OBG

PART OF RAMBOLL

2019 ANNUAL REPORT – FINAL REPORT

Landfill Inspection Report
Coldwater Road Landfill
Flint, Michigan
MID 005 356 860

RACER TRUST

Detroit, Michigan

February 2020

OBG

Part of Ramboll

FEBRUARY 25, 2020 | CLIENT # 15388 | PROJECT # 72202

Landfill Inspection
Coldwater Road Landfill
MID 005 356 860

Flint, Michigan

Prepared for: RACER Trust
Detroit, Michigan

CLIFFORD S. YANTZ
SENIOR HYDROGEOLOGIST
O'BRIEN & GERE ENGINEERS, INC., PART OF RAMBOLL

February 25, 2020

Mr. Jacob Runge
Environmental Engineer
Materials Management Division
Michigan Department of Environment, Great Lakes, and Energy
P.O. Box 30241
Lansing, Michigan 48909-7741

RE: 2019 Annual Landfill Inspection Report
Coldwater Road Landfill, Flint, Michigan
MID 005 356 860

FILE: 15388 /72202/rep

Dear **Mr. Runge**:

On behalf of Revitalizing Auto Communities Environmental Response Trust (RACER), O'Brien & Gere Engineers, Inc., part of Ramboll (OBG) is presenting this annual Landfill Inspection Report summarizing the 2019 Quarterly Post Closure Inspections at the hazardous waste landfill for the Coldwater Road Landfill facility in Flint, Michigan.

Each quarterly inspection event consisted of the following activities:

- A visual inspection of the landfill cap and berms
- A visual inspection of the leachate accumulation above ground storage tank (AST)
- A visual inspection of the site access roads
- A visual inspection of the site perimeter fencing and gates
- An inspection of the leachate collection system
- Testing of the leachate detection alarm system
- A summary of the monthly removal of liquids from the leak detection vaults
- A visual inspection of site drainage structures.

A summary of the inspections is outlined in the following sections and copies of the quarterly inspection reports are included as **Appendix A**. A Site Location Map (**Figure 1**), a Site Layout (**Figure 2**), and a 2019 Incident Location Map (**Figure 3**) are also included.

CAP AND LANDFILL BERMS

The cap and surrounding landfill berms were visually inspected each quarter for deep root penetration, burrowing animals, soil erosion, slope failures, and ponding water, including within the ditch and/or washouts.

The following is a summary of the issues encountered on the cap and berms during the 2019 quarterly inspections.

Several hundred woody-stemmed plants were removed from the landfill cap between March 2019 and December 2019.

Mole activity was observed during the 1st through 4th quarter inspections at Cell B, Cell D, and Cell E. The mole activity is noted on **Figure 3**. It was not confirmed whether the mole mounds observed were new activity or signs of previous activity. Mole traps were set along the trails where located.

One animal burrow was identified and closed in the 3rd quarter. The animal burrow was photographically documented (before and after repair), and the approximate size and configuration of the burrow was documented and included in the Quarterly Status Report.

The burrow was deemed inactive and filled in. The burrow was filled using methods approved by the Michigan Department of Environment, Great Lakes, and Energy (EGLE), which included measuring the approximate length (1.5 feet), depth (3 inches), and diameter (4 inches). No signs of liner damage were observed during the inspection and repair of the animal burrow. A log of burrow activity throughout the year is maintained at the landfill. The log contains information on the date that a burrow was identified, response activities, and the date the burrow was filled and seeded. The animal burrow located during the quarterly inspection is noted on **Figure 3**.

LEACHATE COLLECTION AST

The 15,000-gallon leachate accumulation AST is located in the containment/control building. An inspection of this AST system (tank, piping, containment) is completed and documented during each site visit by OBG and during quarterly inspections in accordance with the post-closure care plan (PCCP). No evidence of leakage was observed within the AST secondary containment area or the associated piping.

ACCESS ROADS

The landfill access and perimeter roads were inspected for sufficient gravel and proper drainage during the quarterly inspections.

During the 1st quarter and 4th quarter inspections the access road west and south of the ponds had areas of ponded water. The wet sections of road were avoided until the road was dry.

Due to the previous per- and polyfluoroalkyl substances (PFAS) investigations and delivery of borrow material for planed middle-pond berm construction, the perimeter access roads were rutted, and the grass was worn down. At the end of the berm construction the road will be repaired while equipment is onsite.

No other problems to the access roads were observed during 2019.

SITE PERIMETER FENCING AND GATES

During the 2nd quarter, 3rd quarter, and 4th quarter, one previously repaired hole along the west perimeter fence had been reopened. The hole was repaired during the site inspections **Figure 3**.

LEACHATE COLLECTION SYSTEM

The leachate collection system was inspected quarterly for visible signs of damage. System components inspected include the control panels for the sumps and the leak detection vaults, as well as the visible portions of the vault piping. No evidence of damage was observed for the aboveground components of the system. Additionally, no signs of erosion/washouts were noticed in the areas around the control panels and posts.

LEACHATE DETECTION ALARM SYSTEM

The PermAlert automated leak detection alarm was tested during each quarterly inspection. The alarm was found to be operating during each of the quarterly inspections.

VAULT LIQUID REMOVAL

The leak detection vaults were pumped out monthly during the year with the exception of the July 2019. Per the Post-Closure Care Plan, which was revised and approved on January 24, 2017, dewatering can occur on an every other month basis unless more than 300 gallons of liquid were removed from a vault during a dewatering event. If more than 300 gallons were removed from a vault, then that vault was dewatered the following month and continued to be dewatered on a monthly basis until less than 150 gallons were removed during a single dewatering event, after which dewatering for that vault reverts back to every other month. If three or more vaults had more than 300 gallons removed during a dewatering event, then the next monthly dewatering event included all the vaults. The volumes of liquid evacuated from each cell are provided in **Table 1** and were reported in the Quarterly Status Reports.

DRAINAGE INSPECTION

The perimeter of the landfill and berm, drainage trenches at the base of the landfill, the Remaining Materials Area (RMA, **Figure 2**), and the pond area were inspected for potential drainage problems. No drainage issues associated with the operation of the landfill were observed during the quarterly inspections for 2019.

This summary of the quarterly inspections fulfills the annual inspection reporting requirements for 2019. If you have any questions, feel free to contact me at (313) 333-0211.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC., Part of Ramboll

Clifford Scott Yantz

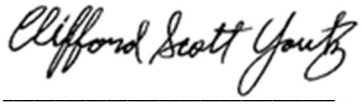
Clifford S. Yantz
Senior Hydrogeologist

ENCLOSURES:
Table 1 – Liquid Volumes Removed from LDS Vaults in 2019
Figure 1 – Site Location Map
Figure 2 – Site Layout
Figure 3 – 2019 Incident Location Map
Appendix A – Inspection Logs

cc: David Favero – RACER Trust
Kevin Schneider – OBG

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

On Behalf of RACER Trust



Clifford S. Yantz
Senior Hydrogeologist – O'Brien & Gere Engineers, Inc., Part of Ramboll

Agent for RACER Trust

Date: February 25, 2020

cc: file

TABLES

TABLE 1

RACER Trust - Coldwater Road Landfill Facility

Liquid Volumes Removed from LDS Vaults in 2019

Date 2019	*VAULT A*	*VAULT B*	*VAULT C*	*VAULT D*	*VAULT E*	*VAULT F*	*TOTAL LDS GALLONS*
16-Jan-19	113*	536*	49*	62*	25*	10*	795
12-Feb-19	--	153	--	--	--	--	153
12-Mar-19	65*	93*	37*	52*	1,001*	213*	1,461
23-Apr-19	49	301	43	5	11	3	412
31-May-19	--	293	--	--	--	--	293
25-Jun-19	235*	267*	57*	158*	13*	0*	730
Jul-19	--	--	--	--	--	--	-
13-Aug-19	329*	340*	115*	494*	1,578*	4*	2,860
17-Sep-19	123	103	101	722	719	7	1,775
16-Oct-19	106	169	67	96	331	10	779
20-Nov-19	--	--	--	--	580	--	580
10-Dec-19	152*	1,011*	59*	81*	387*	9*	1,699
YEAR END TOTAL	**1,172**	**3,266**	**528**	**1,670**	**4,645**	**256**	**11,537**

Notes

Liquid volumes in gallons

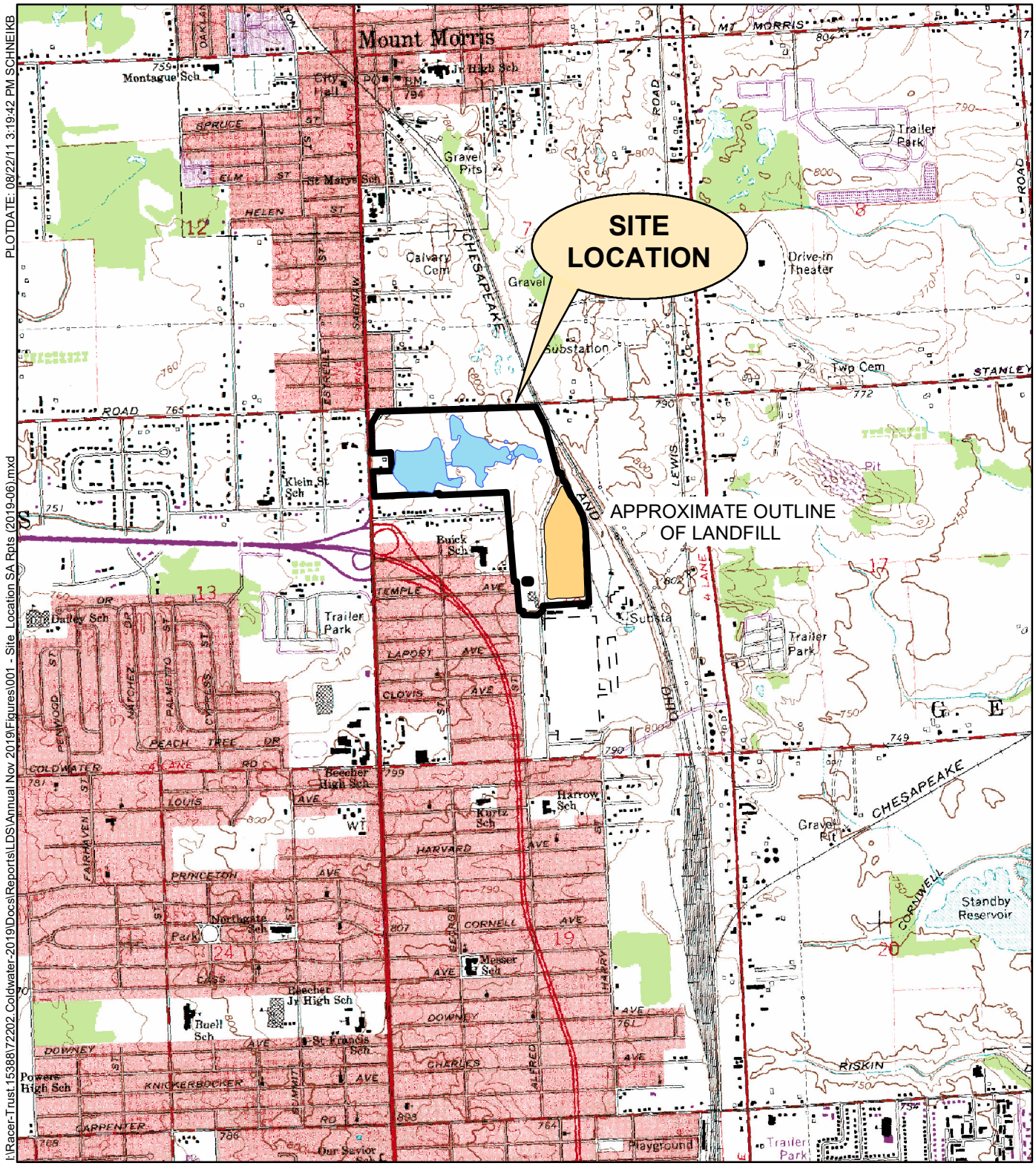
LDS - Leak Detection System

-- Vault not dewatered

* Indicates 2 month totals

Pre the revised Post Closure Care Plan October 2014, dewatering occurred on an every other month basis unless more than 300 gallons of liquid were removed from a vault during a dewatering event. If more than 300 gallons were removed from a vault, then that vault was dewatered the following month and continued to be dewatered on a monthly basis until less than 150 gallons were removed during a single dewatering event, after which dewatering for that vault reverted back to every other month. If three or more vaults had more than 300 gallons removed during a dewatering event, then the next monthly dewatering event included all the vaults.

FIGURES



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PLOTDATE: 08/22/11 3:19:42 PM SCHNEIKB

RACER TRUST
COLDWATER ROAD LANDFILL FACILITY
FLINT, MICHIGAN

SITE LOCATION MAP

15388/72202/001
JANUARY 2020

O'BRIEN & GERE ENGINEERS, INC.

2/13/2020 11:49:10 AM

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N

LEGEND

- LEACHATE COLLECTION SUMP
- ACCESS PORT FOR LEAK DETECTION VAULT
- PROPERTY BOUNDARY

RACER TRUST
COLDWATER ROAD
FLINT, MICHIGAN

SITE LAYOUT MAP

0 150 300 600
Feet

FILE_NO._72202
DATE FEBRUARY 2020

O'BRIEN & GERE ENGINEERS, INC.

N

LEGEND

- LEACHATE COLLECTION SUMP
- ACCESS PORT FOR LEAK DETECTION VAULT
- FENCE REPAIR
- ANIMAL BURROW LOCATION (3rd Quarter 2019)
- MOLE ACTIVITY
- FLOODED ROADWAY
- SOIL STOCKPILE AREA
- PROPERTY BOUNDARY

RACER TRUST
COLDWATER ROAD
FLINT, MICHIGAN

2019 INCIDENT LOCATION MAP

0 150 300 600
Feet

FILE_NO._72202
DATE FEBRUARY 2020

O'BRIEN & GERE ENGINEERS, INC.

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APPENDIX A

Inspection Logs

Quarterly Post Closure Inspection Log Sheet

Coldwater Road Landfill Site – Operations and Maintenance
Flint, Michigan
Project No. 50137

Inspector's Name/Title Kevin Schneider Scientist II

Inspector's Signature/Date/Time 3/28/19 - 3/29/19

Cap and Berm

Inspect the landfill cap and berms for burrowing animals, soil erosion, slope failures, ponding, washouts, and liner damage/exposure. Indicate the presence or absence of each item. Note identified issues on an attached drawing.

Area of Inspection	Animal Burrows?	Soil Erosion	Slope Failures?	Ponding?	Washouts?	Liner damage or exposure?	If yes to any, describe issue, location, and actions taken	Date Corrected
Cell A	No	No	No	No	No	No		
Cell B	No	No	No	No	No	No	Bland 63 areas to watch, could have rare areas of veg	
Cell C	No	No	No	No	No	No		
Cell D	No	No	No	No	No	No		
Cell E	No	No	No	No	No	No		
Cell F	No	No	No	No	No	No		
Berms	No	No	No	No	No	No		

Woody Plant Removal Activities

Summarize monthly activities: Pulled approx dozen woody plants (coniferous) during inspection.

Leachate Tank Storage

Inspect for evidence of leakage, and presence of drums, sandbags, shovels at each leachate tank storage location.

Tank

			If yes to any, describe issue, location, and actions taken	Date Corrected
Cracks or holes observed in tank?	No X	Yes___		
Liquid dripping or running from tank?	No X	Yes___		
Staining observed on the tank surface?	No X	Yes___		

Piping

			If yes to any, describe issue, location, and actions taken	Date Corrected
Is piping sagging, cracked or punctured?	No X	Yes___		
Liquid dripping or running from piping?	No X	Yes___		
Is the tank discharge valve closed and locked?	No___	Yes X		
Staining observed on the piping surface?	No X	Yes___		

Emergency Response

			If yes to any, describe issue, location, and actions taken	Date Corrected
Are drums present in accumulation building?	No___	Yes X		
Are sandbags present in accumulation building?	No___	Yes X		
Are shovels present in accumulation building?	No___	Yes X		

Vegetation

Inspect landfill cap and berm for areas with sparse vegetation, deep-rooted plants and proper height around equipment and access roads. Describe any identified issues and note on an attached drawing. If no issues are found, indicate "none" in the appropriate box.

Cell	Areas with sparse vegetation present?	Deep-rooted plants present?	Areas around building and equipment mowed?	Access roads mowed and in good condition?	If yes, describe issue, and actions taken	Date Corrected
A	No	No	No Plan to Mow during 2nd quarter	No Plan to Mow during 2nd quarter		
B	Potential areas of sparse veg in B1 and B3	No	2nd quarter		will seed during growing season if needed	
C	No	No				
D	No	No				
E	No	No				
F	No	No				
Berms	No	No				

Access Roads

Inspect for sufficient gravel and proper drainage. Note identified issues on an attached drawing.

Area	Sufficient gravel present?	Proper drainage present?	If no, describe issue, and actions taken	Date Corrected
Roads located approx. west of landfill	wet			
Roads located approx. east of landfill	yes	yes		
Roads located approx. north of wetlands	yes	yes		
Roads located approx. south of wetlands	wet Rutted	wet Rutted		
Roads located approx. west of wetlands	wet Rutted	wet Rutted		
Roads located approx. east of wetlands	yes	wet Rutted		

ite Perimeter Fence

Inspect all perimeter fencing and gates for damage or unauthorized entry, and proper warning signs. Note identified issues on an attached drawing.

Area	Any damage present?	Signs of unauthorized entry?	Broken or damaged locks on gates?	"Tresspassing Prohibited" and "Private Property" Signs Posted?	If yes to any, describe issue, and actions taken	Date Corrected
Fences along north property line	NO	NO	NO	yes		
Fences along south property line	NO	NO	NO	yes		
Fences along west property line	NO	NO	NO	yes		
Fences along east property line	NO	NO	NO	yes		

Leachate Collection System

Conduct the alarm test, cable test and battery test on a yearly basis as outlined in Section 4 of the post Closure Care Plan. Inspect the system panel boxes for visible signs of damage.

Alarm Test

1. Disconnect the sensor cable.
2. Reconnect the sensor cable. Alarm will reset.

Cable Test

1. Wet a short length of cable to activate the alarm by wetting a section of the cable stored in the containment vault.
2. Dry the cable after the test.

Alarm Test		Cable Test	
Did the system show a fault in the cable?	Was the alarm activated?	Was the alarm activated?	Any damage noted to system panel boxes?
			No

Battery Test

1. Turn the power off.
2. Remove the processor card.
3. Remove the battery jumper.
4. Is the voltage across the terminals is < 3.6 VDC?
5. If yes, replace the battery.

Describe any issues and actions taken	Date Corrected

Remaining Materials Area

Inspect the soil cover for deep root penetration, burrowing animals, soil erosion, ponding of water and slope failures. Note problems on an attached drawing.

Area of Inspection	Animal Burrows?	Soil Erosion	Slope Failures?	Ponding?	Washouts?	If yes to any, describe issue, location, and actions taken	Date Corrected
RMA	No	No	No	No	No		

Drainage Inspections

Inspect the perimeter of the landfill and berm, drainage trenches at the base of the landfill, RMA and wetlands area for potential drainage problems. Check culverts around landfill, western drainage swale and north landfill catch basin for blockage.

Area Inspected	Drainage problem or blockage observed?	Location (note on figure)	Description	Corrective Actions	Date Corrected
Perimeter of landfill and berm	No				
Drainage trenches at base of landfill	Water Ponded due to reconfiguration of storm sewer/surface water/Berms		@ NW end		
RMA	No				
Wetlands area	additional water Ponded due to recontg of Storm sewer/surface water/Berms				
Culverts around landfill	No				
Western drainage swale	No				
North landfill catch basin	water ponded due to recontg of storm sewer/surface water/berms				

1st Qrt 2019

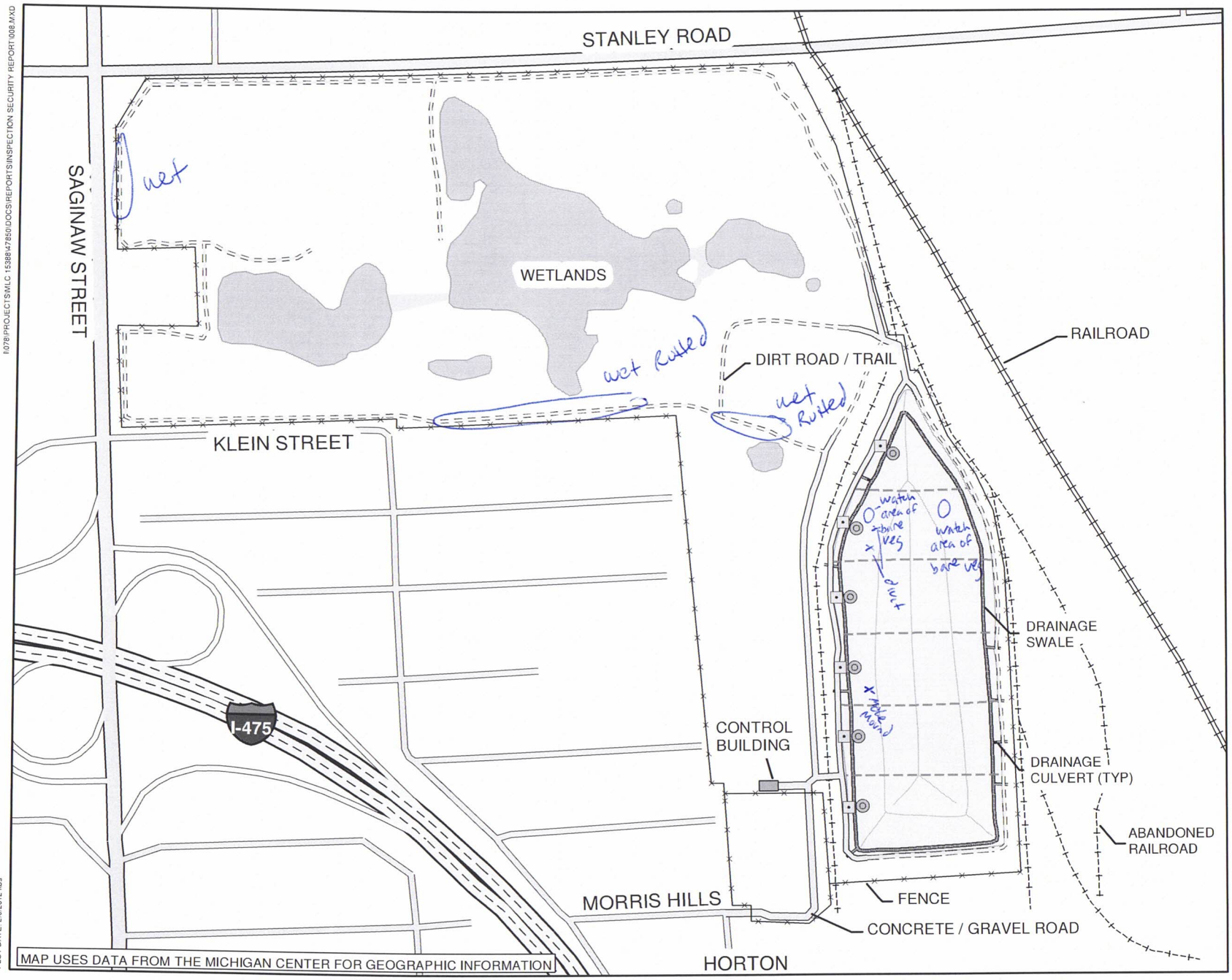

FIGURE 2

N

LEGEND

- LEACHATE COLLECTION SUMP
- ACCESS PORT FOR LEAK DETECTION VAULT

RACER TRUST
COLDWATER ROAD
LANDFILL FACILITY
FLINT, MICHIGAN

SITE LAYOUT

0 140 280 420 560
Feet

FEBRUARY 2012
15388/47850-008

O'BRIEN & GERE ENGINEERS, INC.

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PLOT DATE: 2/6/2012 kbs

Quarterly Post Closure Inspection Log Sheet

Coldwater Road Landfill Site – Operations and Maintenance
Flint, Michigan
Project No. 39196

Inspector's Name/Title Clifford S. Yantz

Inspector's Signature/Date/Time Clifford Yantz / 6/28/19 / 2:45 pm

Cap and Berm

Inspect the landfill cap and berms for burrowing animals, soil erosion, slope failures, ponding, washouts, and liner damage/exposure. Indicate the presence or absence of each item. Note identified issues on an attached drawing.

Area of Inspection	Animal Burrows?	Soil Erosion	Slope Failures?	Ponding?	Washouts?	Liner damage or exposure?	If yes to any, describe issue, location, and actions taken
Cell A	No	None	None	None	None	None	Landfill is very well vegetated
Cell B	↓	↓	↓	↓	↓	↓	
Cell C							
Cell D							
Cell E							
Cell F							
Berms							

Woody Plant Removal Activities

Summarize monthly activities:

Trained both Dylan & Will how to do tree "pulling"
- They will begin in earnest next week (first week in July).
- Some trees, but generally in good shape

Leachate Tank Storage

Inspect for evidence of leakange, and presence of drums, sandbags, shovels at each leachate tank storage location.

Tank

Cracks or holes observed in tank?	No X	Yes___
Liquid dripping or running from tank?	No X	Yes___
Staining observed on the tank surface?	No X	Yes___

Piping

Is piping sagging, cracked or punctured?	No X	Yes___
Liquid dripping or running from piping?	No X	Yes___
Is the tank discharge valve closed and locked?	No ~~X~~	Yes X
Staining observed on the piping surface?	No X	Yes___

Emergency Response

Are drums present in accumulation building?	No___	Yes X
Are sandbags present in accumulation building?	No___	Yes X
Are shovels present in accumulation building?	No___	Yes X

GAC Drums for PFAS removal system also in building

Vegetation

Inspect landfill cap and berm for areas with sparse vegetation, deep-rooted plants and proper height around equipment and access roads. Describe any identified issues and note on an attached drawing. If no issues are found, indicate "none" in the appropriate box.

Cell	Areas with sparse vegetation present?	Deep-rooted plants present?	Areas around building and equipment mowed?	Access roads mowed and in good condition?
A	No	Yes - some but generally well controlled	Yes	mowed and around landfill Generally in good shape, but in rest of site area roads are not in great shape due to Berm construction and investigation activities we will repair roads once next berm construction activities have been completed.
B	↓	↓	↓	
C				
D				
E				
F				
Berms				

Access Roads

Inspect for sufficient gravel and proper drainage. Note identified issues on an attached drawing.

Area	Sufficient gravel present?	Proper drainage present?	If no, describe
Roads located approx. west of landfill	Yes	generally yes	
Roads located approx. east of landfill	Yes	few areas where puddles form.	
Roads located approx. north of wetlands	roads in good shape		
Roads located approx. south of wetlands	No - roads rutted up from construction activities	will repair once all construction activities have been completed.	← see
Roads located approx. west of wetlands	No →		← see
Roads located approx. east of wetlands	No ←		← see

Site Perimeter Fence

Inspect all perimeter fencing and gates for damage or unauthorized entry, and proper warning signs. Note identified issues on an attached drawing.

Area	Any damage present?	Signs of unauthorized entry?	Broken or damaged locks on gates?	"Tresspassing Prohibited" and "Private Property" Signs Posted?
Fences along north property line	No	No	No	Yes
Fences along south property line	No	↓	↓	↓
Fences along west property line	No, except for one opening closed near (100' south of SBP-4			
Fences along east property line	No			

Leachate Collection System

Conduct the alarm test,cable test and battery test on a yearly basis as outlined in Section 4 of the post Closure Care Plan. Inspect the system panel boxes for visible signs of damage.

Alarm Test

1. Disconnect the sensor cable.
2. Reconnect the sensor cable. Alarm will reset.

Cable Test

1. Wet a short length of cable to activate the alarm by wetting a section of the cable stored in the containment vault.
2. Dry the cable after the test.

Alarm Test		Cable Test	
Did the system show a fault in the cable?	Was the alarm activated?	Was the alarm activated?	Any damage noted to system panel boxes?
~~No~~	—	—	No

Battery Test

1. Turn the power off.
2. Remove the processor card.
3. Remove the battery jumper.
4. Is the voltage across the terminals is < 3.6 VDC?
5. If yes, replace the battery.

Remaining Materials Area

Inspect the soil cover for deep root penetration, burrowing animals, soil erosion, ponding of water and slope failures. Note problems on an attached drawing.

Area of Inspection	Animal Burrows?	Soil Erosion	Slope Failures?	Ponding?	Washouts?	If yes to any, describe issue, location, and actions taken
RMA	None noted	only along road and traffic areas	No	Yes in area where drainage swale filled in to allow berm construction	No	a culvert will be added to allow water to flow across haul road once berm construction complete

Drainage Inspections

Inspect the perimeter of the landfill and berm, drainage trenches at the base of the landfill, RMA and wetlands area for potential drainage problems. Check culverts around landfill, western drainage swale and north landfill catch basin for blockage.

Area Inspected	Drainage problem or blockage observed?	Location (note on figure)	Description	Corrective Actions
Perimeter of landfill and berm	No except as previously noted			will repair any damage after berm construction completed.
Drainage trenches at base of landfill				
RMA				
Wetlands area				
Culverts around landfill				
Western drainage swale				
North landfill catch basin				

Quarterly Post Closure Inspection Log Sheet

Coldwater Road Landfill Site – Operations and Maintenance
Flint, Michigan
Project No. 72202

Inspector's Name/Title Kevin Schneider Scientist II

Inspector's Signature/Date/Time [signature] 9/24/19

9/11/19 9/17/19

Cap and Berm

Inspect the landfill cap and berms for burrowing animals, soil erosion, slope failures, ponding, washouts, and liner damage/exposure. Indicate the presence or absence of each item. Note identified issues on an attached drawing.

Area of Inspection	Animal Burrows?	Soil Erosion	Slope Failures?	Ponding?	Washouts?	Liner damage or exposure?	If yes to any, describe issue, location, and actions taken	Date Corrected
Cell A	Yes	No	No	No	No	No	one burrow on slope A1. filled in after found inactive	8/21/19
Cell B	No	No	No	No	No	No		
Cell C	No	No	No	No	No	No	Landfill very well vegetated	
Cell D	No	No	No	No	No	No		
Cell E	No	No	No	No	No	No		
Cell F	No	No	No	No	No	No		
Berms	No	No	No	No	No	No		

Woody Plant Removal Activities

Summarize monthly activities: tree "pulling" was conducted during a few events throughout the quarter

Leachate Tank Storage

Inspect for evidence of leakage, and presence of drums, sandbags, shovels at each leachate tank storage location.

Tank

Cracks or holes observed in tank?	No X	Yes ___
Liquid dripping or running from tank?	No X	Yes ___
Staining observed on the tank surface?	No X	Yes ___

If yes to any, describe issue, location, and actions taken	Date Corrected

Piping

Is piping sagging, cracked or punctured?	No X	Yes ___
Liquid dripping or running from piping?	No X	Yes ___
Is the tank discharge valve open?	No X	Yes ___
Staining observed on the piping surface?	No X	Yes ___

If yes to any, describe issue, location, and actions taken	Date Corrected

Emergency Response

Are drums present in accumulation building?	No ___	Yes X
Are sandbags present in accumulation building?	No ___	Yes X
Are shovels present in accumulation building?	No ___	Yes X

If no to any, describe issue, location, and actions taken	Date Corrected

Vegetation

Inspect landfill cap and berm for areas with sparse vegetation, deep-rooted plants and proper height around equipment and access roads. Describe any identified issues and note on an attached drawing. If no issues are found, indicate "none" in the appropriate box.

Cell	Areas with sparse vegetation present?	Deep-rooted plants present?	Do areas around building and equipment need to be mowed?	Do access roads need to be mowed?	If yes, describe issue, and actions taken	Date Corrected
A	No	Yes, a few	Yes	Yes	grass was mowed during the second quarter and is scheduled to be cut during the fourth quarter	
B						
C						
D						
E						
F						
Berms						

Access Roads

Inspect for sufficient gravel and proper drainage. Note identified issues on an attached drawing.

Area	Sufficient gravel present?	Proper drainage present?	If no, describe issue, and actions taken	Date Corrected
Roads located approx. west of landfill	Yes	Yes		
Roads located approx. east of landfill	Yes	Yes		
Roads located approx. north of wetlands	Yes	Yes		
Roads located approx. south of wetlands	No	rutted from onsite construction	Roads will be repaired after berm construction	
Roads located approx. west of wetlands	No			
Roads located approx. east of wetlands	No			

Site Perimeter Fence

Inspect all perimeter fencing and gates for damage or unauthorized entry, and proper warning signs. Note identified issues on an attached drawing.

Area	Any damage present?	Signs of unauthorized entry?	Broken or damaged locks on gates?	"Tresspassing Prohibited" and "Private Property" Signs Missing?	If yes to any, describe issue, and actions taken	Date Corrected
Fences along north property line	No	No	No	No		
Fences along south property line	No	No	No	No		
Fences along west property line	one opening that was previously repaired	No	No	No		fixed openings 9/24/19
Fences along east property line	No	No	No	No		

Leachate Collection System

Conduct the alarm test, cable test and battery test on a yearly basis as outlined in Section 4 of the post Closure Care Plan. Inspect the system panel boxes for visible signs of damage.

Alarm Test

1. Disconnect the sensor cable.
2. Reconnect the sensor cable. Alarm will reset.

Cable Test

1. Wet a short length of cable to activate the alarm by wetting a section of the cable stored in the containment vault.
2. Dry the cable after the test.

Alarm Test		Cable Test	
Did the system show a fault in the cable?	Was the alarm activated?	Was the alarm activated?	Any damage noted to system panel boxes?
			NO

Battery Test

1. Turn the power off.
2. Remove the processor card.
3. Remove the battery jumper.
4. Is the voltage across the terminals is < 3.6 VDC?
5. If yes, replace the battery.

Describe any issues and actions taken	Date Corrected

Remaining Materials Area

Inspect the soil cover for deep root penetration, burrowing animals, soil erosion, ponding of water and slope failures. Note problems on an attached drawing.

Area of Inspection	Animal Burrows?	Soil Erosion	Slope Failures?	Ponding?	Washouts?	If yes to any, describe issue, location, and actions taken	Date Corrected
RMA	NO	Some along road	NO	Yes along road through RMA	NO	area of RMA has been leveled and is being used to stockpile soil for Berm construction	

Drainage Inspections

Inspect the perimeter of the landfill and berm, drainage trenches at the base of the landfill, RMA and wetlands area for potential drainage problems. Check culverts around landfill, western drainage swale and north landfill catch basin for blockage.

Area Inspected	Drainage problem or blockage observed?	Location (note on figure)	Description	Corrective Actions	Date Corrected
Perimeter of landfill and berm	NONE			Will Repair any damage after	
Drainage trenches at base of landfill				Berm construction	
RMA					
Wetlands area					
Culverts around landfill					
Western drainage swale					
North landfill catch basin					

9/11/19 / 9/17/19 / 9/24/19

FIGURE 2

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LEGEND

- LEACHATE COLLECTION SUMP
- ACCESS PORT FOR LEAK DETECTION VAULT

RACER TRUST
COLDWATER ROAD
LANDFILL FACILITY
FLINT, MICHIGAN

SITE LAYOUT

0 140 280 420 560
Feet

FEBRUARY 2012
15388/47850-008

O'BRIEN & GERE ENGINEERS, INC

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PLOT DATE: 2/6/2012 kds

Quarterly Post Closure Inspection Log Sheet

Coldwater Road Landfill Site – Operations and Maintenance
Flint, Michigan
Project No. 72202

Inspector's Name/Title Kevin Schneider Scientist II

Inspector's Signature/Date/Time K Schn 12/31/19

Cap and Berm

Inspect the landfill cap and berms for burrowing animals, soil erosion, slope failures, ponding, washouts, and liner damage/exposure. Indicate the presence or absence of each item. Note identified issues on an attached drawing.

Area of Inspection	Animal Burrows?	Soil Erosion	Slope Failures?	Ponding?	Washouts?	Liner damage or exposure?	If yes to any, describe issue, location, and actions taken	Date Corrected
Cell A	No	No	No	No	No	No		
Cell B	Mole mounds cell B1	No	No	No	No	No		
Cell C	No	No	No	No	No	No		
Cell D	Mole mounds cell D1	No	No	No	No	No		
Cell E	Mole mounds cell E1	No	No	No	No	No		
Cell F	No	No	No	No	No	No		
Berms	No	No	No	No	No	No		

Woody Plant Removal Activities

Summarize monthly activities:

tree pulling was conducted during the quarter
landfill very well vegetated

Leachate Tank Storage

Inspect for evidence of leakage, and presence of drums, sandbags, shovels at each leachate tank storage location.

Tank

			If yes to any, describe issue, location, and actions taken	Date Corrected
Cracks or holes observed in tank?	No X	Yes___		
Liquid dripping or running from tank?	No X	Yes___		
Staining observed on the tank surface?	No X	Yes___		

Piping

			If yes to any, describe issue, location, and actions taken	Date Corrected
Is piping sagging, cracked or punctured?	No X	Yes___		
Liquid dripping or running from piping?	No X	Yes___		
Is the tank discharge valve open?	No X	Yes___		
Staining observed on the piping surface?	No X	Yes___		

Emergency Response

			If no to any, describe issue, location, and actions taken	Date Corrected
Are drums present in accumulation building?	No___	Yes X		
Are sandbags present in accumulation building?	No___	Yes X		
Are shovels present in accumulation building?	No___	Yes X		

Vegetation

Inspect landfill cap and berm for areas with sparse vegetation, deep-rooted plants and proper height around equipment and access roads. Describe any identified issues and note on an attached drawing. If no issues are found, indicate "none" in the appropriate box.

Cell	Areas with sparse vegetation present?	Deep-rooted plants present?	Do areas around building and equipment need to be mowed?	Do access roads need to be mowed?	If yes, describe issue, and actions taken	Date Corrected
A	No	No	Yes	Yes	Grass will need to be mowed again during next year growing season	
B			grass was last mowed during second quarter	grass was last mowed during second quarter		
C						
D						
E						
F						

Berms	No	No				

Access Roads

Inspect for sufficient gravel and proper drainage. Note identified issues on an attached drawing.

Area	Sufficient gravel present?	Proper drainage present?	If no, describe issue, and actions taken	Date Corrected
Roads located approx. west of landfill				
Roads located approx. east of landfill				
Roads located approx. north of wetlands				
Roads located approx. south of wetlands				
Roads located approx. west of wetlands				
Roads located approx. east of wetlands				

Site Perimeter Fence

Inspect all perimeter fencing and gates for damage or unauthorized entry, and proper warning signs. Note identified issues on an attached drawing.

Area	Any damage present?	Signs of unauthorized entry?	Broken or damaged locks on gates?	"Tresspassing Prohibited" and "Private Property" Signs Missing?	If yes to any, describe issue, and actions taken	Date Corrected
Fences along north property line						
Fences along south property line						
Fences along west property line						
Fences along east property line						

Leachate Collection System

Conduct the alarm test, cable test and battery test on a yearly basis as outlined in Section 4 of the post Closure Care Plan. Inspect the system panel boxes for visible signs of damage.

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1. Wet a short length of cable to activate the alarm by wetting a section of the cable stored in the containment vault.
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Alarm Test		Cable Test	
Did the system show a fault in the cable?	Was the alarm activated?	Was the alarm activated?	Any damage noted to system panel boxes?
			NO

Battery Test

1. Turn the power off.
2. Remove the processor card.
3. Remove the battery jumper.
4. Is the voltage across the terminals is < 3.6 VDC?
5. If yes, replace the battery.

Describe any issues and actions taken	Date Corrected

Remaining Materials Area

Inspect the soil cover for deep root penetration, burrowing animals, soil erosion, ponding of water and slope failures. Note problems on an attached drawing.

Area of Inspection	Animal Burrows?	Soil Erosion	Slope Failures?	Ponding?	Washouts?	If yes to any, describe issue, location, and actions taken	Date Corrected
RMA	None noted	Some along Road due to traffic	NO	yes near Road	NO	area of RMA has been leveled and being used for stockpiling of soil for Berm Construction area will be Repaired after berm Construction	

Drainage Inspections

Inspect the perimeter of the landfill and berm, drainage trenches at the base of the landfill, RMA and wetlands area for potential drainage problems. Check culverts around landfill, western drainage swale and north landfill catch basin for blockage.

Area Inspected	Drainage problem or blockage observed?	Location (note on figure)	Description	Corrective Actions	Date Corrected
Perimeter of landfill and berm	NONE				
Drainage trenches at base of landfill	NONE				
RMA	yes flooded road				
Wetlands area	yes flooded road				
Culverts around landfill	NONE				
Western drainage swale	NONE				
North landfill catch basin	NONE				

Due to the modications made to keep stormwater from going off site there are more areas where water has ponded. The drainage issues are being address with the construction of the berm

4th Quarter 2019

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PLOT DATE: 2/6/2012 rds

FIGURE 2

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- LEACHATE COLLECTION SUMP
- ACCESS PORT FOR LEAK DETECTION VAULT

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COLDWATER ROAD
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