

**AGENDA**  
**LOUDON COUNTY SOLID WASTE DISPOSAL COMMISSION**  
**June 11, 2019**  
**6:30 p.m.**  
**LOUDON COUNTY COURTHOUSE ANNEX**  
**Loudon, Tennessee**

1. Opening of Meeting, Pledge of Allegiance, Invocation
2. Approval of Minutes – May 14, 2019
3. Items of Public Concern
4. Cash Activity Report
5. Operations Report
6. Contract Modification Update
7. Poplar Springs Update
8. Attorney's Report
9. Chairman's Report
10. Other Items of Commission's Consideration
11. Adjourn

**Loudon County Department of Accounts and Budgets**  
**Solid Waste Disposal Fund 207**  
**Monthly Financial Report**  
**May 2019**

April 2019 Combined Ending Cash Balance per Monthly Report		3,766,917.24
Adjustments:		
April Interest	0.00	
	0.00	
Total Adjustments		0.00
<b>Adjusted April 2019 Combined Ending Balance per Loudon Co Trustee</b>		<b>3,766,917.24</b>

**Solid Waste Disposal Commission Operating Fund**

<b>Operating Fund Ending Balance April 2019</b>		<b>3,703,480.66</b>
Cash Receipts:		
Trustee's Collections - Prior Year	0	
Surcharge -April 2019 Host Fees	13,113.30	
Surcharge - April 2019 Security Fees	16,557.19	
Investment Income	12,187.09	
Total Monthly Revenue	41,857.58	
Cash Disbursements:		
Board & Committee Members Fees	(350.00)	
Social Security	(3.10)	
Employer Medicare	(0.73)	
Audit Services (Mitchell Emert & Hill)		
Consultants (Geosyntec)	(8,222.24)	
Contracts with Private Agencies (Santek)		
Engineering Services (Santek)		
Contributions (Loudon Utilities)		
Legal Services (Kennerly-Apr 2019)	(2,500.00)	
Legal Notices (News Herald)	(53.00)	
Travel	0.00	
Other Contracted Services (Mowing)		
Building & Content Insurance		
In-Service/Staff Development		
Trustee's Commission	(203.19)	
Total Cash Disbursements	(11,332.26)	
Expenditure Credit:		
Trustee Commission Adjustment		0.00
<b><u>Operating Fund Ending Balance May 2019</u></b>		<b><u>3,734,005.98</u></b>

**Poplar Springs Subfund**

<b>Poplar Springs Subfund Balance April 2019</b>		<b>63,436.58</b>
Cash Receipts:		
Total Monthly Revenue	0.00	0.00
Cash Disbursements:		
Poplar Springs Legal Services		
Total Cash Disbursements	0.00	0.00
<b><u>Poplar Springs Subfund Balance May 2019</u></b>		<b><u>63,436.58</u></b>

**TOTAL COMBINED OPERATING AND POPLAR SPRINGS MAY 2019 BALANCE**

<b>Combined Summary - May 2019</b>		
Beginning Balance		3,766,917.24
Plus Operating Revenue		41,857.58
Less Operating and Poplar Springs Disbursements		(11,332.26)
<b>TOTAL COMBINED BALANCE - MAY 2019</b>		<b>3,797,442.56</b>



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(423) 303-7101

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Internet: [santekwasteservices.com](http://santekwasteservices.com)

**Monthly Operations Report**  
**Matlock Bend Landfill**  
**June 11, 2019**

**Presented by:**  
**Santek Environmental, Inc.**

**I. OPERATIONS**

- A. Tonnage Report
- B. Customer Report
- C. Inspection
- D. Materials Classification Report
- E. Waste Characterization Report
- F. Tire Report

**II. AIRSPACE UTILIZATION SCHEDULE**

**III. HOST & SECURITY FEES**

**IV. POPLAR SPRINGS FINAL MONITORING, INSPECTION & MAINTENANCE PLAN**

**V. SECOND AMENDMENT CONTRACT DRAFT**

**LANDFILL TONNAGE VOLUME  
MONTH ENDING -  
MAY 2019**

**MATLOCK BEND LANDFILL**

MONTH	2018	2019	2018 TO 2019
JANUARY	15,858.64	13,578.63	(2,280.01)
FEBRUARY	13,865.56	11,770.32	(2,095.24)
MARCH	15,779.17	13,291.24	(2,487.93)
APRIL	15,147.53	14,140.50	(1,007.03)
MAY	13,276.58	14,366.28	1,089.70
JUNE			0.00
JULY			0.00
AUGUST			0.00
SEPTEMBER			0.00
OCTOBER			0.00
NOVEMBER			0.00
DECEMBER			0.00
TOTAL	73,927.48	67,146.97	(6,780.51)

**DAILY AVG FOR ANY  
RUNNING 30 DAY  
PERIOD                    459.32**

**LOUDON COUNTY**

MONTH	2018	2019	2018 TO 2019
JANUARY	471.26	489.09	17.83
FEBRUARY	419.40	437.25	17.85
MARCH	496.17	527.14	30.97
APRIL	524.80	523.08	(1.72)
MAY	515.70	520.19	4.49
JUNE			0.00
JULY			0.00
AUGUST			0.00
SEPTEMBER			0.00
OCTOBER			0.00
NOVEMBER			0.00
DECEMBER			0.00
TOTAL	2,427.33	2,496.75	69.42

**DAILY AVG FOR 22.5  
DAY PERIOD                638.50**

**LENOIR CITY**

MONTH	2018	2019	2018 TO 2019
JANUARY	311.92	359.51	47.59
FEBRUARY	294.51	310.75	16.24
MARCH	353.46	364.95	11.49
APRIL	368.49	399.46	30.97
MAY	410.46	421.45	10.99
JUNE			0.00
JULY			0.00
AUGUST			0.00
SEPTEMBER			0.00
OCTOBER			0.00
NOVEMBER			0.00
DECEMBER			0.00
TOTAL	1,738.84	1,856.12	117.28

**CITY OF LOUDON**

MONTH	2018	2019	2018 TO 2019
JANUARY	363.15	434.56	71.41
FEBRUARY	344.19	367.36	23.17
MARCH	371.66	434.95	63.29
APRIL	427.07	450.53	23.46
MAY	442.51	481.49	38.98
JUNE			0.00
JULY			0.00
AUGUST			0.00
SEPTEMBER			0.00
OCTOBER			0.00
NOVEMBER			0.00
DECEMBER			0.00
TOTAL	1,948.58	2,168.89	220.31

**WASTE SERVICES OF TN**

MONTH	2018	2019	2018 TO 2019
JANUARY	2,437.61	2,912.60	474.99
FEBRUARY	2,331.36	2,545.03	213.67
MARCH	2,635.18	2,954.94	319.76
APRIL	2,721.66	3,275.88	554.22
MAY	2,902.00	3,419.31	517.31
JUNE			0.00
JULY			0.00
AUGUST			0.00
SEPTEMBER			0.00
OCTOBER			0.00
NOVEMBER			0.00
DECEMBER			0.00
TOTAL	13,027.81	15,107.76	2,079.95

**TENNESSEE TRASH**

MONTH	2018	2019	2018 TO 2019
JANUARY	3,854.46	5,184.96	1,330.50
FEBRUARY	3,518.63	4,252.39	733.76
MARCH	4,121.81	5,009.22	887.41
APRIL	4,469.98	5,315.21	845.23
MAY	4,912.76	5,341.05	428.29
JUNE			0.00
JULY			0.00
AUGUST			0.00
SEPTEMBER			0.00
OCTOBER			0.00
NOVEMBER			0.00
DECEMBER			0.00
TOTAL	20,877.64	25,102.83	4,225.19

**LANDFILL TONNAGE VOLUME  
MONTH ENDING -  
MAY 2019**

**KIMBERLY CLARK - PAPER WASTE**

MONTH	2018	2019	2018 TO 2019
JANUARY	5,057.39	0.00	(5,057.39)
FEBRUARY	3,563.87	0.00	(3,563.87)
MARCH	4,234.12	0.00	(4,234.12)
APRIL	3,071.82	0.00	(3,071.82)
MAY	0.00	0.00	0.00
JUNE			0.00
JULY			0.00
AUGUST			0.00
SEPTEMBER			0.00
OCTOBER			0.00
NOVEMBER			0.00
DECEMBER			0.00
TOTAL	15,927.20	0.00	(15,927.20)

**TENNESSEE DIVISION OF SOLID WASTE MANAGEMENT  
CLASS I FACILITY INSPECTION CHECKLIST\***

**CLASS I  
FACILITY**

Follow Up Inspection

SITE	DATE 20190520	TIME 14:00	WEATHER Sunny 85
Loudon County Landfill SNL530000203 21712 Highway 72 North Loudon	INSPECTOR PJM	EFO KNOX	

\*SEE DISCLAIMER ON LAST PAGE

VIOLATION	REGULATION	OBSERVATION NVO AOC V1 V2
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**BUFFER ZONE STANDARDS FOR SITING LANDFILLS**

<b>8310</b>	BUFFER ZONE STANDARD VIOLATED	0400-11-01-.04(3)(a)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS						

**COLLECTED LEACHATE**

<b>8330</b>	LEACHATE IMPROPERLY MANAGED	0400-11-01-.04(4)(a)8(i-iii)	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS	Seeps tended to daily by digging out and draining down						

<b>8340</b>	INADEQUATE LEACHATE COLLECTION SYSTEM	0400-11-01-.04(4)(a)7	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS							

**COMMUNICATIONS**

<b>8130</b>	NO COMMUNICATION DEVICES	0400-11-01-.04(2)(f)	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS							

**COVER MATERIAL**

<b>8160</b>	UNAVAILABILITY OF COVER MATERIAL.	0400-11-01-.04(2)(h)	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS							

**DEAD ANIMALS**

<b>8250</b>	DEAD ANIMALS IMPROPERLY HANDLED	0400-11-01-.04(2)(k)5.(ii) (I-III)	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS							

**DUST CONTROL**

<b>8190</b>	INADEQUATE DUST CONTROL	0400-11-01-.04(2)(j)	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS							

**DUTY TO PROVIDE INFORMATION**

\*SEE DISCLAIMER ON LAST PAGE

VIOLATION		REGULATION	OBSERVATION NVO AOC V1 V2				
<b>DUTY TO PROVIDE INFORMATION</b>							
<b>8530</b>	UNSATISFACTORY RECORDS OR REPORTS	0400-11-01-.02(5)(a)7 TCA 68-211-862(a)	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS							
<b>8590</b>	PERMITS, PLANS, OPERATING MANUAL NOT AVAILABLE	0400-11-01-.02(5)(a)(7)	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS							
<b>FIRE SAFETY</b>							
<b>8080</b>	EVIDENCE OF OPEN BURNING	0400-11-01-.04(2)(c)1	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS							
<b>8090</b>	INADEQUATE FIRE PROTECTION	0400-11-01-.04(2)(c)2	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS							
<b>GAS MIGRATION CONTROL STANDARDS</b>							
<b>8380</b>	INADEQUATE GAS MIGRATION CONTROL SYSTEM	0400-11-01-.04(5)(a)	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS							
<b>8390</b>	INADEQUATE MAINTENANCE OF GAS MIGRATION CONTROL SYSTEM	0400-11-01-.04(5)(a)	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS							
<b>GENERAL FACILITY STANDARDS</b>							
<b>8010</b>	INADEQUATE VECTOR CONTROL	0400-11-01-.04(2)(a)1	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS							
<b>8020</b>	ACCESS NOT LIMITED TO OPERATING HOURS	0400-11-01-.04(2)(a)4	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS							
<b>8030</b>	INADEQUATE ARTIFICIAL OR NATURAL BARRIER	0400-11-01-.04(2)(b)1	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS							

\*SEE DISCLAIMER ON LAST PAGE

VIOLATION		REGULATION	OBSERVATION			
			NVO	AOC	V1	V2
<b>GENERAL FACILITY STANDARDS</b>						
<b>8040</b>	INADEQUATE INFORMATION SIGNS	0400-11-01-.04(2)(b)2 TCA 68-211-703(h)	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS						
<b>8050</b>	UNSATISFACTORY ACCESS ROAD(S)/PARKING AREA(S)	0400-11-01-.04(2)(b)3	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS						
<b>8060</b>	CERTIFIED PERSONNEL NOT PRESENT DURING OPERATING HOURS	0400-11-01-.04(2)(b)5	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS						
<b>8070</b>	UNAPPROVED SALVAGING OF WASTE	0400-11-01-.04(2)(b)6	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS						
<b>LITTER CONTROL</b>						
<b>8110</b>	UNSATISFACTORY LITTER CONTROL	0400-11-01-.04(2)(d)	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS	Litter picked up near adjacent Monterey Mushroom property.					
<b>OPERATING EQUIPMENT</b>						
<b>8140</b>	INADEQUATE OPERATING EQUIPMENT	0400-11-01-.04(2)(g)	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS						
<b>8150</b>	UNAVAILABILITY OF BACKUP EQUIPMENT	0400-11-01-.04(2)(g)	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS						
<b>OVERALL PERFORMANCE STANDARD</b>						
<b>8270</b>	WASHOUT OF SOLID WASTE	0400-11-01-.04(2)(a)(3)	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS						
<b>8320</b>	INADEQUATE MAINTENANCE OF LEACHATE MANAGEMENT SYSTEM (INSPECTOR TO CHECK AND RECORD LEACHATE LEVELS AT EVERY LANDFILL SUMP)	0400-11-01-.04(2)(a)(3) 0400-11-01-.04(4)(a)7	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS						

\*SEE DISCLAIMER ON LAST PAGE

VIOLATION		REGULATION	OBSERVATION
			NVO AOC V1 V2
<b>OVERALL PERFORMANCE STANDARD</b>			
<b>8350</b>	LEACHATE OBSERVED AT THE SITE	0400-11-01-.04(2)(a)(3) 0400-11-01-.04(4)(a)6,	? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
COMMENTS			
<b>8360</b>	LEACHATE ENTERING RUN-OFF	0400-11-01-.04(2)(a)(3) 0400-11-01-.04(4)(a)6	? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
COMMENTS			
<b>8370</b>	LEACHATE ENTERING A WATER COURSE	0400-11-01-.04(2)(a)(3) 0400-11-01-.04(4)(a)6	? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
COMMENTS			
<b>8420</b>	POTENTIAL FOR EXPLOSIONS OR UNCONTROLLED FIRES	0400-11-01-.04(2)(a)2 0400-11-01-.04(5)(a)	? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
COMMENTS			
<b>8490</b>	EXCESSIVE POOLING OF WATER	0400-11-01-.04 (2)(a)3 0400-11-01-.04(8)(c)4(iii)	? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
COMMENTS			
<b>8520</b>	DUMPING OF WASTE INTO WATER	0400-11-01-.04 (2)(a)3	? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
COMMENTS			
<b>PERMANENT BENCHMARK</b>			
<b>8280</b>	NO PERMANENT BENCHMARK	0400-11-01-.04(2)(o)	? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
COMMENTS			
<b>PERSONNEL SERVICES</b>			
<b>8120</b>	INADEQUATE EMPLOYEE FACILITIES	0400-11-01-.04(2)(e)	? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
COMMENTS			
<b>PROPER OPERATION AND MAINTENANCE</b>			
<b>8540</b>	GROUNDWATER MONITORING SYSTEM IMPROPERLY MAINTAINED	0400-11-01-.02(5)(a)4	? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
COMMENTS			

\*SEE DISCLAIMER ON LAST PAGE

VIOLATION		REGULATION	OBSERVATION
			NVO AOC V1 V2
<b>RANDOM INSPECTION PROGRAM</b>			
<b>8290</b>	INADEQUATE RANDOM INSPECTION PROGRAM	0400-11-01-.04(2)(s)	? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
COMMENTS			
<b>RECORDS OF ORIGIN AND AMOUNT OF SOLID WASTE</b>			
<b>8610</b>	NO OPERATING SCALES AND/OR FAILURE TO MAINTAIN WASTE RECORDS	TCA 68-211-862(a)(b)(1)(2)	? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
COMMENTS			
<b>RUN-ON, RUN-OFF, AND EROSION CONTROL</b>			
<b>8170</b>	INADEQUATE MAINTENANCE OF RUN-ON/RUN-OFF SYSTEM(S)	0400-11-01-.04(2)(i)1-5 0400-11-01-.04(8)(c)4(i)	? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
COMMENTS			
<b>8180</b>	INADEQUATE EROSION CONTROL	0400-11-01-.04(2)(i)6 0400-11-01-.04(8)(c)4(ii)	? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
COMMENTS			
<b>SPECIAL WASTE APPROVAL PROCESS</b>			
<b>8300</b>	MISHANDLING OF SPECIAL WASTE	0400-11-01-.01(4)(d)1	? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
COMMENTS			
<b>UNLAWFUL METHODS OF DISPOSAL</b>			
<b>8570</b>	OPERATION DOES NOT CORRESPOND WITH ENGINEERING PLANS (EVALUATE AND RECORD THE APPROXIMATE INTERIOR AND EXTERIOR SLOPE OF THE LANDFILL)	TCA 68-211-104(3) TCA 68-211-105(b)	? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
COMMENTS			
<b>8580</b>	OPERATION DOES NOT CORRESPOND WITH PERMIT CONDITIONS	TCA 68-211-104(3) 0400-11-01-.02(5)(a)(1)	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
COMMENTS			
<b>WASTE HANDLING AND COVER STANDARDS</b>			
<b>8430</b>	WASTE NOT CONFINED TO A MANAGEABLE AREA	0400-11-01-.04(6)(a)1	? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
COMMENTS			

\*SEE DISCLAIMER ON LAST PAGE

VIOLATION		REGULATION	OBSERVATION			
			NVO	AOC	V1	V2
<b>WASTE HANDLING AND COVER STANDARDS</b>						
<b>8440</b>	IMPROPER SPREADING OF WASTE	0400-11-01-.04(6)(a)2	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS						
<b>8450</b>	IMPROPER COMPACTING OF WASTE	0400-11-01-.04(6)(a)2	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS						
<b>8460</b>	UNSATISFACTORY INITIAL COVER	0400-11-01-.04(6)(a)3 0400-11-01-.04(6)(a)5	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS						
<b>8470</b>	UNSATISFACTORY INTERMEDIATE COVER	0400-11-01-.04(6)(a)4 0400-11-01-.04(6)(a)5	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS						
<b>8480</b>	UNSATISFACTORY FINAL COVER	0400-11-01-.04(6)(a)6 0400-11-01-.04(8)(c)4	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS						
<b>8510</b>	UNSATISFACTORY STABILIZATION OF COVER	0400-11-01-.04(6)(a)5,6	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS						
<b>WASTE RESTRICTIONS</b>						
<b>8210</b>	UNAUTHORIZED WASTE ACCEPTED	0400-11-01-.04(2)(k)1 0400-11-01-.04(2)(k)6	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS						
<b>8220</b>	UNAPPROVED SPECIAL WASTE ACCEPTED	0400-11-01-.01(4)(b) 0400-11-01-.01(4)(c)5	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS						

\*SEE DISCLAIMER ON LAST PAGE

VIOLATION		REGULATION	OBSERVATION			
			NVO	AOC	V1	V2
<b>WASTE RESTRICTIONS</b>						
<b>8230</b>	TIRES IMPROPERLY HANDLED	0400-11-01-.04(2)(k)3.(i)	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS						
<b>8240</b>	MEDICAL WASTE IMPROPERLY HANDLED	0400-11-01-.04(2)(k)4.(i-iv)	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS						

LEACHATE LEVELS

10.7" and 11.5"

*\*Disclaimer: The information contained in these documents (checklists/notes, etc.) is not intended to be all inclusive and is subject to change. These documents are intended solely for use by DSWM staff. These documents are not a substitute for evaluation of compliance in accordance with applicable laws and regulations. These documents are not intended for, nor can they be relied upon, to create any rights, substantive or procedural, enforceable or useable by any party in litigation with the State of Tennessee or its employees.*

Compliance Date

**LOCK Form**

**SAVE FORM**

**ADDITIONAL COMMENTS**

Inspection Photolog  
Matlock Bend – SNL530000203  
May 20, 2019



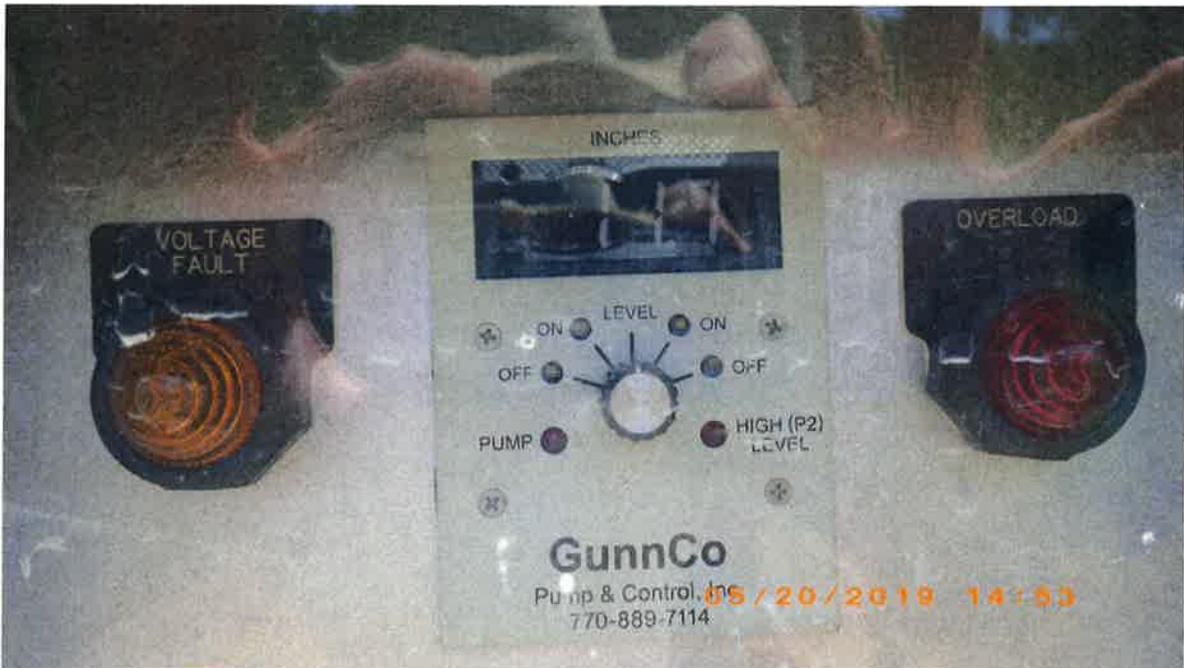
Working face facing southwest



Leachate seep repairs.



Working face facing east.



Sump level – 11.7



New cell area.



Pond



Forbay filter breach to break up silt blockage.



Panorama with hairclasp for scale.



Sump level.



Utility grading near SO-2.

**Materials Classification Report**  
**Matlock Bend Landfill**  
**Monthly Tonnage Summary May 2019**

Material	Tonnage	2016 Sludge %		2017 Sludge %	
<b>MSW</b>					
MSW	<b>12,452</b>	January	4%	January	5%
		February	3%	February	8%
		March	4%	March	8%
		April	3%	April	7%
		May	4%	May	4%
		June	2%	June	2%
		July	2%	July	3%
		August	3%	August	4%
		September	2%	September	7%
		October	3%	October	8%
		November	3%	November	6%
		December	3%	December	5%
<b>Special Waste</b>					
Other	1,426				
Ash	0				
Sludge	488				
<b>Total Special Waste</b>	<b>1,914</b>				
<b>Total MSW &amp; SW</b>	<b>14,366</b>				
Tires	32				
<b>Total Material</b>	<b>14,398</b>				
<b>% MSW</b>	<b>87%</b>				
<b>% Special Waste</b>	<b>13%</b>				
<b>% Sludge</b>	<b>3%</b>				

	2018 Sludge %		2019 Sludge %	
January	4%	January	5%	
February	4%	February	5%	
March	5%	March	4%	
April	6%	April	4%	
May	8%	May	3%	
June	9%	June		
July	6%	July		
August	4%	August		
September	2%	September		
October	2%	October		
November	5%	November		
December	5%	December		



**2018-2019 Matlock Bend  
Landfill Tire Report**

<b>Month</b>	<b>Tonnage</b>
Jul-18	52.58
Aug-18	33.02
Sep-18	35.27
Oct-18	85.69
Nov-18	18.25
Dec-18	41.53
Jan-19	29.23
Feb-19	21.62
Mar-19	48.06
Apr-19	32.38
May-19	33.30
Jun-19	
<b>Total (tons)</b>	<b>430.93</b>

## Matlock Bend Landfill - Module I-B 2019 Airspace Projection / Construction Schedule

DATE	REMAINING AIRSPACE <sup>1</sup> (CY)	MONTHLY TONNAGE	ACTUAL / PROJECTED <sup>2</sup>	UTILIZATION FACTOR	MONTHLY VOLUME CONSUMED (CY)	ENDING MONTHLY REMAINING AIRSPACE (CY)
		13,970		1.49		
May 6, 2019	121,828	-	-	-	-	-
May 7 - 31, 2019	-	11,657	A	1.49	17,368	104,460
June	-	13,970	P	1.49	20,815	83,645
July	-	13,970	P	1.49	20,815	62,830
August	-	13,970	P	1.49	20,815	42,015
September	-	13,970	P	1.49	20,815	21,200
October	-	13,970	P	1.49	20,815	385
November	-	13,970	P	1.49	20,815	0
December	-	13,970	P	1.49	20,815	0
January '20	-	13,970	P	1.49	20,815	0
February	-	13,970	P	1.49	20,815	0
March	-	13,970	P	1.49	20,815	0
April	-	13,970	P	1.49	20,815	0
May	-	13,970	P	1.49	20,815	0
June	-	13,970	P	1.49	20,815	0
July	-	13,970	P	1.49	20,815	0
August	-	13,970	P	1.49	20,815	0
September	-	13,970	P	1.49	20,815	0
October	-	13,970	P	1.49	20,815	0
November	-	13,970	P	1.49	20,815	0
December	-	13,970	P	1.49	20,815	0

<sup>1</sup> = Remaining airspace based on May 6, 2019 aerial survey.

Full Date

November-2019

<sup>2</sup> = Projected tonnages are based on a 3 month average per Matt Dillard on 6-2-09.

<sup>3</sup> = Utilization rate based on the annual utilization rate per October 27, 2008 construction meeting (Avg. Utilization = 1.22 cy/ton)

### Tonnage for Past 3 Months

March	13,333
April	14,178
May	14,398
<b>Average</b>	<b>13,970</b>

cc: Tim  
Matt  
Ben  
Ron  
Justin  
Jason  
Mark



650 25<sup>th</sup> Street NW, Ste 100  
Cleveland, TN 37311

Phone: (423) 303-7101  
Toll Free: (800) 467-9160  
www.santekenviro.com

June 11, 2019

Loudon County Solid Waste Disposal Commission  
100 River Road  
P.O. Box 351  
Loudon, TN 37774

Dear Steve:

Pursuant to Section 10.6 and 10.7 of the Sanitary Landfill Operation Agreement between Loudon and Santek as of July 1, 2007, Santek agreed to pay the Commission a host fee and security fee as defined in the Agreement. The following recap reflects the calculation for the period May 1, 2019 to May 31, 2019:

Host Fees (Greater of below) –	
Total Tip Fees Billed	\$334,231.09
Host Fee Percentage	<u>3.96%</u>
	<b>\$ 13,235.55</b>
Minimum Fee	<u>\$ 10,560.00</u>
Security Fees (Greater of below) –	
Total Tonnage Received	14,366.28
Rate per ton	<u>\$ 1.00</u>
Total	<u>\$ 14,366.28</u>
Total Tip Fees Billed	\$334,231.09
Security Fee Percentage	<u>5.00%</u>
	<b>\$ 16,711.55</b>

Our checks in payment of the above fees have been remitted to the above address for the Commission. Should you have any questions or need additional information, please let me know.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark C. Mathys", is written over a horizontal line.

Mark C. Mathys  
Vice President of Finance & Corporate Controller

April 19, 2019

Patrick Mulligan, P.G.  
Environmental Scientist  
**Tennessee Department of Environment & Conservation**  
**Division of Solid Waste Management**  
Knoxville Environmental Field Office  
3711 Middlebrook Pike  
Knoxville, TN 37921

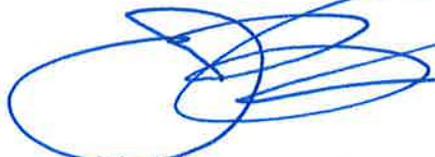
**RE: Transmittal**  
**Final Monitoring, Inspection & Maintenance Plan**  
**Final Cover/Cap Restoration & Related Improvements**  
**Former Poplar Springs Landfill (SNL 53-103-0162)**  
**Loudon County, Tennessee**

Dear Mr. Mulligan:

On behalf of Loudon County, **attached** please find the Monitoring, Inspection, and Maintenance Plan for the subject site which is being provided in fulfillment of site improvements obligations. Although Tennessee Department of Environment & Conservation approval of the work's Completion Report references Post Closure Monitoring, this plan is focused strictly on inspection and maintenance of the restoration and improvement elements that were completed in 2018.

Should you have any additional questions, comments, or require clarification, please contact me either by phone (cell: 919-801-5932) or e-mail, at your earliest convenience.

Cordially,  
**SMITH GARDNER, INC.**



John M. Gardner, P.E.  
Senior Project Manager  
john@smithgardnerinc.com

Attachment

cc: The Honorable Mayor Buddy Bradshaw  
Mr. Chad Newton  
Ms. Susan Huskey (Loudon County Procurement)  
David Jackson, P.G. (BDY Environmental)

# Monitoring, Inspection & Maintenance Plan

## Former Poplar Springs Landfill Loudon County, Tennessee

Prepared for:

Loudon County, Tennessee

April 2019

Prepared by:

**SMITH+GARDNER**

14 N. Boylan Avenue, Raleigh NC 27603 | 919.828.0577



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# Monitoring, Inspection & Maintenance Plan

## Former Poplar Springs Landfill Loudon County, Tennessee

Prepared For:  
**Loudon County, Tennessee**

**S+G Project No. LOUDON-18-1**



---

John M. Gardner, P.E.  
Senior Project Manager

**April 2019**

# SMITH+GARDNER

14 N. Boylan Avenue, Raleigh NC 27603 | 919.828.0577

**FORMER POPLAR SPRINGS LANDFILL  
LOUDON COUNTY, TENNESSEE**

**FINAL COVER/CAP RESTORATION & RELATED IMPROVEMENTS  
MONITORING, INSPECTION & MAINTENANCE PLAN**

**1.0 INTRODUCTION**

On behalf of the County of Loudon, Tennessee, the City of Lenoir City, Tennessee, and the City of Loudon, Tennessee, BDY Environmental, LLC (BDY) submitted a proposed site improvements plan to the Tennessee Department of Environment & Conservation (TDEC) in June 2015<sup>1</sup>. This proposed plan included, among other elements, development of a monitoring/inspection and maintenance plan (MIMP). More specifically, as stated in the letter:

*“Monitoring/Inspection and Maintenance Plan – As part of the post-closure repairs summarized above, it would be recommended that a monitoring/inspection and maintenance plan be developed and implemented to 1) ensure that the above repairs remain in place and are effective; 2) allow any necessary cap repairs before they become significant, and 3) reduce the potential for cap defects in the future.”*

The proposed site improvement plan was approved by TDEC in a letter dated July 20, 2015. Smith Gardner, Inc. (S+G) prepared this MIMP on behalf of Loudon County, as outlined in the above-referenced site improvements plan.

Subsequently, construction-level plans were prepared, reviewed and approved by TDEC and the construction work, referred to as “Final Cover/Cap Restoration & Related Improvements” was initiated by J.D. Anderson Contracting, LLC on July 30, 2018. The work was deemed substantially complete on August 29, 2018 and a “Completion Report” was submitted to TDEC on January 31, 2019. TDEC accepted the work as complete in correspondence dated February 7, 2019, with the condition that a one-year warranty period on the work (until August 31, 2019) be honored.

The completed restoration work generally addressed the following site areas:

- ❖ Access/Roadways – to allow construction and post-construction access for inspections;
- ❖ Storm Water Management features – to control run-on and run-off to the effected site areas;
- ❖ Leachate seeps – that have impacted cap vegetation and surface waters; and,

---

<sup>1</sup> Letter dated June 26, 2015 to Patrick Mulligan, P.G. and Revendra Awasthi from David E. Jackson, P.G., BDY Environmental, LLC and John M. Gardner, P.E., Smith Gardner, Inc., re: “Proposed Site Improvements, Former Poplar Springs Landfill (SNL 531030162), Loudon County, Tennessee”.

- ❖ Cap Erosion – to repair historic rills/gullies and areas disturbed during restoration construction.

### 1.1 Responsible Parties

Loudon County is the responsible party for conducting the post-construction inspections during the initial 10-year period immediately following written approval of this MIMP by TDEC and a “baseline” inspection by S+G. The Landowner, currently Mr. Chad Newton, will be the responsible party for conducting the post-construction inspections thereafter, following the initial 10-year period.

### 1.2 MIMP Modifications and Updates

Should this MIMP require modification or revisions based on observations of post-construction conditions, the MIMP will be re-issued as a revised document, with review and approval by TDEC and Loudon County.

Monitoring will include observation and documentation of any trends and /or progressive degradation on improved areas so that they are addressed/repared in a timely manner, to avoid more costly repairs in the future. Areas of chronic or recurring impacts/damage may need to be addressed through redesign or reconstruction of one or more features.

## 2.0 INSPECTIONS

### 2.1 Inspection Goals

- ❖ Ensure that the above repairs remain in place and are effective;
- ❖ allow any necessary cap repairs before they become significant; and
- ❖ reduce the potential for cap defects in the future.

### 2.2 Inspection Frequency

#### 2.2.1 Periodic Inspections

Periodic inspections will be performed biannually (i.e. approximately every six months) following TDEC approval of this MIMP. After a reasonable time period (as determined by site conditions) the inspection frequency (and subsequent reporting) may be reduced, if agreed to by TDEC and Loudon County.

A minimum 7- day notice will be provided to TDEC (**Knoxville Environmental Field Office; Patrick Mulligan, P.G.: 865-594-6035 or 865-594-5582**) to allow for their attendance during the inspections.

Prior to inspections by Loudon County, S+G will provide training to the individual(s) who will conduct the inspections. Training will include information on the following:

- Site layout;
- Design intent/function;
- How design components work together;
- Signs of degradation/impacts; and,
- MIMP Requirements.

Following each inspection, if deficiencies are noted then repairs will occur (as discussed in Section 3.0) so that the subsequent biannual MIMP report will address both the inspection event itself and the status of the repaired deficiencies.

### 2.2.2 Conditional (Interim) Inspections

Conditional inspections will be performed following an event that has the potential to impact the site improvements, as outlined below.

In these cases, a minimum 2 - day notice will be provided to TDEC (**Knoxville Environmental Field Office; Patrick Mulligan, P.G.: 865-594-6035 or 865-594-5582**) to allow for their attendance during the inspections. Conditional inspections can be triggered by the following events:

- Hurricane;
- Fire;
- During the first 12-months of the MIMP Period - a rainfall event that exceeds 3.3-inches in a 24-hour period (two-year storm) and/or 5.4-inches in a 24-hour period (25-year storm) because the vegetative cover is most susceptible after planting; or
- After the first 12 months of the MIMP period – 5.4-inches (25-year storm).

A separate inspection will occur, unless coordinated and planned to coincide with a periodic inspection. Rainfall received at the site will be determined using rainfall data recorded at a local weather station that is publicly available, including:

- ❖ Tellico Lake – Loudon, Tennessee 5.3E  
USGS Station Network ID: GHCND:US1TNLN0011
- ❖ Knoxville Airport, Tennessee  
USGS Network ID: GHCND:USW00013891

A conditional inspection will occur as soon as practical after the triggering

event. Such conditional inspections will occur during the initial 24 months of the MIMP obligation and thereafter until such time that enough information is collected that would dictate otherwise (e.g., all components of the Site are stable following occurrence of those types of events) and with concurrence between TDEC and Loudon County. Changes to the MIMP will go through the revision approval process.

**Table 1 – Inspection Type and Frequency**

<b>Inspection Type</b>	<b>Frequency</b>
Periodic	Biannually beginning after TDEC approval of MIMP and baseline inspection by S+G
Conditional	Rainfall event that exceeds 5.4-inches in a 24-hour period (25-year storm)
Conditional	Hurricane-Related Storms
Conditional	Fire on or in surrounding area
Conditional	Unauthorized access and/or vandalism

### **2.3 Inspection Scope**

This section of the MMIP presents the scope of the inspection activities. The primary focus of the inspection is for the areas of the site that underwent 2018 restoration repairs. This includes erosion repair/regrading, access road/drainage, leachate seep control, and revegetated areas. The following describes the scope of the inspections, i.e. what conditions are to be noted and documented so that the inspection goals continue to be met.

#### **2.3.1 Access**

##### **2.3.1.1 Gate**

Access to the site was provided by repairing the established North and South Access roads. The road was used during the Work and upon completion of construction activities, the security gates at its southern end will be secured with lock and key. The swing gate located at the entrance to the site (from Poplar Springs Road) should be locked at all times. The inspection of the gate should include its ability to secure the entrance against unauthorized access.

### 2.3.1.2 Roadways

Routine site (vehicular) access is planned to occur through the Poplar Springs entrance and use the South Road, North Road, and North Road Extension. Inspections will include the following. Maintenance and repairs should be made if any of these are encountered.

- Roadway surface structural functionality/integrity and trafficability;
- Erosion of stone/soil along the road;
- Rutting, erosion or poor road drainage;
- Overgrowth onto the roadways; and
- Fallen trees on the roadways.

## 2.3.2 Stormwater Management

### 2.3.2.1 Roadside Ditching

Roadside drainage ditching and check dams will require inspection with the goal of maintaining structural integrity and functionality of the features and minimizing off-site sediment transport. The site roadside ditches are presented in plan on **Record Issue Sheets 3 and 4 in Appendix 1**. Inspections will include the following:

- Roadside ditch structural functionality and integrity;
- Erosion of stone/soil along the road and drainage ditches;
- Erosion or poor road drainage;
- Overgrowth in the ditches;
- Fallen trees on the roadways or ditches;
- Blockage or sediment buildup along ditches or at culverts;
- Erosion around the culvert outlet protection; and
- Dislodged outlet protection.

### 2.3.2.2 Check Dams

Check dams will be important only until the roadside ditches become revegetated and stable. The Check Dams are presented in plan on **Record Issue Sheets 3 and 4**. The Check Dam detail is presented on **Record Issue Sheet 5**. Inspections will include the following:

- Check dam degradation and/or effectiveness (by-pass flow in road evident);
- Check Dam damage (loosened rock);

- Erosion around the Check Dams; and
- Dislodged Check Dam rock.

#### 2.3.2.3 Culverts

A set of culverts were repaired (Culvert -1) or replaced (Culvert-2) during the Work. The Culverts are presented in plan view on **Record Issue Sheets 3 and 4**. The Culvert detail is presented on **Record Issue Sheet 5**. Culverts and associated outlet protection structures will be inspected for the following:

- Damage or structural integrity;
- Sediment or other material buildup that obstructs flow through the culvert;
- Flow around or over the culvert;
- Erosion around the headwall or inlet/outlet protection; and
- Dislodged outlet protection.

#### 2.3.2.4 Drainage Channels

A series of drainage channels were designed and incorporated (Upper South Channel, Lower South Channel, East Perimeter Channel, South Slope Channel). These drainage channels are intended to convey storm water runoff around areas of the site that are most susceptible to erosion and to minimize erosion of cap materials. The Drainage Channels are presented in plan on **Record Issue Sheets 3 and 4**. The Channel detail is presented on **Record Issue Sheets 5 and 6**. Drainage channels will be inspected for:

- Erosion in or adjacent to the channel;
- Damaged to the GCL lining (Lower South Channel);
- Sediment build up or blocked flow;
- Differential settlement or changes in contour;
- Distressed vegetation or bare spots;
- Displaced or deterioration of rip rap outlet protection (Lower South Channel); and,
- Dislodged rip rap (South Slope Channel).

#### 2.3.2.5 Sediment Pond

Improvements to the on-site sediment pond included 1) providing an

access road for inspections; and 2) repair of the primary spillway riser; and revegetation of disturbed areas. The Sediment Pond is presented in plan view on **Record Issue Sheets 3 and 4**. The Sediment Pond Riser is presented on **Record Issue Sheet 6**. The pond will be inspected for:

- Riser deterioration;
- Dislodged rip rap in riser; and,
- Erosion around the riser.

### 2.3.3 Soil Cap and Vegetative Cover

The soil cap was replaced/repared to: 1) fill erosion gullies; 2) flatten and stabilize the South Slope; and 3) cover/cap completed Vertical Stone Drains. Revegetation was implemented to stabilize all areas disturbed by the cap restoration and related improvement construction, including the on-site Borrow Area.

The areas of the site that received soil capping are presented in plan view on **Record Issue Sheets 3 and 4**. The soil cover/cap details are presented on **Record Issue Sheets 5 and 6**. The soil cover/cap and vegetated cover will be inspected for:

- Erosion rills or washouts;
- Slippage or cracks in the soil cover/cap;
- Exposed waste, (i.e., where the soil layer has eroded);
- Animal burrows or trails;
- Distressed vegetation or bare spots;
- Soft or saturated areas with ponded water indicating poor drainage and potentially leachate seeps (see §2.2.4 below);
- Potential slope stability concerns:
  - Bulging at the slope toe,
  - Seepage,
  - Sloughing or deformation, and
  - Cracking in cover/cap layer at the top of slope areas.
- Sediment buildup; and
- General observations of overall condition of soil cover and vegetation.

### 2.3.4 Leachate Seeps

Leachate seeps that were historically present were repaired as part of the 2018 improvement work. Leachate seeps can occur in the future at any location within the former landfill footprint area as a result of rainfall, landfill settlement,

or other factors. The area subject to inspections under this MIMP are those areas where Vertical Seep Drains (VSDs) were installed in the 2018 work. However, during the conduct of inspections conducted under this MIMP other, adjoining areas of the site that are visible should also be observed for the evidence of reoccurring or new seeps.

The areas of the site that contained leachate seeps that received VSDs are presented in plan view on **Record Issue Sheets 3 and 4**. The VSD detail is presented on **Record Issue Sheet 6**. The soil cover/cap and vegetated cover will be inspected for leachate seeps using the following observable evidence:

- Dead vegetation;
- Bare soil areas;
- Discolored (i.e. brown, black, red, or oil-like “sheen”) water/moisture or drainage emanating from the soil cover or flowing across the ground surface;
- Discoloration of the grass and/or soil;
- Seepage from the cover that has an odor;
- Movement of the soil cover/cap due to wet conditions.

#### 2.3.5 Borrow Area

The on-site Soil Borrow Area (located along the South Access Road) was the source of cover/cap material for the cover/cap restoration work and was graded to drain and revegetated (reclaimed) following completion of the restoration work. The plan limits of the borrow area are shown on **Record Issue Sheets 3**. An objective of the MIMP is to ensure that the reclaimed Borrow Area remains stable. Inspection of the Soil Borrow area will include the following:

- Major erosion rills or washouts;
- Ponded surface water; and
- Condition of vegetation.

### 3.0 MAINTENANCE AND REPAIRS

#### 3.1 Maintenance

Routine maintenance will be required during the MIMP activities and will include the following:

- Removing drainage channel impediments that cause channel overflow;
- Removing materials that block the culverts; and
- Ensuring passable access roads by replacing road materials.

Culvert and road maintenance will take place on an as-needed basis.

Vegetation may need to be re-established in areas that are bare or are less than 70% covered. No vegetation cutting is needed on the site.

Migration of soil/debris into channels will be documented.

### **3.2 Repairs**

When areas of damage are observed, it is likely that some form of repair will be required. Below are guidelines to be used as a baseline for scheduling repairs to common conditions that would be anticipated under the site circumstances. These are not intended to be inclusive and should only be used as a guide, because many different scenarios may occur that may require more specialized or specific repair procedures.

- Ruts in roadways
  - Less than 3 inches deep - monitor in future inspections for signs of progression/degradation
  - 3 to 6 inches deep - schedule for repair
- Erosion in channels, cover/cap, or on slopes
  - 3 to 6 inches deep – monitor in future inspections for signs of progression/degradation
  - 6 to 12 inches deep – schedule for repair
  - Greater than 12 inches – repair prior to next inspection
- Bare<sup>2</sup> spots in vegetation
  - Less than 100 SF – monitor for signs of vegetation volunteering during future inspections
  - Greater than 100 SF – schedule for fertilizer/seed/lime/mulch. Soil testing prior to repairs is recommended.
- Displaced riprap – schedule for repair/replacement
- Damaged GCL in channels – schedule for repair/replacement
- Leachate seeps
  - Monitor for a period of time that includes both wet and dry seasons
  - If seeps do not stop over a period of three biannual inspections – schedule for repair (employing a VSD or equal)

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<sup>2</sup> For purposes of this MIMP, “bare” is considered to be less than 70% covered.

Repairs shall be made following standard industry practice, means and methods and/or manufacturers procedures/recommendations.

Reoccurring repairs at the same location (e.g. reoccurring riprap displacement) will be assessed by the Landowner to ascertain if changes are necessary to address the root cause of a reoccurring issue.

## **4.0 REPORTING**

### **4.1 Minimum Reporting Requirements**

Biannual MIMP Inspection reports will contain, at a minimum, the following:

1. Inspection Form (see §4.1.1, below).
2. Copies of Record Issue drawings – marked/annotated depicting areas of the site that require further monitoring and immediate or possible future repair work.
3. Photographs, labeled, of all areas requiring further monitoring and immediate or possible future repair work.

#### **4.1.1 Inspection Form**

Inspection forms will be used to document observations, changes in features, corrective actions required to maintain the functional intent of the original design and its construction. The Inspection Form to be used is included in **Appendix 2**.

### **4.2 Maintenance & Repair Reporting Requirements**

Maintenance and repair work will be documented by the Landowner. After maintenance and/or repair activities are completed, a copy of a completion report will be submitted to TDEC and Loudon County.

Appendix 1

Record Issue Drawings  
Sheets 3,4,5 & 6

Monitoring, Inspection, & Maintenance Plan  
Final Cover/Cap Restoration & Related Improvements  
Former Poplar Springs Landfill  
April 2019

# RECORD ISSUE

## NOT FOR CONSTRUCTION

PREPARED FOR:  
**(FORMER) POPLAR SPRINGS LANDFILL**  
 LOUDON COUNTY  
 TENNESSEE

PREPARED BY:

**SMITH+GARDNER**  
 ENGINEERS  
 14 N. Boylan Avenue, Raleigh NC 27603 | 919.828.0577

SEAL

SEAL

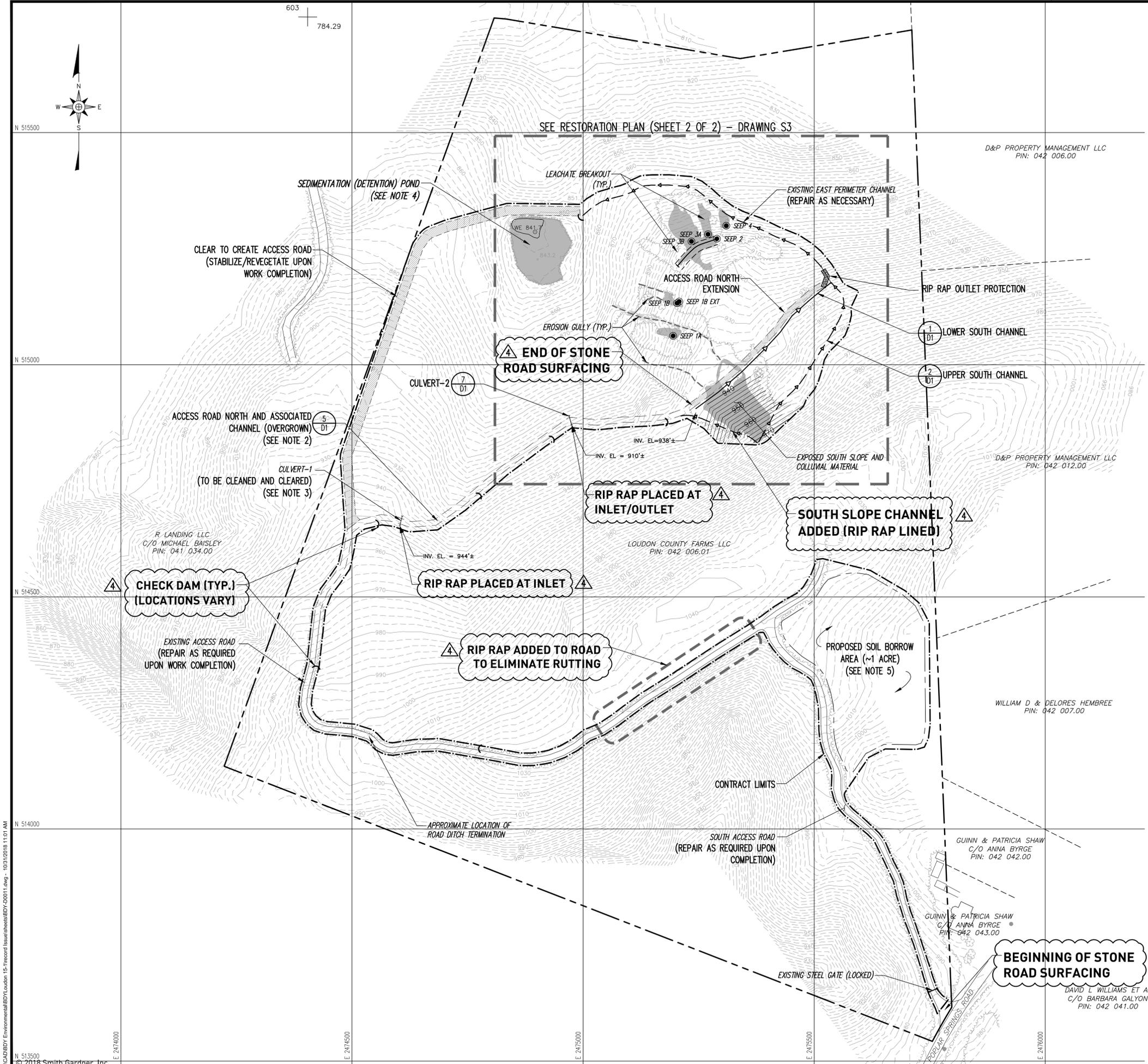
REV.	DATE	DESCRIPTION
1	05/16	PER 4/1/16 TDEC COMMENTS
2	12/16	REVISED BOUNDARY SURVEY
3	07/17	CONSTRUCTION ISSUE AND C.D. #1 CHANGES
4	10/18	RECORD ISSUE

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PROJECT TITLE:  
**FINAL COVER/CAP RESTORATION AND RELATED IMPROVEMENTS**

DRAWING TITLE:  
**RESTORATION PLAN (SHEET 1 OF 2)**

DESIGNED: J.M.G.	PROJECT NO: BDY/LOUDON 15-1
DRAWN: C.T.J.	SCALE: AS SHOWN
APPROVED:	DATE: MARCH 2016
FILENAME: BDY-D0011	
SHEET NUMBER: <b>3</b>	DRAWING NUMBER: <b>S2</b>



**LEGEND**

- 150 --- EXISTING 10' CONTOUR (SEE REFERENCE 1)
- 2 --- EXISTING 2' CONTOUR
- - - - - APPROXIMATE PROPERTY LINE (SEE REFERENCE 2)
- EXISTING CULVERT
- PROPOSED CULVERT
- CONTRACT LIMITS
- ARW-1 EXISTING CHANNEL (AND DESIGNATION) TO BE IMPROVED
- PROPOSED CHANNEL
- LEACHATE BREAKOUT AREA
- EROSION GULLY IN FINAL COVER/CAP
- BARE, UNVEGETATED AND/OR SILED AREAS
- SEEP 1A APPROXIMATE SEEP LOCATION
- REVEGETATED ROADWAY

- NOTES**
- THE ACCESS ROADS SOUTH AND WEST SHALL BE IMPROVED FOR ACCESS AND DRAINAGE BY CLEARING OVERGROWTH, REMOVING DOWN TIMBER AND FILLING ANY RILLS/GULLIES SO AS TO PROVIDE ADEQUATE CLEARANCE AND TRAFFICABILITY FOR CONSTRUCTION-RELATED VEHICLES AS WELL AS SUBSEQUENT MONITORING AND MAINTENANCE ACCESS. DRAINAGE FEATURES (CHANNELS) SHALL BE RESTORED AND/OR CREATED SO AS TO PREVENT PONDING OF SURFACE WATER ON THE ROADWAY AND PROVIDE CONVEYANCE OF COLLECTED RUNOFF TO THE ON-SITE SEDIMENTATION POND IN ACCORDANCE WITH THESE PLANS. WHERE NECESSARY, ADDITIONAL AGGREGATE MAY BE NEEDED PER THESE PLANS TO PROVIDE AN ADEQUATE ROAD BASE FOR TRAFFIC.
  - THE ACCESS ROAD NORTH IS SIGNIFICANTLY OVERGROWN AND IN SOME PLACES POORLY-DEFINED WITH LITTLE OR NO OBSERVABLE DRAINAGE FEATURES. THE ACCESS ROAD NORTH SHALL BE IMPROVED FOR ACCESS BY CLEARING OVERGROWTH, DOWN TIMBER FILLING ANY RILLS/GULLIES, AND ADJUST ROAD ALIGNMENT SO AS TO PROVIDE ADEQUATE CLEARANCE AND TRAFFICABILITY FOR CONSTRUCTION-RELATED VEHICLES AS WELL AS SUBSEQUENT MONITORING AND MAINTENANCE ACCESS. DRAINAGE FEATURES (CHANNELS AND CULVERTS) SHALL BE RESTORED AND/OR CREATED SO AS TO PREVENT PONDING OF SURFACE WATER ON THE ROADWAY AND PROVIDE CONVEYANCE OF COLLECTED RUNOFF TO THE ON-SITE SEDIMENTATION POND IN ACCORDANCE WITH THESE PLANS. WHERE NECESSARY, ADDITIONAL AGGREGATE MAY BE NEEDED PER THESE PLANS TO PROVIDE AN ADEQUATE ROAD BASE FOR TRAFFIC.
  - EXISTING CULVERTS ENCOUNTERED DURING THE WORK ALONG ALL EXISTING ACCESS ROADS (SOUTH, WEST AND NORTH) SHALL BE CLEARED OF ANY DEBRIS OR OTHER MATERIALS BLOCKING/PARTIALLY BLOCKING FLOWS AROUND THE INLET/OUTLET AND WITHIN THE PIPE ITSELF.
  - THE EXISTING POND WILL BE STABILIZED (REVEGETATED) AND SPILLWAY RISER WILL BE IMPROVED IN ACCORDANCE WITH THE RESTORATION PLAN, SHEET 2 OF 2.
  - IF ON-SITE BORROW AREAS ARE UTILIZED (DISTURBED), THEN THESE AREAS SHALL BE STABILIZED THROUGH VEGETATION, AS APPROPRIATE.

- REFERENCES**
- OVERALL SITE BASE TOPOGRAPHY PROVIDED BY GEODATA CORP., BASED ON NOVEMBER 11, 2015 AERIAL SURVEY.
  - PARCEL BOUNDARY LINES DRAWN USING SURVEY DESCRIPTIONS FROM DRAWING TITLED "BOUNDARY SURVEY, TRACT 2 LOUDON COUNTY FARMS, LLC." PREPARED BY STERLING LAND SURVEYING, MARYVILLE, TN, DATED JULY 30, 2014.
  - SEEP BREAKOUT LOCATIONS ARE APPROXIMATE AS IDENTIFIED IN APRIL 2017 BY S+G AND J.D. ANDERSON CONSTRUCTION, LLC.



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# RECORD ISSUE

## NOT FOR CONSTRUCTION

PREPARED FOR:  
**(FORMER) POPLAR SPRINGS LANDFILL**  
**LOUDON COUNTY**  
**TENNESSEE**

PREPARED BY:  
**SMITH+GARDNER**  
**ENGINEERS**  
 14 N. Boylan Avenue, Raleigh NC 27603 | 919.828.0577

VERTICAL SEEP DRAINS (ESTIMATED)							
SEEP	LENGTH (FEET)	WIDTH (FEET)	DEPTH (FEET)	FINAL COVER SOIL (CY)	TRASH REMOVED (CY)	TRASH REMOVED (TONS)	STONE DRAIN (TONS)
1A	10	10	6	11	11	10	19
1B	20	20	10	44	104	91	174
2	120	20	6	267	267	234	448
3A	10	10	6	11	11	10	19
3B	10	10	6	11	11	10	19
4	20	20	10	44	104	91	174
TOTALS				389	507	445	852

NOTES:  
 ASSUME FINAL COVER SOIL IS THREE FEET THICK  
 STONE DENSITY ASSUMED: 1.68 TONS/CY  
 WASTE DENSITY: 65 PCF  
 WASTE DENSITY: 0.87 TONS/CY

- LEGEND**
- 150- EXISTING 10' CONTOUR (SEE REFERENCE 1)
  - 2- EXISTING 2' CONTOUR
  - - - - - APPROXIMATE PROPERTY LINE (SEE REFERENCE 2)
  - - - - - EXISTING CULVERT
  - - - - - PROPOSED CULVERT
  - - - - - CONTRACT LIMITS
  - USC-1 EXISTING CHANNEL (AND DESIGNATION) TO BE IMPROVED
  - - - - - LEACHATE BREAKOUT AREA
  - - - - - EROSION GULLY IN FINAL COVER/CAP
  - - - - - PROPOSED CHANNEL
  - BARE, UNVEGETATED AND/OR SILTED AREAS (SEE NOTE 8)
  - ▨ REVEGETATED ROADWAY
  - SEEP 1A APPROXIMATE SEEP LOCATION

- NOTES**
1. THE LOWER SOUTH CHANNEL ALIGNMENT WILL NEED TO BE CONFIRMED FOLLOWING PRE-CONSTRUCTION TOPOGRAPHY VERIFICATION.
  2. REGRADING THE EXISTING SOUTH SLOPE MAY USE EXISTING MATERIAL ON THE SLOPE OR OTHER SUITABLE MATERIALS AS APPROVED IN ADVANCE BY THE ENGINEER.
  3. THE UPPER SOUTH CHANNEL ALIGNMENT WILL NEED TO BE CONFIRMED FOLLOWING PRE-CONSTRUCTION TOPOGRAPHY VERIFICATION AND CONFIRMATION OF THE STABILITY OF THE EXISTING MATERIAL ABOVE THE SOUTH SLOPE.
  4. VERTICAL STONE DRAINS AND EROSION FEATURE REPAIRS SHALL BE INSTALLED IN ALL EXISTING LEACHATE BREAKOUTS AND EROSION GULLIES, RESPECTIVELY, WITHIN THESE AREAS. REFER TO TABLE S1-1. ADDITIONAL FEATURES MAY EXIST OUTSIDE THE LIMITS SHOWN IN THESE PLANS AND SHALL BECOME PART OF THE WORK.
  5. THE VEGETATED NORTH ACCESS ROAD (MINIMUM WIDTH OF 12 FEET) SHALL BE EXTENDED EASTWARD TO THE PROPOSED EAST PERIMETER TO PROVIDE BOTH CONSTRUCTION AND POST-CONSTRUCTION ACCESS TO THE EAST SIDE OF THE SITE.
  6. WASTE AND OTHER CONTAMINATED MATERIALS (SOILS) GENERATED DURING EXECUTION OF THE WORK PRESENTED IN THESE PLANS SHALL BE PROPERLY DISPOSED AT A PERMITTED FACILITY.
  7. THE LOCATION OF THIS CHANNEL MAY NEED TO BE ADJUSTED IN THE FIELD (AND THEREFORE MAY VARY FROM THAT SHOWN HERE) TO ALLOW A 4H:1V SLOPE ON THE SOUTH SLOPE REGRADING AND TO PROVIDE A BOTTOM SLOPE OF ABOUT 2 PERCENT.
  8. ALL BARE UNVEGETATED AND/OR SILTED AREAS SHALL BE STABILIZED BY REGRADING, PLACEMENT OF SUITABLE (TOP) SOIL, AND REVEGETATING PER THESE SPECIFICATIONS.
  9. THE CHECK DAM SHALL BE FIELD-LOCATED IN THE SEDIMENTATION POND AT THE DISCHARGE POINT OF THE EAST PERIMETER CHANNEL AND CONSTRUCTED FROM THE SAME STONE/RIP RAP AS USED TO STABILIZE THE PRIMARY SPILLWAY RISER, DETAIL 5 D2.

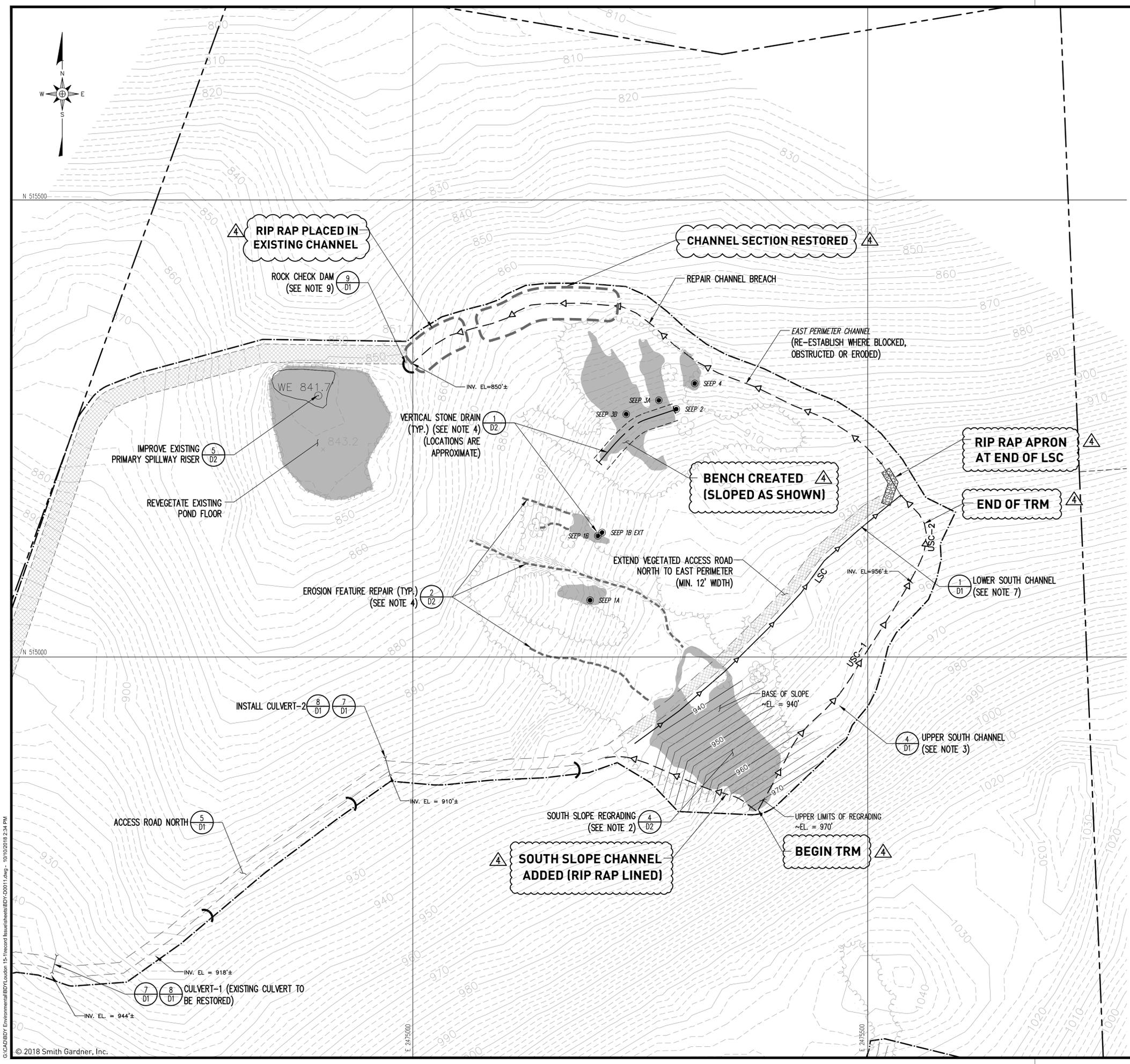
- REFERENCES**
1. OVERALL SITE BASE TOPOGRAPHY PROVIDED BY GEODATA CORP., BASED ON NOVEMBER 11, 2015 AERIAL SURVEY.
  2. PARCEL BOUNDARY LINES DRAWN USING SURVEY DESCRIPTIONS FROM DRAWING TITLED "BOUNDARY SURVEY, TRACT 2 LOUDON COUNTY FARMS, LLC," PREPARED BY STERLING LAND SURVEYING, MARYVILLE, TN, DATED JULY 30, 2014.
  3. SEEP BREAKOUT LOCATIONS ARE APPROXIMATE AS IDENTIFIED IN APRIL 2017 BY S+G AND J.D. ANDERSON CONSTRUCTION, LLC.

REV.	DATE	DESCRIPTION
1	06/16	PER 4/1/16 TDEC COMMENTS
2	12/16	REVISED BOUNDARY SURVEY
3	07/17	CONSTRUCTION ISSUE AND C.D. #1 CHANGES
4	10/18	RECORD ISSUE

PROJECT TITLE:  
**FINAL COVER/CAP RESTORATION AND RELATED IMPROVEMENTS**

DRAWING TITLE:  
**RESTORATION PLAN (SHEET 2 OF 2)**

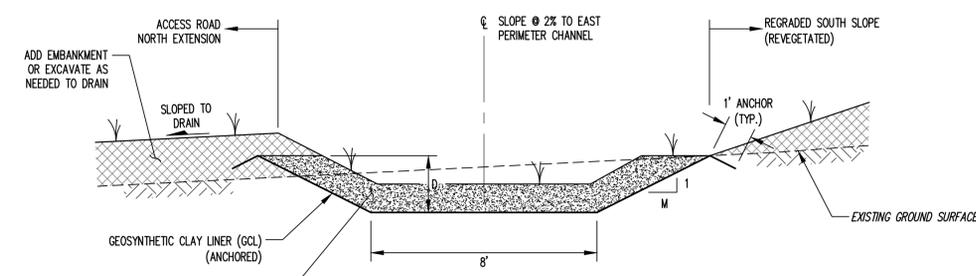
DESIGNED: J.M.G.	PROJECT NO: EBYLOUDON 15-1
DRAWN: C.T.J.	SCALE: AS SHOWN
APPROVED:	DATE: MARCH 2016
FILENAME: BDY-D0011	DRAWING NUMBER:
SHEET NUMBER: <b>4</b>	DRAWING NUMBER: <b>S3</b>



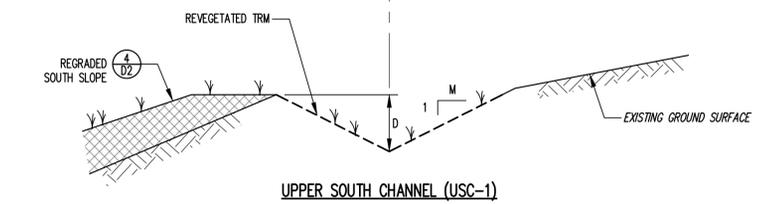
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DRAINAGE CHANNEL SCHEDULE				
DRAINAGE CHANNEL DESIGNATION	CHANNEL LINING	BOTTOM WIDTH (B) (FEET)	TOTAL DEPTH (D) (FEET)	SLOPE (M)
USC-1	TRM	0.0	2.0	3
USC-2	SPOT REPAIRS AS NECESSARY			
LSC	GRASS	8.0	1.0	2
EAST PERIMETER CHANNEL	GRASS	0.0	1.5	8

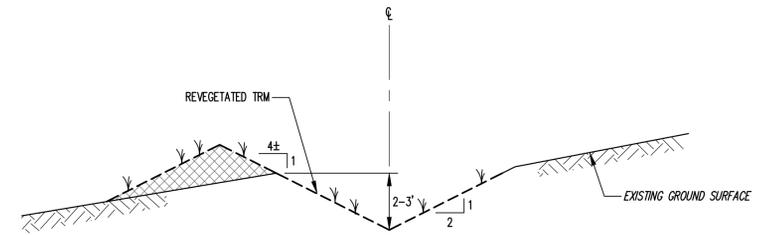
- NOTES:  
 1. ECB = EROSION CONTROL BLANKET.  
 2. TRC = TURF REINFORCEMENT MATTING.  
 3. THE ACCESS ROAD (NORTH AND WEST) AND EAST PERIMETER CHANNEL ARE EXISTING IN SOME LOCATIONS. THE WORK WILL INCLUDE REGRADING/RESTORING, AND IN SOME LOCATIONS CREATING THE CHANNEL GEOMETRY PRESENTED IN THIS TABLE.  
 4. THESE DIMENSIONS ARE MINIMUMS.



**LOWER SOUTH CHANNEL (LSC)**  
 DETAIL 1 D1  
 NOT TO SCALE

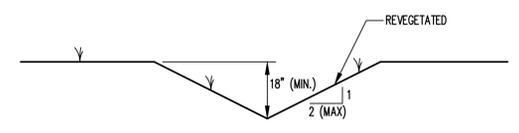


**UPPER SOUTH CHANNEL (USC-1)**

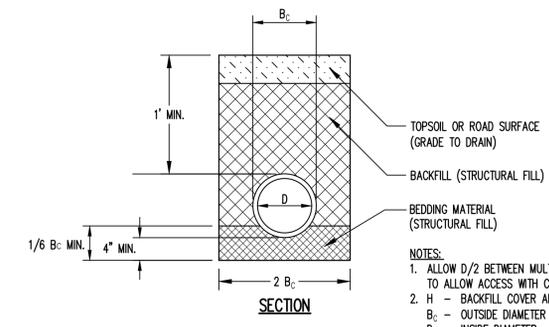


**UPPER SOUTH CHANNEL (USC-2)**

**UPPER SOUTH CHANNEL**  
 DETAIL 4 D1  
 NOT TO SCALE

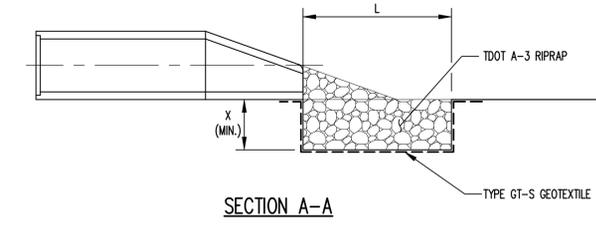


**EAST PERIMETER CHANNEL**  
 DETAIL 2 D1  
 NOT TO SCALE

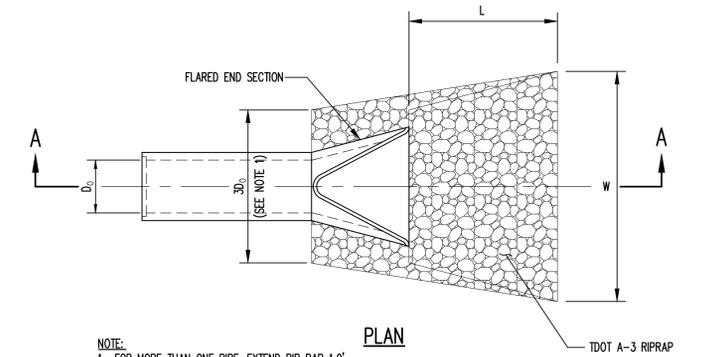


**TYPICAL CULVERT CROSS SECTION**  
 DETAIL 5 D1  
 NOT TO SCALE

CULVERT SCHEDULE						
NO.	NO. OF PIPES	SIZE/TYPE	LENGTH (FEET)	SLOPE	INV. IN (FEET)	INV. OUT (FEET)
CULVERT 1		EXISTING -- TO BE CLEANED AND CLEARED				
CULVERT 2	1	24" CPE (TYPE S)	50	1%	910.0	909.5



**SECTION A-A**

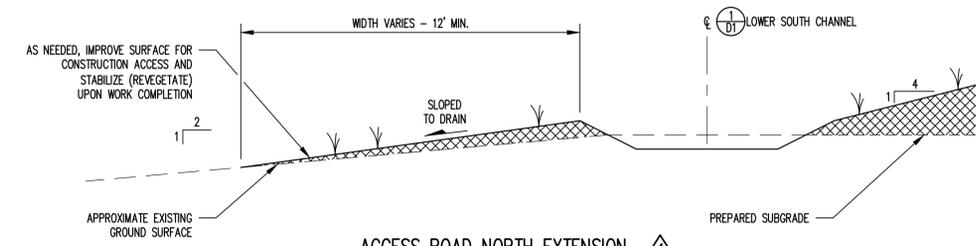


**PLAN**

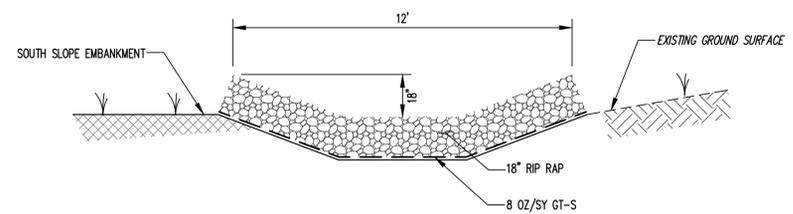
- NOTE:  
 1. FOR MORE THAN ONE PIPE, EXTEND RIP RAP 1.0' MIN. BEYOND OUTSIDE EDGES OF PIPES.  
 2. THERE ARE TWO PIPES AT CULVERT 2.

RIPRAP OUTLET PROTECTION				
PIPE	D <sub>o</sub>	L	W	X
CULVERT 2	24"	11'	13'	1.0'
USC-2	N/A	5'	12'	1.0'

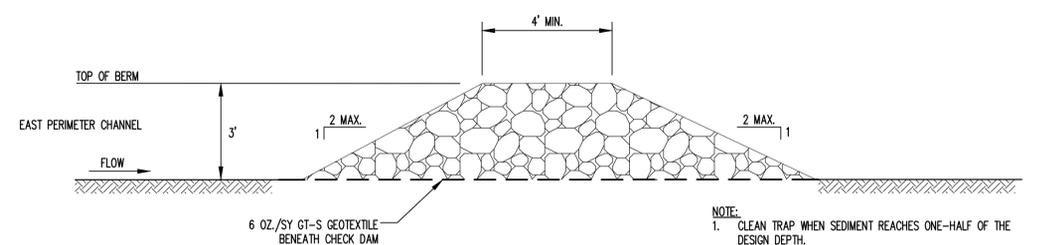
**RIPRAP OUTLET PROTECTION**  
 DETAIL 7 D1  
 NOT TO SCALE



**ACCESS ROAD NORTH EXTENSION**  
 DETAIL 3 D1  
 NOT TO SCALE



**SOUTH SLOPE CHANNEL**  
 DETAIL 8 D1  
 NOT TO SCALE



**ROCK CHECK DAM**  
 DETAIL 6 D1  
 NOT TO SCALE

- NOTE:  
 1. CLEAN TRAP WHEN SEDIMENT REACHES ONE-HALF OF THE DESIGN DEPTH.  
 2. BUILD ROCK CHECK DAM FROM SAME STONE/RIP RAP AS USED TO STABILIZE THE PRIMARY SPILLWAY RISER, DETAIL 5 D2.  
 3. BUILD CHECK DAM TO FULL TOP WIDTH OF EAST PERIMETER CHANNEL.

**RECORD ISSUE**  
 NOT FOR CONSTRUCTION

SEAL

SEAL

REV.	DATE	DESCRIPTION
3	07/17	CONSTRUCTION ISSUE AND C.O. #1 CHANGES
4	10/18	RECORD ISSUE

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PROJECT TITLE:  
**FINAL COVER/CAP RESTORATION AND RELATED IMPROVEMENTS**

DRAWING TITLE:  
**DETAILS (SHEET 1 OF 2)**

DESIGNED: J.M.G.	PROJECT NO: BDY/LOUDON 15-1
DRAWN: C.T.J.	SCALE: AS SHOWN
APPROVED:	DATE: MARCH 2016
TITLENAME: BDY-00012	
SHEET NUMBER: 5	DRAWING NUMBER: D1



## Appendix 2

### Inspection Form

Monitoring, Inspection, & Maintenance Plan  
Final Cover/Cap Restoration & Related Improvements  
Former Poplar Springs Landfill  
April 2019

FORMER POPLAR SPRINGS LANDFILL  
 MONITORING, INSPECTION & MAINTENANCE PLAN  
 BIENNIAL POST-CONSTRUCTION INSPECTION FORM

INSPECTOR: \_\_\_\_\_

DATE: \_\_\_\_\_ WEATHER: \_\_\_\_\_

	CONDITION	ACTION TO BE TAKEN
<b>ACCESS</b>		
a) Gate		
b) South Access Road		
c) North Access Road		
d) North Access Road Extension		
e) Road to Pond		
<b>STORMWATER MANAGEMENT</b>		
a) Roadside Ditching		
b) Check Dams		
c) Culvert-1		
d) Culvert-2		
e) Upper South Channel (inlets, outlets, rip rap)		
f) Lower South Channel (inlets, outlets, rip rap)		
g) South Slope Channel		
h) Sediment Pond (riser, spillway)		
<b>VEGETATIVE COVER</b>		
a) South Slope		
b) Roadside Ditches		
c) Landfill Slopes		
d) East Perimeter Channel		
e) Sediment Pond		
<b>LEACHATE SEEPAGE</b>		
<b>BORROW AREA</b>		
a) Vegetative Cover		

NOTES: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

ATTACHMENTS: \_\_\_\_\_.

Copy sent to TDEC on \_\_\_\_\_.

Inspection Photolog  
Poplar Spring – SNL530000162  
April 23, 2019



Active leachate seep at landfill toe.



Active leachate seep. Lower portion.



Developing rill on lower, western portion.





Leachate seep.



Leachate



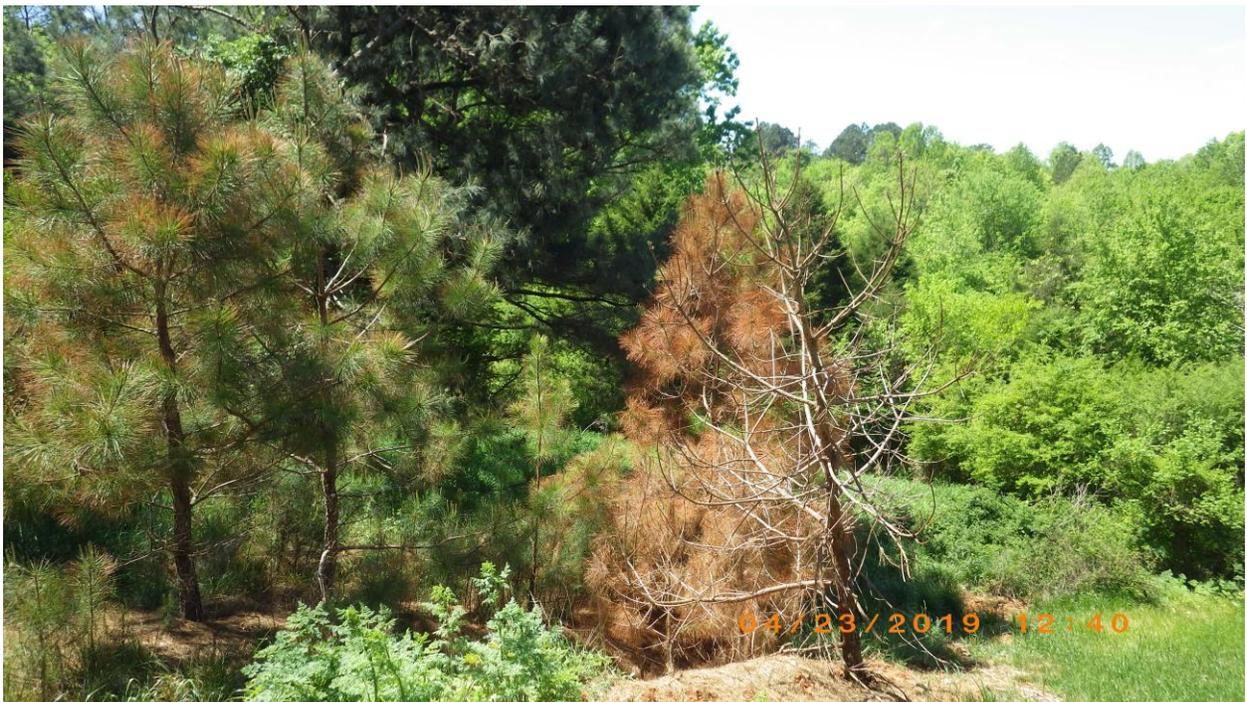
Leachate



Lower diversion swale.



Leachate seep and dying pines.



Dying pines from leachate seep



South slope vegetated.



Check dam.

## SECOND AMENDMENT TO SANITARY LANDFILL OPERATION AGREEMENT

THIS SECOND AMENDMENT TO SANITARY LANDFILL OPERATION AGREEMENT (this “Second Amendment”) is entered into as of the \_\_\_ day of June, 2019, by and between the **Loudon County Solid Waste Disposal Commission** (“Commission”), a public entity created by an Intergovernmental Agreement among the City of Lenoir City, the City of Loudon and Loudon County, Tennessee dated March 1, 1993, and **Santek Environmental, Inc.** (“Contractor”), a Tennessee corporation with its principal place of business at 650 25th Street N.W., Cleveland, Tennessee 37311.

### RECITALS

A. The parties have previously entered into a certain Sanitary Landfill Operation Agreement dated as of July 1, 2007, as amended by that certain First Amendment to Sanitary Operation Agreement dated as of March 1, 2015 (collectively, the “Agreement”), which concerns the operation of the Commission’s Subtitle D sanitary landfill known as the Matlock Bend Sanitary Landfill located on Highway 72 in Loudon, Tennessee (the “Landfill”).

B. The parties desire to modify and amend the terms of the Agreement pursuant to the following provisions.

NOW, THEREFORE, based upon the mutual promises of the parties and for other good and valuable consideration, the receipt and sufficiency of which are acknowledged, the parties agree as follows:

1. The Agreement is amended by adding Exhibit B to this Second Amendment as Exhibit B to the Agreement, and Section 3.1 of the Agreement is amended by adding the following provision to the end of the section:

In addition to the foregoing, Contractor agrees to submit to TDEC a major permit modification to the Landfill Permit (the “Major Permit Modification”), and the Commission agrees to timely support and cooperate with the Contractor’s efforts to obtain TDEC approval for the Major Permit Modification. The Major Permit Modification shall include the following modifications:

- (a) The permitted airspace will include a lateral expansion of approximately 26.6 acres, which brings the revised total footprint of the permitted landfill area to approximately 67.2 acres.
- (b) The maximum permitted elevation will be shown as 1,125 ft. msl.
- (c) A cell construction and grading plan substantially consistent with the plan prepared by the Contractor and shown in Exhibit B attached to this Agreement, which achieves a maximum constructed elevation of 1,093 ft. msl. At no time during the term of this Agreement shall the

constructed landfill grades exceed elevation of 1,093 ft. msl, unless authorized in writing by the Commission.

- (d) Any interim closure (“phased closure”) actions required to by TDEC during the term of this Agreement and prior to final Closure of the Landfill.

Contractor shall not be required to pursue such Major Permit Modification if it does not include the above modifications to the Landfill Permit.

2. Section 3.5 of the Agreement is amended herein by deleting the entirety of Section 3.5 clauses (a) and (b) of the Section, and renumbering clause (c) to clause (b), and substituting in lieu of existing clauses (a) and (b) the following:

**3.5 Agreement Period.**

- (a) This Agreement shall be effective upon execution by the parties hereto. The Contractor shall commence the Work on or before the Commencement Date, and this Agreement shall be for a term ending on June 30, 2027; provided, that upon the issuance of the Major Permit Modification, the term of this Agreement is automatically extended for an additional period ending on the date that all space of the Landfill reaches full permitted waste capacity; provided further, that in no event shall the extended term of this Agreement go beyond December 31, 2038, unless mutually agreed upon in writing by the Commission and Contractor.

3. The Agreement is hereby amended by attaching Exhibit C to the Second Amendment, and Section 5.6 of the Agreement is amended by inserting a new sentence to subsection (a) immediately after the existing first sentence, which new sentence reads as follows:

Commission shall take any and all actions necessary to provide Contractor access to and the right to use soils from the real property adjacent to the Landfill (the “Adjacent Property”) and more particularly identified on Exhibit C to this Agreement. The soils from the Adjacent Property will be provided by the Commission to the Contractor without charge or other cost or assessment. However, soils from the Adjacent Property shall be used only for cover and Landfill operations by the Contractor at the Landfill. Prior to obtaining soils from the Adjacent Property, the Contractor shall prepare a grading plan to show the approximate excavation sequence and an Erosion and Sediment Control (the “ES&C”) Plan for this area. The Contractor shall submit the proposed final grading topography, the ES&C Plan, and the interim and final vegetation plan to the Commission and TDEC for their approval, which shall not be unreasonably withheld or untimely given, before any grading and excavation commences on the Adjacent Property. The Contractor shall be responsible for obtaining all permits and for all costs related to operation and stabilization of the Adjacent Property.

4. Section 5.7 of the Agreement is hereby amended by inserting a new sentence to subsection (a) immediately after the existing first sentence, which new sentence reads as follows:

In addition to the foregoing efforts to litter and debris off the Landfill roads and Access Roads and reduce the generation of dust in the operation of the Landfill, Contractor shall propose a pressurized wheel wash system for approval by TDEC on or before the end of 2020; which is designed to meet the requirements of the Solid Waste Laws. Upon approval by TDEC, such wheel wash system shall be promptly implemented by Contractor.

5. Section 8.2 of the Agreement is amended herein by deleting the entirety of Section 8.2 of the Agreement and substituting in lieu thereof the following:

**8.2 Closure/Post-Closure Care of Existing Landfill**

(a) During the term of this Agreement and prior to the issuance of the Major Permit Modification, the Contractor shall only be responsible for compliance with any phased Closure requirements during the term of this Agreement and not the final Closure for the Landfill. For purposes of this Agreement, final Closure is the date on which all permissible air space of the Landfill has been permitted, filled to capacity, and the Landfill Permit expires, terminates or is otherwise surrendered. Assuming proper closure of all cells in the Landfill filled prior to the Commencement Date, the Contractor shall also be responsible for compliance with Post-Closure Care for all closed portions of the Landfill and the Closed Landfill during the term of this Agreement.

(b) During the term of this Agreement, upon and after the issuance of the Major Permit Modification, and subject to the terms of this Agreement, the Contractor shall be responsible for final Closure of the Landfill upon the end of the term of this Agreement due to the natural expiration of the operational life of the Landfill (i.e., utilization of all permitted airspace) or December 31, 2038, whichever occurs first. During the term of this Agreement, Contractor shall perform any phased Closure actions required prior to final Closure by TDEC pursuant to the Major Permit Modification.

(c) During the term of this Agreement, the Contractor shall be responsible for compliance with Post-Closure Care for the Phase I portion of the Landfill and all portions of the Landfill closed during the term of this Agreement pursuant to any TDEC-approved phased closure schedule

included in the Major Permit Modification. After the term of this Agreement, the Commission shall assume any and all responsibility for Post-Closure Care. Notwithstanding the foregoing, except as may be provided by Subsection 12.3(a), in no event shall Contractor be responsible for the investigation and/or remediation under any federal, state or local law, including without limitation the federal and state "superfund," hazardous waste, air pollution or water pollution laws.

6. Section 8.3 of the Agreement is amended herein by deleting the entirety of Section 8.3 of the Agreement and substituting in lieu thereof the following:

**8.3 Financial Assurances.** The Commission acknowledges that the financial assurance obligations under the Solid Waste Laws for Closure and Post-Closure Care of the Landfill are the responsibility of the Commission, which with the pledge of the County's share of state taxes is, and shall remain, in compliance with the state requirements relating to closure and Post-Closure Care security. Notwithstanding the Contractor's obligations under Section 8.2 of this Agreement, the Commission shall continue to meet such annual financial assurance obligations with the State during the term of this Agreement.

In consideration of such Commission obligations, the Contractor will provide the Commission directly with financial assurance for the performance by the Contractor of its final Closure obligations under Subsection 8.2(b) hereinabove ("Closure Assurance"); such Closure Assurance amount shall be determined by utilizing the TDEC approved closure costs (excluding Post-Closure Care costs). Contractor shall be entitled to select in its sole discretion the methods and/or instruments of financial assurance to be provided to the Commission to satisfy such financial assurance obligations, and Contractor may from time to time change and/or substitute such methods and/or instruments; provided, that the form of any financial assurance instrument provided from time to time by the Contractor to the Commission pursuant to this section shall be reasonably acceptable to the Commission. Notwithstanding the foregoing, the Commission agrees that the Contractor may meet its financial assurance requirements under this provision by providing the Commission with a performance bond from an insurance company authorized to transact business in the State of Tennessee. The performance bond shall be renewed annually, and in an amount equal to the TDEC approved closure costs (excluding Post-Closure Care costs) provided, that Contractor may replace such bond or other financial assurance mechanism more frequently than annually to reflect a reduction in such Closure costs as a result of any phased Closure activities performed by Contractor. In this case, the Contractor's Closure obligation would be the TDEC approved closure cost (excluding Post-Closure Care costs) divided by the number of acres represented in the such TDEC approved closure cost, multiplied by

the actual number of acres remaining to be closed. After the Contractor has performed any and/or all of its final Closure obligations for the Landfill under this Agreement, Contractor may immediately cancel or terminate any and all bonds, letters of credit or other similar instruments provided to the Commission by Contractor.

7. Section 10.6 of the Agreement is amended for Host Fees accruing on and after the first day of the month following the date of this Amendment, as follows:

**10.6 Host Fees.** The Contractor shall pay the Commission a per ton host fee (the "Host Fee") for all Solid Waste disposed of at the Landfill during the remaining term of this Agreement in a fixed-percentage amount equal to five and one-half percent (5.5%) of the tipping fees received by Contractor, provided, that the percentage rate of such Host Fee shall not change throughout the term of this Agreement, and provided further that the aggregate amount of each monthly payment to the Commission for Host Fees shall not be less than \$10,560.00. Host Fees shall be paid to the Commission on or before the 20<sup>th</sup> day of the following month for which they are due. Notwithstanding the foregoing, the Contractor shall not pay a Host Fee for waste disposed of at the Landfill pursuant to the Commission's Reserved Rights unless specifically provided for by a subsequent written agreement between the Commission and Contractor.

8. Except as amended herein, all other terms, covenants and conditions of the Agreement shall remain in full force and effect and are hereby reaffirmed by the parties.

IN WITNESS WHEREOF, the parties have caused this Amendment to be executed as of the date first written above.

**LOUDON COUNTY SOLID WASTE  
DISPOSAL COMMISSION**

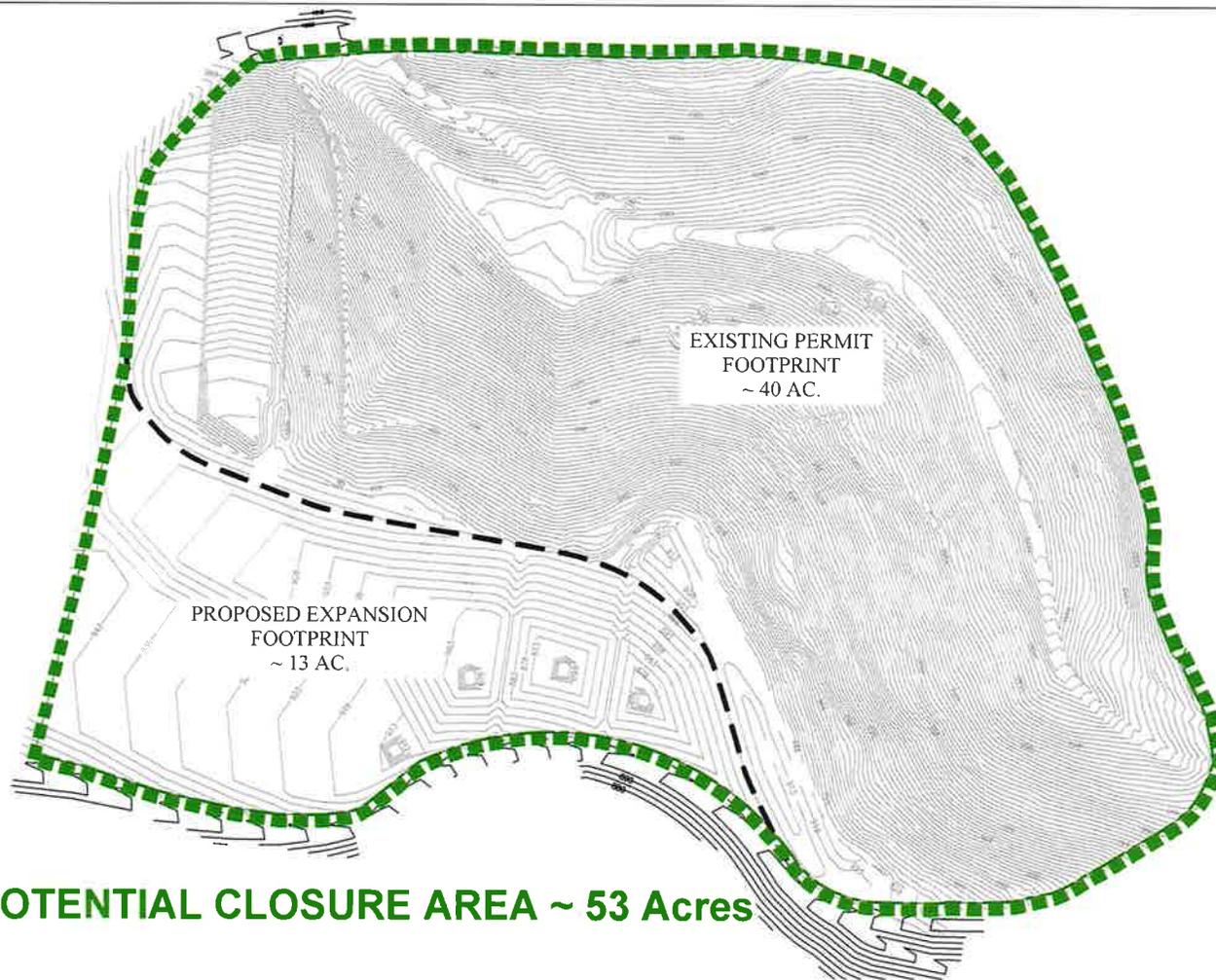
By: \_\_\_\_\_  
Steve M. Field, Chair

**SANTEK ENVIRONMENTAL, INC.**

By: \_\_\_\_\_  
Joseph T. Watts, President

**EXHIBIT B**

**[Attach Contractor's cell construction and grading plan]**



REV	DATE	DESCRIPTION	BY

MAJOR PERMIT MODIFICATION FOOTPRINT

MATLOCK BEND LANDFILL  
LOUDON COUNTY, TENNESSEE

**SANTEK**  
Waste Services

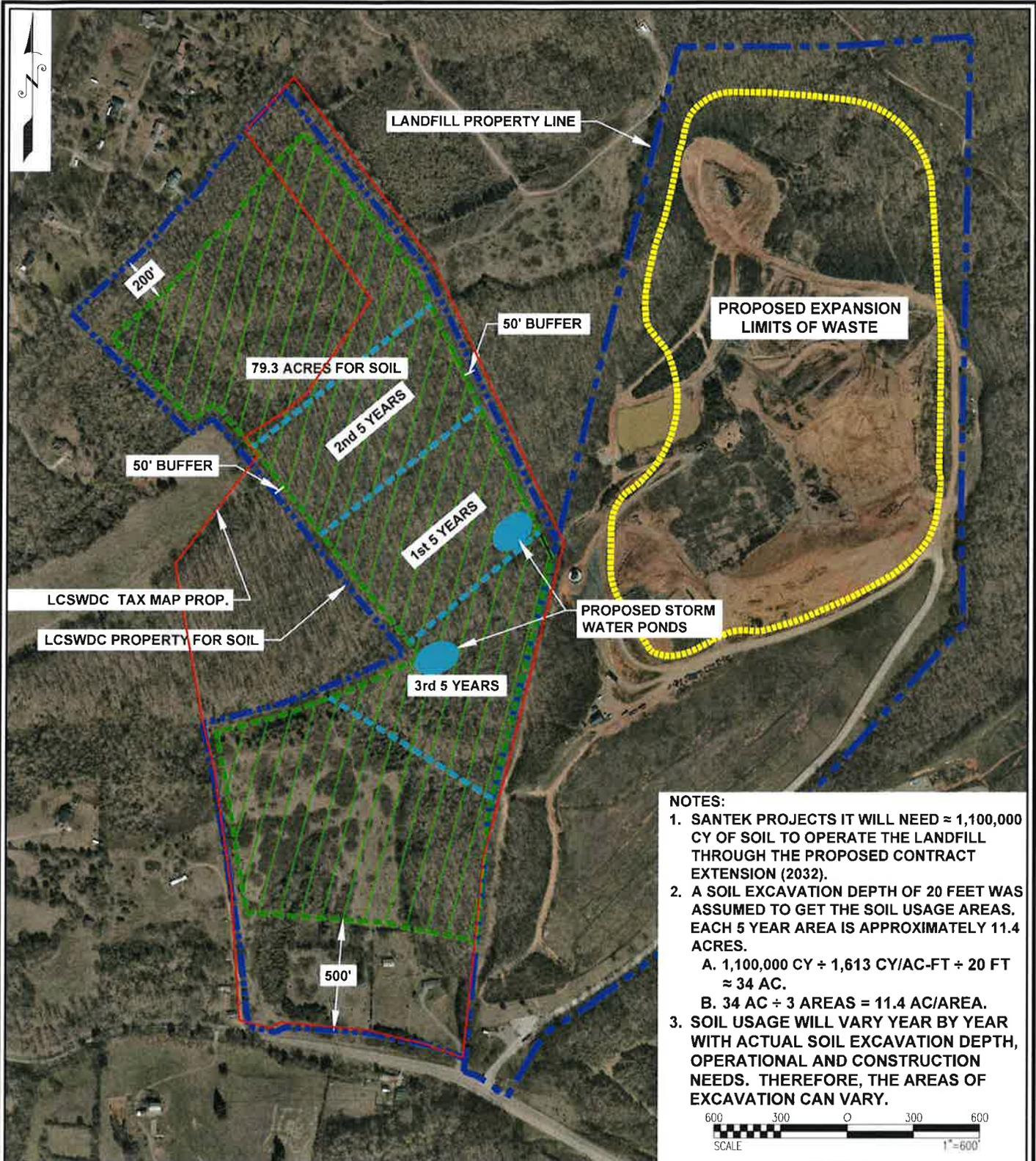
6050 WOODBURY SW  
CLEVELAND, OHIO 44130  
TEL: (216) 424-1000

DATE: 11/11/11  
DRAWN BY: [ ]  
CHECKED BY: [ ]  
APPROVED BY: [ ]  
SCALE: AS SHOWN

**B**  
EXHIBIT

**EXHIBIT C**

**[Description of Commission Soil Property]**



LCSWDC SOIL PROPERTY

MATLOCK BEND LANDFILL  
LOUDON COUNTY, TENNESSEE

DRAWN BY: JW	SCALE: AS NOTED	DATE: 6/12/18
CHECKED BY: RV	APPROVED BY: RV	



**SANTEK**  
Waste Services

650 25TH STREET NW  
SUITE 100  
CLEVELAND,  
TENNESSEE  
(423) 303-7101

C  
EXHIBIT



***LOUDON COUNTY SOLID WASTE  
DISPOSAL COMMISSION***



Loudon County Annex • 101 Mulberry Street, Suite 102  
Loudon, Tennessee 37774

June 17, 2019

County Mayor Rollen “Buddy” Bradshaw  
Loudon County  
100 River Road, Suite 106  
Loudon, TN 37774

Mayor Jeff Harris  
City of Loudon  
P.O. Box 189  
Loudon, TN 37774

Mayor Tony R. Aikens  
Lenoir City  
530 Highway 321 North  
Lenoir City, TN 37771

**Re: Loudon County Solid Waste Disposal Commission**

Dear Mayors:

As you know, Loudon County Solid Waste Disposal Commission (“LCSWDC”) has been negotiating with Santek Environmental, Inc. (“Santek”) to modify the terms of the Operation Agreement dated July 1, 2007 (the “Contract”) regarding the operation of the Matlock Bend Landfill (the “Landfill”). The purpose of this negotiation was to seek to obtain a more favorable financial arrangement with Santek in order to minimize LCSWDC’s long-term liability for expenses related to closure and post-closure care of the Landfill.

I am writing to provide you with another update regarding the status of the Contract modification process. After lengthy negotiation, LCSWDC has conditionally approved the basic terms of a Contract modification with Santek, subject to: the consensus of our Stakeholders; approval by the Tennessee Department of Environment and Conservation (“TDEC”) of a phased closure plan and permit modification for the Landfill; and execution of a formal Contract Amendment in acceptable form. As part of this process, LCSWDC representatives intend to brief our Stakeholders regarding the Contract modification proposal at the upcoming commission and council meetings. However, before doing so, LCSWDC wanted to provide our Stakeholders with a summary of the pending Contract modification proposal.

LCSWDC has been consulting with a third-party engineering firm regarding the terms of the proposed Contract modification. LCSWDC and its consultant now agree that the current proposal will substantially assist LCSWDC in minimizing its long-term liability for expenses related to closure and post-closure care of the Landfill. Attached hereto are the detailed terms of the proposal. However, the key terms of the proposal are summarized below for your convenience.

- 1.) LCSWDC will seek a permit modification from TDEC to laterally expand the Landfill footprint by 27 acres, resulting in a total landfill footprint of approximately 67 acres, which will be located entirely within LCSWDC's existing Landfill property.
- 2.) Of the 67-acre footprint, Santek will only construct and place waste on a 13-acre subset of the permitted airspace, for a total waste disposal footprint of 53 acres. The remaining 14-acre footprint will be permitted by TDEC to construct additional landfill disposal airspace, should the LCSWDC and its Stakeholders elect to continue operation of the Landfill.
- 3.) The Contract will be extended through the date that the expanded 13-acre Landfill footprint reaches full permitted waste capacity, but in no event shall extend the term of the Contract beyond December 31, 2038. (At current waste volumes, it is estimated that the expanded Landfill footprint will reach full capacity in 2036).
- 4.) Santek will raise the Host Fee from 4.0% to 5.5% (The Contract provides that the Host Fee is intended to cover ongoing operating expenses incurred by LCSWDC).
- 5.) The Security Fee will remain at the greater of \$1.00 per ton or 5% of tipping fees generated (The Contract provides that the Security Fee is intended to cover LCSWDC's ongoing closure and post closure care obligations).
- 6.) Santek will pay for closure of all 53 acres of the Landfill pursuant to a phased closure plan to be approved by TDEC.
- 7.) Santek will provide at its expense a performance bond guaranteeing to Loudon County the closure responsibility of all 53 acres of the Landfill. (Note: At this time it is anticipated that TDEC will only calculate future closure and post-closure liability based upon the 53 constructed acres and not the 67 permitted acres).
- 8.) Santek will provide sufficient funds in the accrued Security Fee during the extended Contract term to cover the post-closure care of all closed portions of the Landfill, which will extend to at least 30 years beyond the terms of the Contract
- 9.) Santek will install a pressurized wheel wash system at the Landfill to control the runoff of sediment and debris to the adjacent roadway.
- 10.) Santek will agree to a maximum Landfill elevation of 1,093 ft. mean sea level ("msl"), even though the Landfill is currently permitted to a maximum elevation of 1,125 ft. msl. The Landfill will maintain the maximum permitted elevation of 1,125 ft. msl but will not increase the elevation of 1,093 ft. msl without written authorization from the Stakeholders.

At the conclusion of the extended Contract term, LCSWDC will only be responsible for the post-closure care of the 53-acre Landfill. At this juncture, it is estimated that the post-closure care costs for the Landfill will be \$4,515,822. LCSWDC presently has the following accrued funds: 1.) Host Fee Funds of \$1,586,193 and 2.) Security Fee Funds of \$2,033,853. Assuming that LCSWDC's future accrued funds will be invested to garner 1% interest at a 2.3% inflation

rate (the present TDEC inflation rate), LCSWDC will attain the following total accrued funds at the end of the extended Contract term: 1.) Host Fee Funds of \$5,016,837 and 2.) Security Fee Funds of \$5,816,906. LCSWDC's estimated accrued funds at the end of the extended Contract term will be substantially greater than its post-closure care obligation for the Landfill and will leave LCSWDC with significant reserves to fund future operations or other projects.

LCSWDC believes that this Contract modification proposal will significantly reduce the long-term liability of LCSWDC and its Stakeholders and will put LCSWDC in the best position to succeed in the future. In addition, this proposal will give LCSWDC the financial flexibility to determine the future of the Landfill expansion based upon the needs and desires of the Stakeholders as opposed to strictly concerns with financial liability. This has been a long negotiation process, but we firmly believe that we have accomplished a great deal on behalf of LCSWDC and our Stakeholders.

We look forward to meeting with our Stakeholders in the near future to discuss the Contract modification proposal in more detail. Please let me know if you have any questions regarding this process in the interim.

Sincerely,

A handwritten signature in black ink, appearing to read "S. Field". The signature is fluid and cursive, with a large initial "S" and a distinct "Field" at the end.

Steve Field, Chairman of Loudon County  
Solid Waste Disposal Commission