and perimeter ditches. During the reporting period, typical silt removal maintenance was performed in ditches and stormwater basins.</u>	
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) Lndfl unit/cell <u>Phase 1-8A</u> , <u>34.0</u> acres. Intrm or Final Cover (I/F): <u>I</u> b) Lndfl unit/cell _____ , _____ acres. Intrm or Final Cover (I/F): <u>I</u> c) Acres of disposed waste not under final certified cover: <u>34.0</u> acres d) Acres of disposed waste area that have interim cover: <u>34.0</u> 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 spills, unauthorized waste handling and removal, etc...), and indicate whether action was taken in response to an ADEQ inspection.	a) <i>Briefly list corrective actions events here:</i> <u>During the reporting period, there were no DEQ quarterly inspection comments. No corrective actions required during the reporting period.</u> b) Were any of the corrective actions taken in response to an ADEQ inspection (Y/N)? <u>N/A</u> c) Current status of corrective actions: <u>N/A</u>	

		<i>Note: If trust fund financial assurance mechanism is utilized, the trust fund must fully fund all acres permitted.</i>	d) Did corrective actions permanently solve the conditions (Y/N)? <u>N/A</u> <i>Explain briefly:</i> _____	
10	22.423(b)(10) 22.522(a)(9) 22.619(b)(10)	Updated Financial Assurance documentation as required by Chapter 14. <i>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.</i>	a) Size of facility property under current permit? <u>609.2</u> acres b) Size of actual permitted disposal area? <u>40.7</u> acres c) What is the current total permitted disposal area that contains disposed waste but is not certified closed? <u>34.0</u> acres d) Updated closure cost estimate amount: \$ <u>1,163,004</u> e) Is the closure cost estimate based on the largest area ever requiring closure (Y/N)? <u>Y</u> f) Is the existing closure financial assurance adequate for acreage not yet certified closed (Y/N)? <u>Y</u> g) Updated post closure care cost estimate amount: \$ <u>151,379</u> (with 80% Reduction: \$30,276) h) Is the existing post closure care financial assurance adequate for all permitted areas (Y/N)? <u>Y</u> i) Is the financial assurance mechanism a trust fund (Y/N)? <u>N</u> j) Are the sources of information for updated unit cost line items shown on the cost estimate calculations (Y/N)? <u>Y</u> k) Do the unit cost items for soil cover material include actual third party cost of materials and labor (Y/N)? <u>Y</u>	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. <i>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.</i>	a) Was an updated Closure Plan required during this reporting period (Y/N)? <u>N</u> b) Is an updated Closure Plan attached herein (Y/N)? <u>N</u>	

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"	<p>a) Arkansas Licensed Engineer:</p> <p>Sign: <u>Brad N. Foreign</u> Date: <u>3/29/2024</u></p> <p>b) License Number: <u>14977</u></p> <p>c) Attach seal here:</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div>	
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Attachment A

Photographic Log



PHOTOGRAPHIC RECORD OF CONSTRUCTION



Photo No. 1

Looking east towards the active working face of the Class 4 Landfill.

Photo No. 2
Looking north towards the active working face of the Class 4 Landfill.



Photo No. 3

Looking south at the west slope of the Class 4 Landfill.

PHOTOGRAPHIC RECORD OF CONSTRUCTION



Photo No. 4
Looking west at the south slope of the Class 4
Landfill.

Photo No. 5
Looking southwest at the east slope of the
Class 4 Landfill.



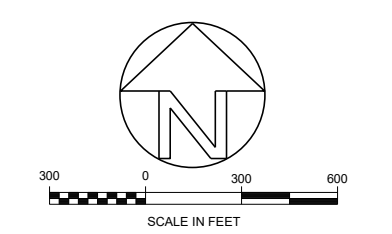
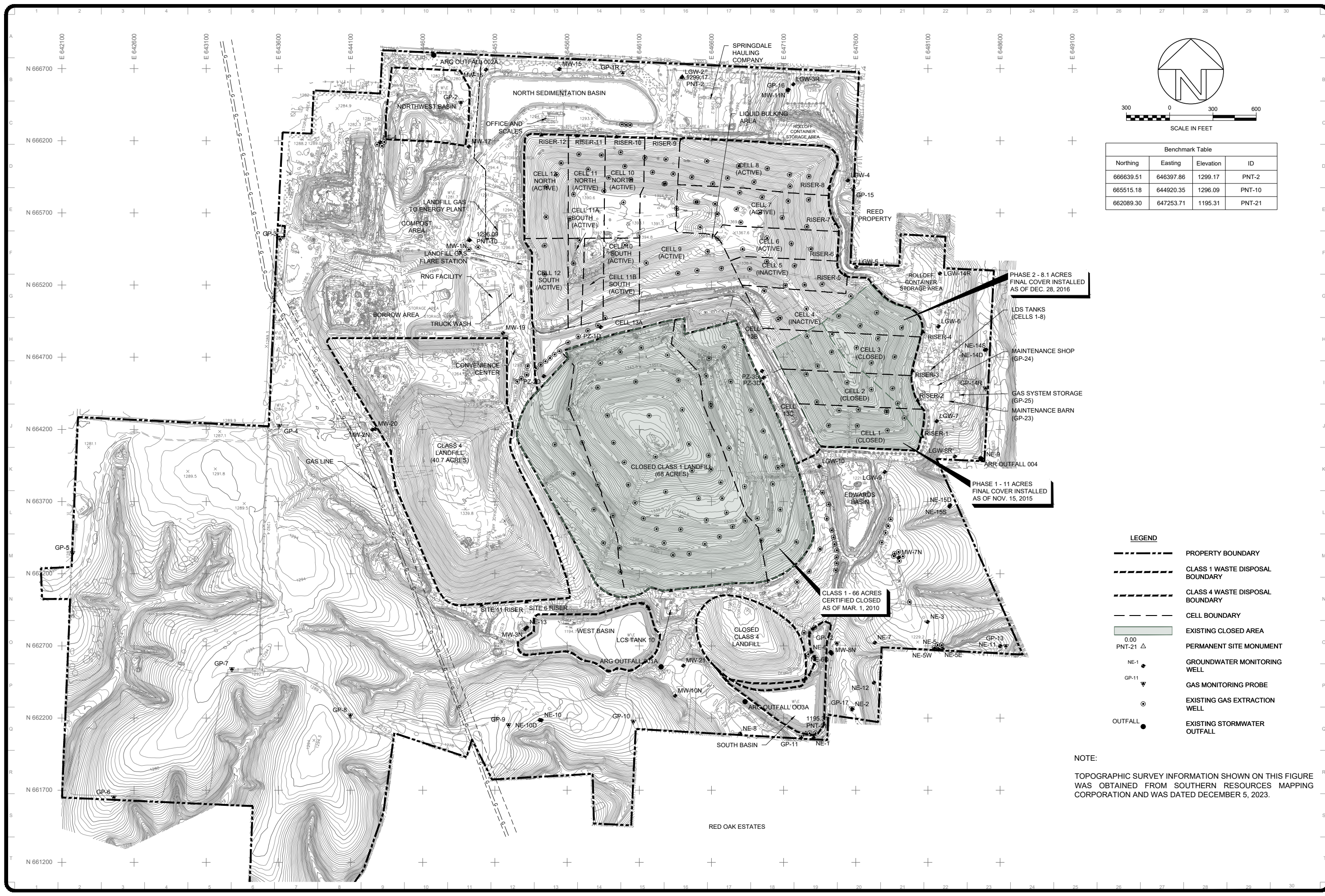
Photo No. 6
Looking south across top deck of the Class 4
Landfill.

Attachment B

Updated Drawings



M:\PROJECTS-ACTIVE\240011-WMEV-ENGINEERING\1-AEIRSDRAWINGS\240011-WMEV-AEIR.DWG
 Date: 1/18/2024 2:42 PM
 Last Saved By: JONATHAN



Benchmark Table			
Northing	Easting	Elevation	ID
666639.51	646397.86	1299.17	PNT-2
665515.18	644920.35	1296.09	PNT-10
662089.30	647253.71	1195.31	PNT-21

LEGEND

- PROPERTY BOUNDARY
- CLASS 1 WASTE DISPOSAL BOUNDARY
- CLASS 4 WASTE DISPOSAL BOUNDARY
- CELL BOUNDARY
- EXISTING CLOSED AREA
- PERMANENT SITE MONUMENT
- GROUNDWATER MONITORING WELL
- GAS MONITORING PROBE
- EXISTING GAS EXTRACTION WELL
- EXISTING STORMWATER OUTFALL

NOTE:
 TOPOGRAPHIC SURVEY INFORMATION SHOWN ON THIS FIGURE WAS OBTAINED FROM SOUTHERN RESOURCES MAPPING CORPORATION AND WAS DATED DECEMBER 5, 2023.

DESCRIPTION	APPR. BY	DRA. BY	DES. BY	DATE	REV

PREPARED FOR:
 WASTE MANAGEMENT OF ARKANSAS, INC.

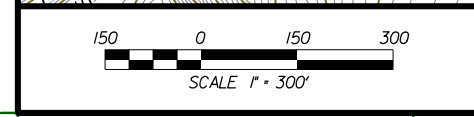
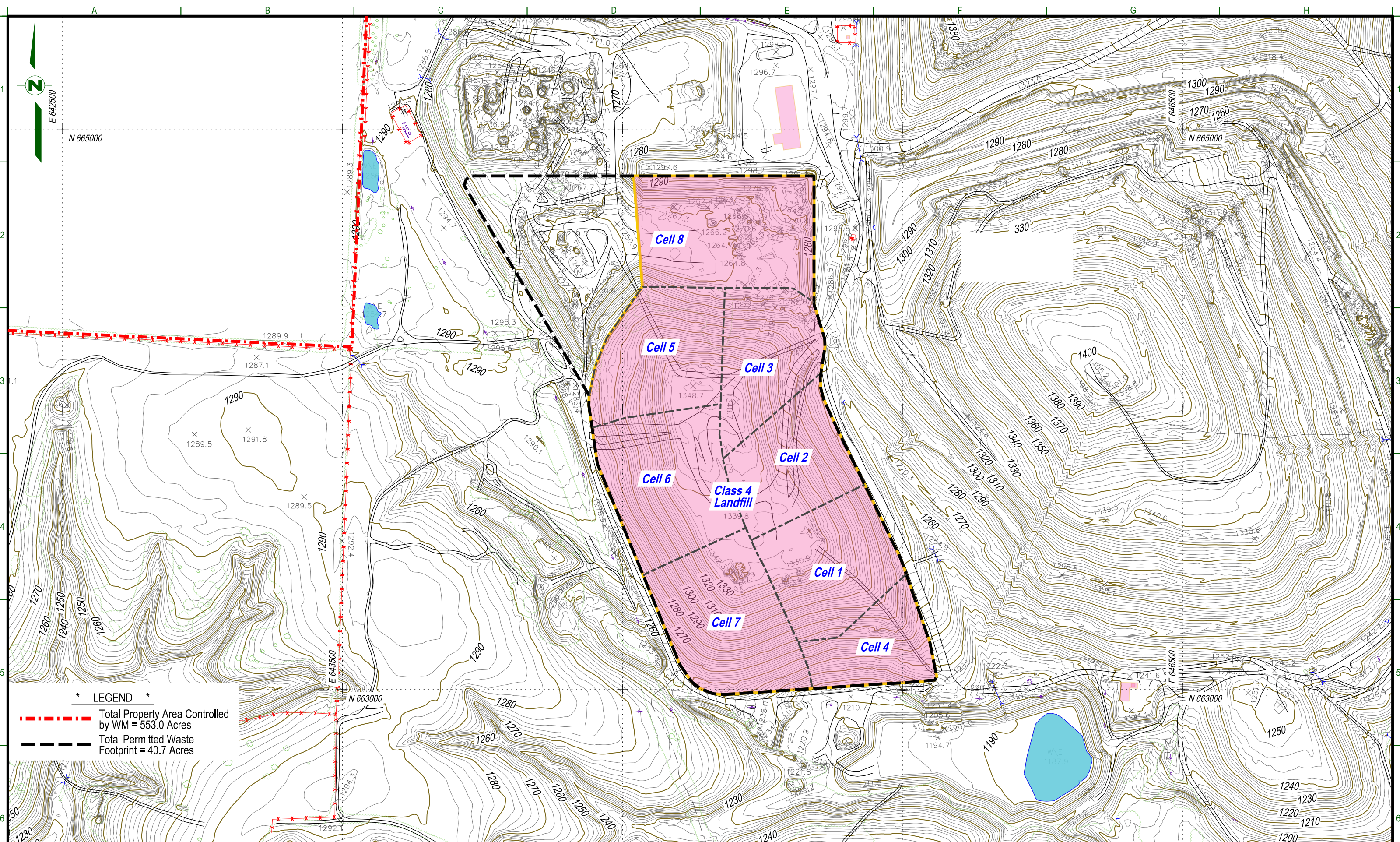
PREPARED BY:
 PROMUS ENGINEERING
 www.promusengineering.com

SITE LAYOUT MAP

2023 ANNUAL ENGINEERING
 INSPECTION REPORT
 ECO VISTA CLASS 1 LANDFILL
 TONTTOWN, ARKANSAS

PROJECT NO.: 240011
 FIGURE

1



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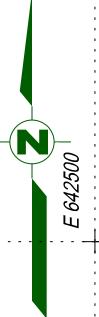
Revisions			
No.	Description	Date	By

Approved By: Area Engineering Manager
 Checked By: David Conrad
 Drawn By: Bullseye Design Services, Inc.

Project Location:
Eco Vista Class 4 Landfill
 Springdale, Arkansas

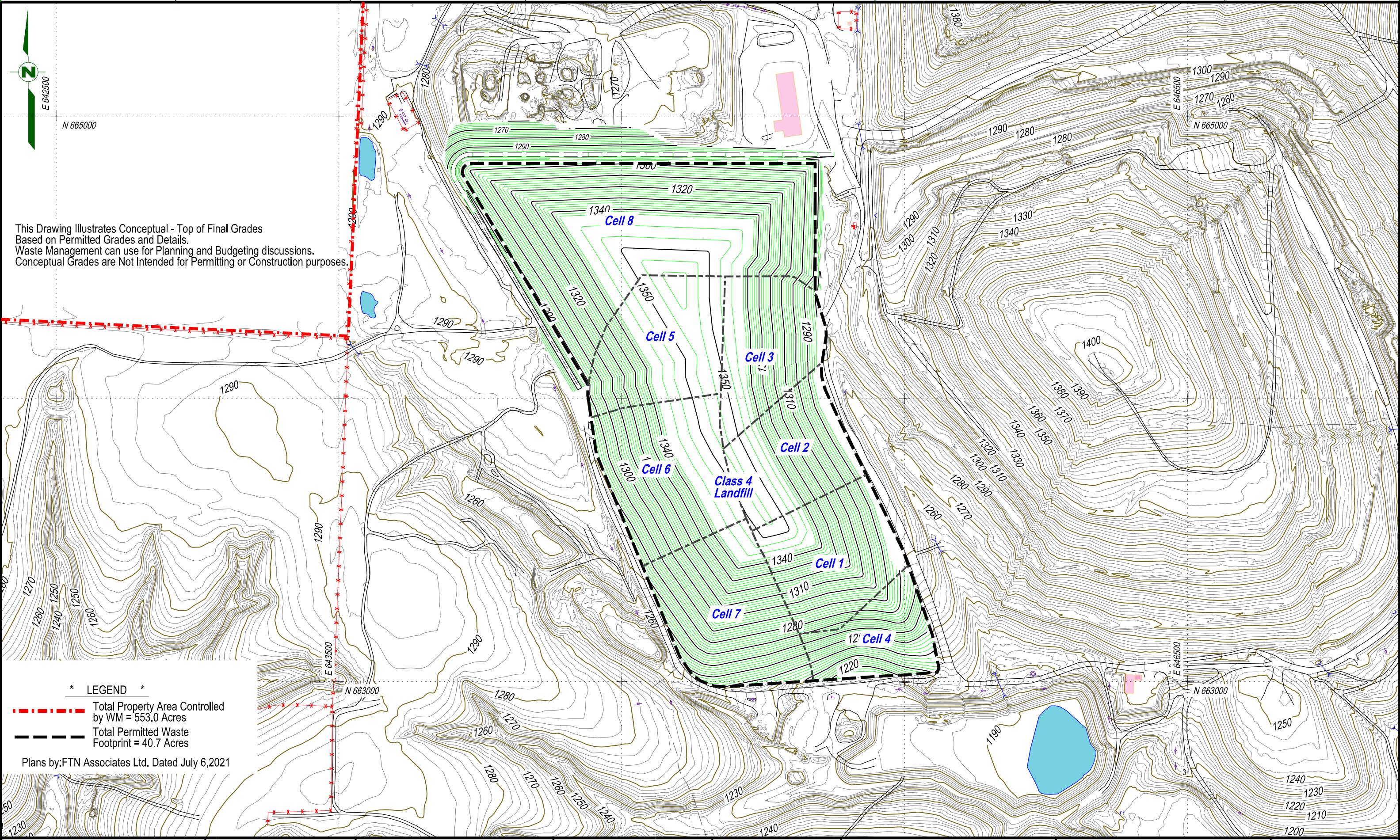
Current Topography
 Dated December 5, 2023

Facility ID: **AR 0019**
 Scale: 1" = 300'
 Date: January 2024
 Drawing No. **2**



N 665000

This Drawing Illustrates Conceptual - Top of Final Grades Based on Permitted Grades and Details. Waste Management can use for Planning and Budgeting discussions. Conceptual Grades are Not Intended for Permitting or Construction purposes.

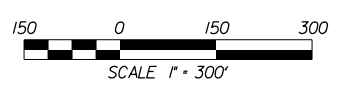


*** LEGEND ***

Total Property Area Controlled by WM = 553.0 Acres

Total Permitted Waste Footprint = 40.7 Acres

Plans by:FTN Associates Ltd. Dated July 6,2021



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Revisions			
No.	Description	Date	By

Approved By: Area Engineering Manager

Checked By: David Conrad

Drawn By: Bullseye Design Services, Inc.

Project Location:
Eco Vista Class 4 Landfill
 Springdale, Arkansas

Permit Modification Final Cover Plan
 by FTN Dated July 6, 2021

Facility ID: **AR 0019**

Scale: 1" = 300'

Date: January 2024

Drawing No. **4**

Attachment C

Leachate Head Level Inspection Results



Eco Vista Class 4 Landfill
Leachate Head Level Inspection

Level Control Data	Class 4 - Site 11		Class 4 - Site 6		Cell 8							
	Elevation (feet)	Display (inches)	Elevation (feet)	Display (inches)	Elevation (feet)	Display (inches)	Elevation (feet)	Display (inches)	Elevation (feet)	Display (inches)	Elevation (feet)	Display (inches)
Point of Compliance		36.0		36.0		36.0						
Bottom of Liner		24.0		24.0		24.0						
Bottom of Sump		0.0		0.0		0.0						
Panel Reading	--	26.4	--	31.8		0.6						
Depth Above Liner	--	2.4	--	7.8		-23.4						

Inspection Date: 3/21/2024
Inspector Name: Jonathan King, PE



Attachment D

Updated Financial Assurance



LANDFILL CLOSURE - COST ESTIMATE WORKSHEET

OWNER: Eco-Vista, LLC	PERMIT No.: 0290-S4-R2	AFIN No.: 72-00144
OPERATOR: Eco-Vista, LLC	ESTIMATOR: Brad N. Fureigh, P.E. (Ark. Licensed P.E. #: 14977)	DATE: March 18, 2024
TOTAL PERMITTED WASTE DISPOSAL ACRES: 40.7		
TOTAL PERMITTED ACRES CERTIFIED CLOSED: 0	ACRES CURRENTLY OPEN: 40.7 (i.e., "open" means areas subject to regulation and have not been certified closed)	
LARGEST ACREAGE EVER REQUIRING FINAL COVER OVER ACTIVE LANDFILL LIFE: 40.7 (i.e., largest acreage ever open at any one time; NOTE: if approved Closure Plan does not include phased closure then largest area is the total permitted disposal acres)		

LANDFILL CLOSURE COST ESTIMATE WORKSHEET

Permit: 0290-S4-R2

AFIN: 72-00144

ITEM No.	ITEM	QUANTITY	UNITS	UNIT COST	COST	SUBTOTALS	SOURCE OF UNIT COST INFO
1.0.0	PROFESSIONAL SERVICES						
1.1.0	Engineering (Design, Bid Documents, Procurement, Construction Contract Management)	1	Lump Sum	\$27,500	\$ 27,500		Engineer's estimate
1.2.0	Topographic and Boundary Survey	40.7	ACRE	\$225	\$ 9,158		Engineer's estimate
1.3.0	Engineering Services (Construction Oversight, Testing, Reporting, Certification)	1	Lump Sum	\$100,000	\$ 100,000		\$60,000 Construction Observation + \$20,000 Test & Report + \$20,000 Certification
	Professional Services Subtotal					\$ 136,658	
2.0.0	FINAL COVER						
2.1.0	Low Permeability Soil Layer						
2.1.1	Preparation of landfill to receive cover (final grading)	40.7	ACRE	\$1,500	\$ 61,050		Engineer's estimate based on prior bids
2.1.2	Clay Liner, On-site (excavate, transport, place, compact) (Quantity must match earthwork balance)	103,419	CU. YD.	\$4.65	\$ 480,897		Engineer's estimate based on prior bids
2.1.3	Clay, Off-site (excavate, transport, place, compact) (Quantity must match earthwork balance)	0	CU. YD.	\$0.00	\$ -		N/A
	Low Permeability Soil Layer Subtotal					\$ 541,947	
2.2.0	Geomembrane and Drainage Layer						
2.2.1	Drainage material--sand	0	CU. YD.	\$0.00	\$ -		N/A
2.2.2	Drainage material--geocomposite	0	SQ. FT.	\$0.00	\$ -		N/A
2.2.3	Geomembrane	0	SQ. FT.	\$0.00	\$ -		N/A
	Geomembrane and Drainage Layer Subtotal					\$ -	
2.3.0	Protective Soil and Vegetative Layer						
2.3.1	Protective Soil, On-site (excavate, transport, place, compact) (Quantity must match earthwork balance and must be guaranteed for future availability)	0	CU. YD.	\$0.00	\$ -		N/A
2.3.2	Protective Soil, Off-site (excavate, transport, place, compact) (Quantity must match earthwork balance)	0	CU. YD.	\$0.00	\$ -		N/A
2.3.3	Vegetative Soil (Topsoil), On-site (excavate, transport, place) (Quantity must match earthwork balance and must be guaranteed for future availability)	32,831	CU. YD.	\$4.05	\$ 132,967		Engineer's estimate based on prior bids
2.3.4	Vegetative Soil (Topsoil), Off-site (excavate, transport, place) (Quantity must match earthwork balance)	0	CU. YD.	\$0	\$ -		N/A
2.3.5	Seeding and mulching	40.7	ACRE	\$2,100	\$ 85,470		Engineer's estimate based on prior bids
2.3.6	Fertilizer	40.7	ACRE	\$400	\$ 16,280		Engineer's estimate based on prior bids
	Protective Soil and Vegetative Layer Subtotal					\$ 234,717	
3.0.0	EROSION CONTROL						
3.1.0	Terraces and letdowns	1,150	Lin. FT.	\$90	\$ 103,500		Engineer's estimate based on prior bids (letdowns only)
3.2.0	Checkdams and filters	1	Lump Sum	\$4,000	\$ 4,000		Engineer's estimate based on prior bids
3.3.0	Grass ditching/channels	1,200	Lin. FT.	\$5.00	\$ 6,000		Engineer's estimate based on prior bids
3.4.0	Riprap ditching/channels (includes rock in mid-slope benches)	1,200	Lin. FT.	\$17	\$ 20,400		Engineer's estimate based on prior bids
	Erosion Control Subtotal					\$ 133,900	
4.0.0	GAS SYSTEM						
4.1.0	Gas vents, ___ vents, _____ average depth	0	Lin. FT.	\$0.00	\$ -		N/A
4.2.0	Passive System						
4.2.1	Passive well head flare	0	EACH	\$0.00	\$ -		N/A
4.3.0	Active System						
4.3.1	Flare, ___ BTU/hour	0	EACH	\$0.00	\$ -		N/A
4.3.2	Additional Well Installation	0	ACRE	\$0.00	\$ -		N/A
4.3.4	Ancillary gas equipment (piping, blowers, condensate collection)	0	ACRE	\$0.00	\$ -		N/A
	Gas System Subtotal					\$ -	

LANDFILL CLOSURE COST ESTIMATE WORKSHEET							Permit: 0290-S4-R2	AFIN: 72-00144
ITEM No.	ITEM	QUANTITY	UNITS	UNIT COST	COST	SUBTOTALS	SOURCE OF UNIT COST INFO	
5.0.0	GROUNDWATER MONITORING SYSTEM							
5.1.0	Well installation	0	EACH	\$0.00	\$ -		N/A	
5.2.0	Upgrade existing wells	0	LS	\$0.00	\$ -		N/A	
5.3.0	Dedicated pump/sampling system installation/upgrade	0	EACH	\$0.00	\$ -		N/A	
5.4.0	Baseline sample collection (4 events per first year, _____ samples per event)	0	EVENT	\$0.00	\$ -		N/A	
5.5.0	Baseline sample analysis and reporting (4 events per first year, _____ samples per event)	0	EVENT	\$0.00	\$ -		N/A	
	Groundwater Monitoring System Subtotal					\$ -		
6.0.0	LEACHATE COLLECTION SYSTEM							
6.1.0	Additional/upgrades for collection piping	0	Lin. FT	\$0.00	\$ -		N/A	
6.2.0	Additional/upgrades to pumps	0	EACH	\$0.00	\$ -		N/A	
6.3.0	Additional/upgrades to storage containers	0	EACH	\$0.00	\$ -		N/A	
6.4.0	Baseline sample collection	0	EACH	\$0.00	\$ -		N/A	
6.5.0	Baseline sample analysis and reporting	0	EACH	\$0.00	\$ -		N/A	
	Leachate Collection System Subtotal					\$ -		
7.0.0	OPERATIONS AND INVENTORY REMOVAL							
7.1.0	Excess solid waste	0	CU. YD.	\$0.00	\$ -		N/A	
7.2.0	Mobile equipment/machinery (e.g., containers, tanks, etc...)	0	Lump Sum	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Closure Cost Estimates	
7.3.0	Stored leachate	0	GAL.	\$0.00	\$ -		N/A	
7.4.0	Contaminated soils	0	CU. YD.	\$0.00	\$ -		N/A	
	Operations and Inventory Removal Subtotal					\$ -		
8.0.0	DEMOLITION/REMOVAL SITE IMPROVEMENTS							
8.1.0	Office/shop/maintenance and other ancillary buildings	0	Lump Sum	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Closure Cost Estimates	
8.2.0	Equipment to be decommissioned (e.g., weigh scales, bulking/solidification pits, collection pits/sumps, piping, etc...)	0	Lump Sum	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Closure Cost Estimates	
8.3.0	Site Utilities	0	Lump Sum	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Closure Cost Estimates	
	Demolition/Removal Site Improvements Subtotal					\$ -		
9.0.0	REPLACE/REBUILD SITE ACCESS CONTROLS							
9.1.0	Fencing	0	Lin. FT.	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Closure Cost Estimates	
9.2.0	Gates	0	Lump Sum	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Closure Cost Estimates	
9.3.0	Access barriers	1	Lump Sum	\$2,800	\$ 2,800		Engineer's Estimate	
9.4.0	Other security equipment	0	Lump Sum	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Closure Cost Estimates	
	Replace/Rebuild Site Access Controls Subtotal					\$ 2,800		
10.0.0	BORROW AREA RECLAMATION							
10.1.0	Regrade and site prep	0	ACRE	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Closure Cost Estimates	
10.2.0	Soil, On-site (excavate, transport, place, compact)	0	CU.YD.	\$0.00	\$ -		N/A	
10.3.0	Soil, Off-site (excavate, transport, place, compact)	0	CU. YD.	\$0.00	\$ -		N/A	
10.4.0	Seeding and mulching	0	ACRE	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Closure Cost Estimates	
10.5.0	Fertilizer	0	ACRE	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Closure Cost Estimates	
	Borrow Area Reclamation Subtotal					\$ -		
						\$ 1,050,021		
11.0.0	MISCELLANEOUS							
11.1.0	Administration and Contingency			\$42,001	\$ 42,001		Approximately 4% of Total Closure Cost	
	Misc. Subtotal					\$ 42,001		
						\$ 1,092,022		
12.0.0	ANNUAL INFLATION FACTOR ADJUSTMENTS							
12.1.0	2023 Inflation Adjustment			2023	1.065	\$ 1,163,004	http://www.adeq.state.ar.us/sw/permits/financial.aspx	

LANDFILL POST-CLOSURE CARE - ANNUAL COST ESTIMATE WORKSHEET

OWNER: Eco-Vista, LLC	PERMIT NO.: 0290-S4-R2	AFIN: 72-00144	
OPERATOR: Eco-Vista, LLC	ESTIMATOR: Brad N. Fureigh, P.E. (Ark. Licensed P.E. #: 14977)		DATE: March 18, 2024
TOTAL PERMITTED WASTE DISPOSAL ACRES: 40.7			
TOTAL PERMITTED ACRES CERTIFIED CLOSED: 0			

LANDFILL POST-CLOSURE CARE - ANNUAL COST ESTIMATE WORKSHEET Permit: 0290-S4-R2 AFIN: 72-00144

ITEM No.	ITEM	QUANTITY	UNITS	UNIT COST	COST	SUBTOTALS	SOURCE OF UNIT COST INFO
1.0.0	PROFESSIONAL SERVICES						
1.1.0	Engineering (Annual inspection and reporting, corrective action design and bid, contract management)	1	Lump Sum	\$2,750	\$ 2,750		Engineer's Estimate
1.2.0	Topographic and Boundary Survey (annual, final, and corrective action, if required)	1	Lump Sum	\$2,300	\$ 2,300		Engineer's Estimate
1.3.0	Corrective Action Engineering Services (Construction Oversight, Testing, Reporting, Certification)	1	Lump Sum	\$7,700	\$ 7,700		Engineer's Estimate
	Professional Services Annual Subtotal					\$ 12,750	
2.0.0	FINAL COVER ROUTINE MAINTENANCE						
2.1.0	Inspect soil cover, vents, flares, drainage letdowns and outfalls, etc...	2	EVENT	\$1,150	\$ 2,300		Engineer's Estimate
2.2.0	Mowing/Trimming (40.7 acres twice per year)	81.4	ACRE	\$60	\$ 4,884		Engineer's Estimate
2.3.0	Clean Drain/Vent Openings	2	EVENT	\$1,150	\$ 2,300		Engineer's Estimate
	Final Cover Routine Maintenance Annual Subtotal					\$ 9,484	
3.0.0	FINAL COVER REPAIRS						
3.1.0	Remove/incorporate unacceptable materials (e.g., dead vegetation, solid waste)	1	ACRE	\$55	\$ 55.00		Engineer's estimate based on prior bids
3.2.0	Scarify and prepare surface	1	ACRE	\$1,500	\$ 1,500.00		Engineer's estimate based on prior bids
3.3.0	Soil, On-Site (excavate, transport, place, compact)	3,227	CU. YD.	\$4.65	\$ 15,004.00		Engineer's estimate based on prior bids
3.4.0	Soil, Off-site (excavate, transport, place, compact)		CU. YD.	\$0	\$ -		N/A
3.5.0	Seeding and mulching	1	ACRE	\$2,100	\$ 2,100.00		Engineer's estimate based on prior bids
3.6.0	Fertilizer	1	ACRE	\$400	\$ 400.00		Engineer's estimate based on prior bids
	Final Cover Repairs Annual Subtotal					\$ 19,059.00	
4.0.0	ACCESS ROADS REPAIRS						
4.1.0	Reshape/regrade subgrade	0	SQ. FT.	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Post Closure Cost Estimates
4.2.0	Gravel (transport, place, compact)	0	TON	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Post Closure Cost Estimates
4.3.0	Drainage Structures (e.g., culverts,	0	LS	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Post Closure Cost Estimates
4.4.0	Riprap ditching/channels	0	LS	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Post Closure Cost Estimates
	Access Roads Repair Annual Subtotal					\$ -	
5.0.0	SURFACE WATER MANAGEMENT OPERATION AND MAINTENANCE (O&M)						
5.1.0	Collection system operation and maintenance (ditches, piping conveyances, outfalls, sampling points repair/replace)	0	Lump Sum	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Post Closure Cost Estimates
5.2.0	Stormwater storage (sediment pond) operation/repairs	0	Lump Sum	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Post Closure Cost Estimates
5.3.0	Sample collection (2 events per year)	0	EVENT	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Post Closure Cost Estimates
5.4.0	Sample analysis and reporting (2 events per year)	0	EVENT	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Post Closure Cost Estimates
	Surface Water Management O&M Annual Subtotal					\$ -	
6.0.0	LEACHATE COLLECTION SYSTEM O&M						
	Generation Rate = 1,972,000 gal/yr.						
6.1.0	Collection operation/maintenance (pump, piping, storage...operation/repair/replace)	1	YEAR	\$2,800	\$ 2,800		Engineer's Estimate
6.2.0	Leachate loading, off-loading and off-site transportation		EVENT	\$0.00	\$ -		Forceman in place to transport to NW Arkansas Conservation Authority Wastewater Treatment Facility
6.3.0	Leachate Treatment/Disposal	1,972,000	GAL.	\$0.01166	\$ 22,994		NACA WWTP Agreement
6.4.0	Additional/upgrades for piping, pumps and storage	0	Lump Sum	\$0.00	\$ -		N/A
6.5.0	Leachate sample collection	1	YEAR	\$500	\$ 500		Engineer's Estimate
6.6.0	Leachate sample analysis and reporting	1	YEAR	\$750	\$ 750		Engineer's Estimate
	Leachate Collection System O&M Annual Subtotal					\$ 27,044	

LANDFILL POST-CLOSURE CARE - ANNUAL COST ESTIMATE WORKSHEET							Permit: 0290-S4-R2	AFIN: 72-00144
ITEM No.	ITEM	QUANTITY	UNITS	UNIT COST	COST	SUBTOTALS	SOURCE OF UNIT COST INFO	
7.0.0	GROUNDWATER MONITORING SYSTEM O&M							
	Number of Wells in Approved System							
7.1.0	Well maintenance (e.g., protective casing (lock & hinges) repair/replacement, well pad repair/replace, etc...)	0	LS	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Post Closure Cost Estimates	
7.2.0	Upgrade/redevelop existing wells	0	LS	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Post Closure Cost Estimates	
7.3.0	Well Replacement	0	LS	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Post Closure Cost Estimates	
7.4.0	Sample collection (2 events per year)	0	EVENT	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Post Closure Cost Estimates	
7.5.0	Sample analysis and reporting (2 events per year)	0	EVENT	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Post Closure Cost Estimates	
	Groundwater Monitoring System O&M Annual Subtotal					\$ -		
8.0.0	GAS MONITORING SYSTEM O&M							
8.1.0	Number of Gas Monitoring Probes/Wells							
8.2.0	Methane monitoring of probes/wells (4 per year)	0	EVENT	\$0.00	\$ -		N/A	
8.3.0	Methane monitoring at site boundary and structures (4 per year)	0	EVENT	\$0.00	\$ -		N/A	
8.4.0	Sample analysis and reporting	0	EVENT	\$0.00	\$ -		N/A	
	Gas Monitoring System O&M Annual Subtotal					\$ -		
9.0.0	GAS EXTRACTION SYSTEM O&M							
9.1.0	Passive System							
9.1.1	Passive well head flare maintenance	0	EACH	\$0.00	\$ -		N/A	
9.2.0	Active System							
9.2.1	Flare, _____ BTU/hour	0	EACH	\$0.00	\$ -		N/A	
9.2.2	Additional Well Installation/Upgrades	0	EACH	\$0.00	\$ -		N/A	
9.2.3	Ancillary gas equipment repair/replacement (piping, blowers, condensate collection)	0	Lump Sum	\$0.00	\$ -		N/A	
	Gas Extraction System O&M Annual Subtotal					\$ -		
10.0.0	CORRECTIVE ACTION EVALUATION AND IMPLEMENTATION							
10.1.0	Resurvey monitoring well reference points and site benchmarks (prorate for annual expenses)	0	EACH	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Post Closure Cost Estimates	
10.2.0	Remove sediments from stormwater basin(s) (prorate for annual expenses)	0	EACH	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Post Closure Cost Estimates	
10.3.0	Groundwater exceedances statistical evaluation	0	EACH	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Post Closure Cost Estimates	
10.4.0	Groundwater alternate source determination) (prorate for annual expenses)	0	EACH	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Post Closure Cost Estimates	
10.5.0	Groundwater compliance monitoring (prorate for annual expense)	0	EACH	\$0.00	\$ -		Included in EVLF Class 1 Landfill -- Post Closure Cost Estimates	
10.6.0	Other: _____		EACH	\$0.00	\$ -			
	Corrective Action Evaluation and Implementation Annual Subtotal					\$ -		
	Total Post-Closure Care Annual Cost Subtotal					\$ 68,337		
11.0.0	MISCELLANEOUS							
11.1.0	Administration and Contingency				\$ 2,733		Approximately 4% of Total Post Closure Cost	
	Misc. Subtotal					\$		
	TOTAL ESTIMATED ANNUAL POST-CLOSURE CARE COST						\$ 71,070	
	ESTIMATED 2 YEAR POST-CLOSURE CARE PERIOD	2 x "Total Estimated Annual Post-Closure Care Cost".				\$	142,140	
	CERTIFICATE OF INSURANCE	20% of Total Post-Closure Care Cost				\$	28,428	
12.0.0	ANNUAL INFLATION FACTOR ADJUSTMENTS							
12.1.0	2023 Inflation Adjustment	2023	1.065	\$151,379	\$	30,276	http://www.adeq.state.ar.us/sw/permits/financial.aspx	