

SCS ENGINEERS, P.C.

March 7, 2011
File No. 02201314.28

Mr. John Murray, P.E.
NCDENR - Division of Waste Management
Solid Waste Section - Permitting Branch
Mooresville Regional Office
610 East Center Avenue
Mooresville, North Carolina 28115
John.Murray@ncmail.net

Subject: Phase 3, Cell 2I Construction
Leachate Collection Piping Cleaning and CCTV Inspection Documentation
Charlotte Motor Speedway (CMS) V MSW Landfill (Permit Number 13-04)

Dear Mr. Murray:

As part of the landfill cell 2I construction, the contractor Earnhardt Grading employed Jetclean America to complete high pressure water jetting and closed-circuit televised (CCTV) inspection of the cell 2I constructed leachate collection piping. A summary of work performed and results from the high pressure water jetting and closed-circuit televised (CCTV) inspection is outlined in the attached report from Jetclean America dated February 2011. Based on information presented in the report no defects or obstructions were observed in the leachate collection piping.

In the report location CO 1 is the leachate collection pipe that runs to the western leachate collection sump, location CO 2 is the leachate collection pipe that runs to the eastern sump, and location CO 3 is the leachate collection pipe that runs along the interior toe of the perimeter berm to the eastern sump. In addition, location Sump 1A and 1B is the western riser pipes and location Sump 2A and 2B is the eastern riser pipes.

The completed high pressure water jetting and closed-circuit televised (CCTV) inspection of the leachate collection piping for cell 2I construction meets the requirements of the Modification to Permit to Construct; Attachment 2, Part I, number 7 issued November 12, 2010 and the Phase 3 Operations Plan; Appendix 6 – Plan for the Leachate Collection System Cleaning, Inspection and Record Keeping dated November 4, 2010.



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We trust that the completed high pressure water jetting and closed-circuit televised (CCTV) inspection and documentation provided meets the requirements for issuance of a Permit to Operate for cell 2I. If you have any questions or need additional information please don't hesitate to contact me at (704) 504 – 3107 or Mike Gurley at (704) 782-2004 ext 391.

Sincerely,

A handwritten signature in black ink, appearing to read "Albert D. Glenn", with a long horizontal flourish extending to the right.

Albert D. Glenn, P.E.
Project Manager
SCS ENGINEERS, PC

Attachments: Jetclean America - CMS Landfill, 2011 New Cell Expansion, High-pressure Water-jetting & Explosion-proof Video-inspection dated February 2011.

Cc: Mike Gurley - CMS Landfill and File

M:\PROJECT FILES\02201314.28 - CMS Landfill Permit Modification\Correspondence\Letter_John Murray_Cell 2I CCTV Inspection_03-07-2011.doc

JETCLEAN AMERICA

HIGH PRESSURE WATER JETTING
VIDEO PIPELINE INSPECTION
NO DIG POINT REPAIRS
WWW.JETCLEANAMERICA.COM

19019 FERN MEADOW LOOP
LUTZ, FL 33558
TEL: 800-226-8013 FAX: 813-926-4616
JETCLEANAMERICA@YAHOO.COM

Earnhardt Grading CMS Landfill 2011 New Cell Expansion High-pressure Water-jetting & Explosion-proof Video-inspection

Work Performed February 2011

Conducted By:
Jetclean America
800-226-8013

JETCLEAN AMERICA

HIGH PRESSURE WATER JETTING
VIDEO PIPELINE INSPECTION
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JETCLEANAMERICA@YAHOO.COM

DATE : 2/23/2011
TO : Fred Brown – Earnhardt Grading, Inc.
FROM : Ralph Calistri (jetcleanamerica@yahoo.com)
SUBJECT : CMS Landfill – New Cell Expansion – 2011

REPORT

Jetclean America completed the high-pressure water-jetting and explosion-proof video-inspection of the new Cell's leachate collection piping on 2/15/2011. Included with this report are the applicable jetting logs, pipe graphic reports, and video-inspection footage in DVD format.

High-pressure Water-jetting:

As the below jetting log indicates, the new cell's leachate collection piping was jetcleaned end-to-end from the available cleanout access utilizing a high-pressure water-jetting nozzle. The leachate collection system was blockage free upon completion.

<u>LOCATION</u>	<u>ACHIEVED DISTANCE (ft)</u>	<u>RESULT</u>
CO 1	488.6'	End of Pipe Reached
CO 2	860.0'	End of Pipe Reached
CO 3	543.5'	End of Pipe Reached
Sump 1A	55'	End of Pipe Reached
Sump 1B	55'	End of Pipe Reached
Sump 2A	55'	End of Pipe Reached
Sump 2B	55'	End of Pipe Reached

Explosion-proof Video-inspection:

After jetcleaning was completed, the above piping was video-inspected as far as possible from the available access using explosion-proof video-inspection equipment (see summary chart below and included pipe graphic reports and DVD inspection footage for more details).

<u>VIDEO SETUP</u>	<u>DESCRIPTION</u>	<u>VIDEO LENGTH</u>	<u>RESULT</u>
1	CO 1	488.6'	End Of Pipe Reached – No Defects
2	CO 1	110.3'	Re-video After Re-jetting First 110'
3	CO 2	721.1'	Maximum Distance Possible – No Defects
4	CO 3	543.5'	Gravel @ 543.5' - No Defects
5	Sump 1B	45.0'	Bottom of Sump – No Defects
6	Sump 1A	44.5'	Bottom of Sump – No Defects
7	Sump 2A	48.2'	Bottom of Sump – No Defects
8	Sump 2B	47.0'	Bottom of Sump – No Defects

A full pipe of gravel was identified with the inspection camera at the 543.5' mark into CO3 that we are told is part of the system's design. No defects were noted in the visible areas of the piping. Based on both the jetcleaning and video-inspection data, the leachate collection system appears to flow and drain properly, and looks to be ready to deliver leachate.

Please call us with questions or concerns.

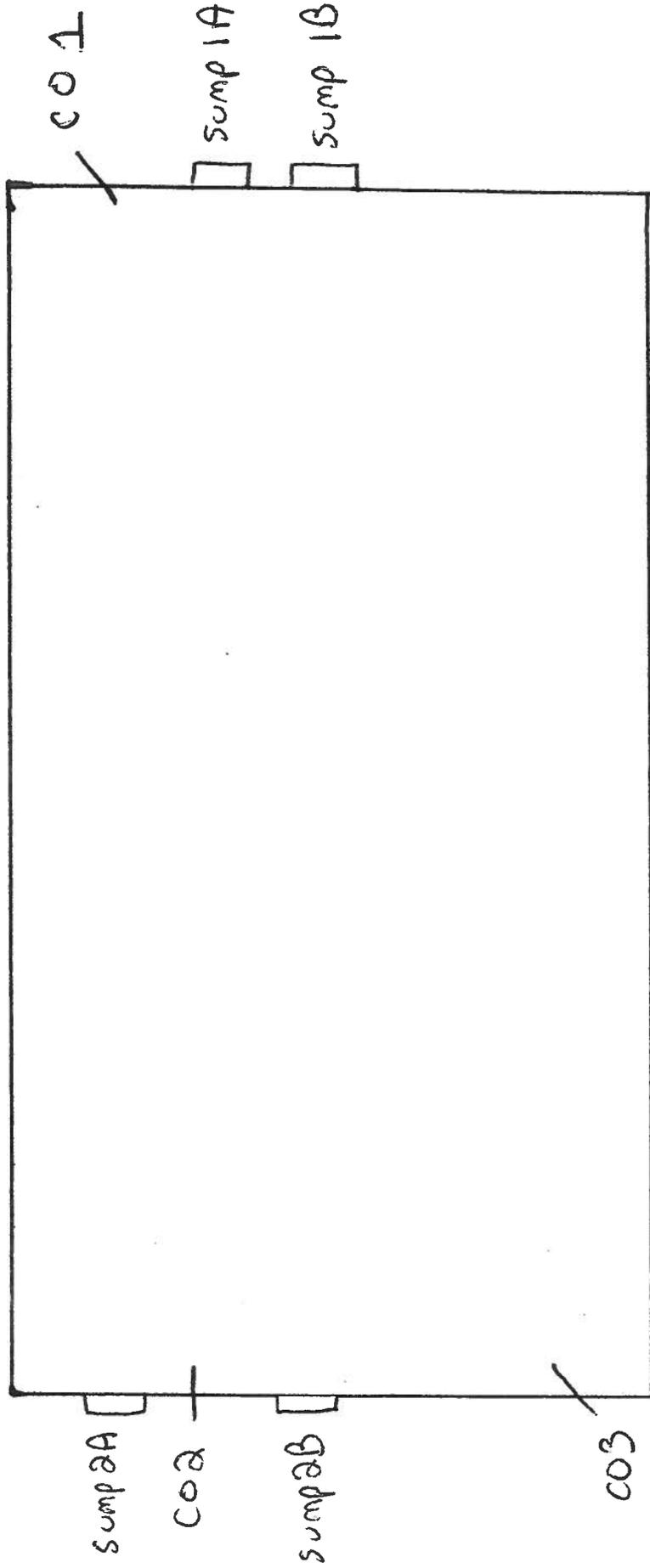
Regards,

A handwritten signature in black ink that reads "Ralph Calistri". The signature is written in a cursive style with a long horizontal flourish extending to the right.

Ralph Calistri – Jetclean America

Charlotte Motor Speedway Cand fill

2-15-11



* 2011 New Cell *

CCTV Surveys List for Earnhardt Grading

Number of surveys in this list is 8 as of Wednesday, February 16, 2011

Unit of measure: ft

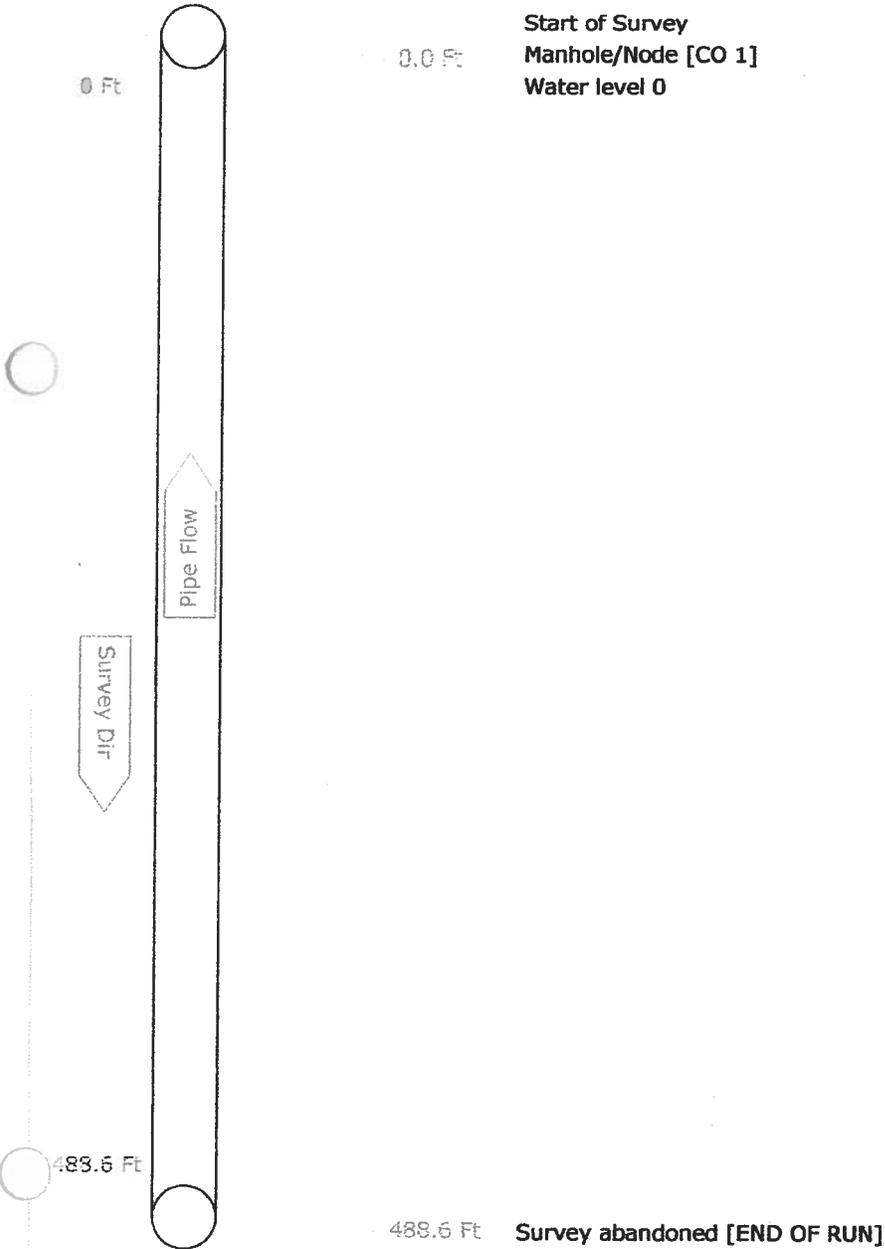
Setup Date	Street	Start MH	Finish MH	Dir	Size inch	Pre Clean	Vid Cassette	Scheduled Length	Surveyed Length
1 2/15/2011	Charlotte Motor Landfill	CO 1	CO 1A	U	8	Y	1		488.6
2 2/15/2011	Charlotte Motor Landfill	CO 1	CO 1A	U	8	Y	1		110.3
3 2/15/2011	Charlotte Motor Landfill	CO 2	CO 2A	U	8	Y	1		721.1
4 2/15/2011	Charlotte Motor Landfill	CO 3	CO 3A	D	8	Y	1		543.5
5 2/15/2011	Charlotte Motor Landfill	SUMP 1B	SUMP 1BA	D	24	Y	1		45.0
6 2/15/2011	Charlotte Motor Landfill	SUMP 1A	SUMP 1AA	D	24	Y	1		44.5
7 2/15/2011	Charlotte Motor Landfill	SUMP 2A	SUMP 2AA	D	24	Y	1		48.2
8 2/15/2011	Charlotte Motor Landfill	SUMP 2B	SUMP 2BA	D	24	Y	1		47.0

Total Scheduled Length 0.0

Total Length Surveyed 2,048.2

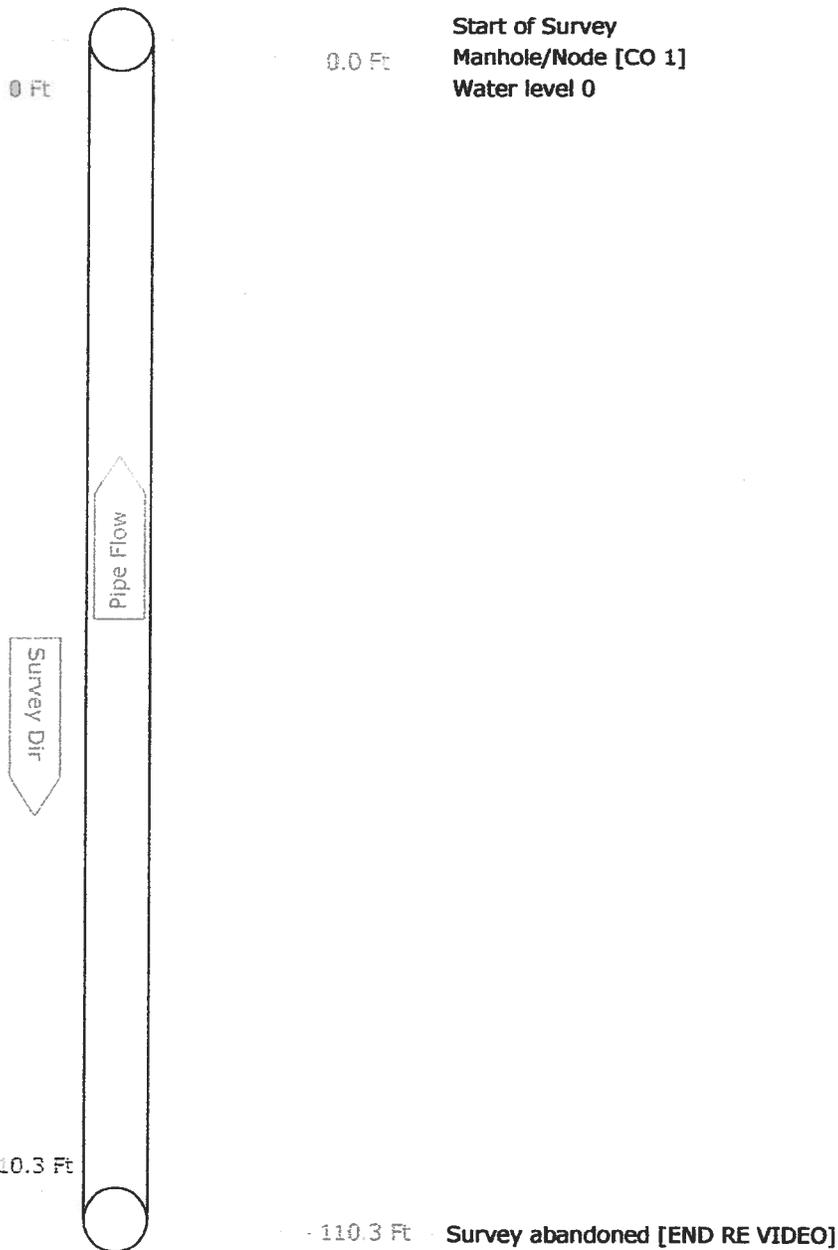
Pipe Graphic Report of PLR CO 1A X for Earnhardt Grading

Work Order	Contract	Video 1	Setup 1
Facility	Operator David	Van Ref NC-1	Surveyed On 02/15/2011
Street Name	Charlotte Motor Landfill	City	
Location type	LANDFILL		
Surface			
Survey purpose	Pre-acceptance - normally new sewers for adoption or private line goin		Weather Dry
Pipe Use LEACHATE	Schedule length	Ft	From CO 1 Depth Ft
Shape Circular	Size 8 by	ins	To CO 1A Depth Ft
Material hdpe	Joint spacing	Ft	Direction Upstream
Lining	Year laid 2011		Pre-clean Y Last cleaned 2/15/2011
General note			
Location note			



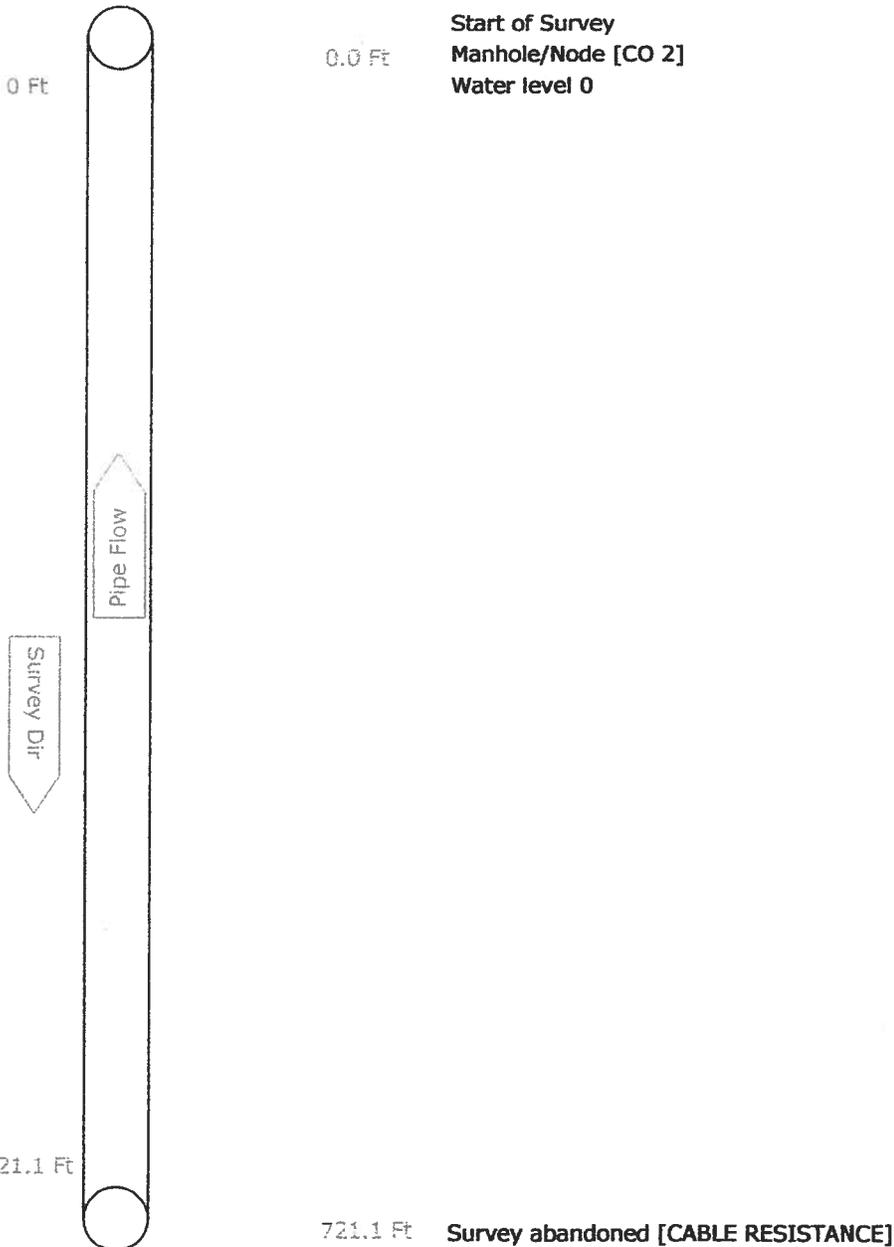
Pipe Graphic Report of PLR CO 1A W for Earnhardt Grading

Work Order	Contract	Video 1	Setup 2
Facility	Operator David	Van Ref NC-1	Surveyed On 02/15/2011
Street Name	Charlotte Motor Landfill	City	
Location type	LANDFILL		
Surface			
Survey purpose	Pre-acceptance - normally new sewers for adoption or private line goin		Weather Dry
Pipe Use LEACHATE	Schedule length	Ft	From CO 1 Depth Ft
Shape Circular	Size 8 by ins		To CO 1A Depth Ft
Material hdpe	Joint spacing	Ft	Direction Upstream
Lining	Year laid 2011		Pre-clean Y Last cleaned 2/15/2011
General note			
Location note			



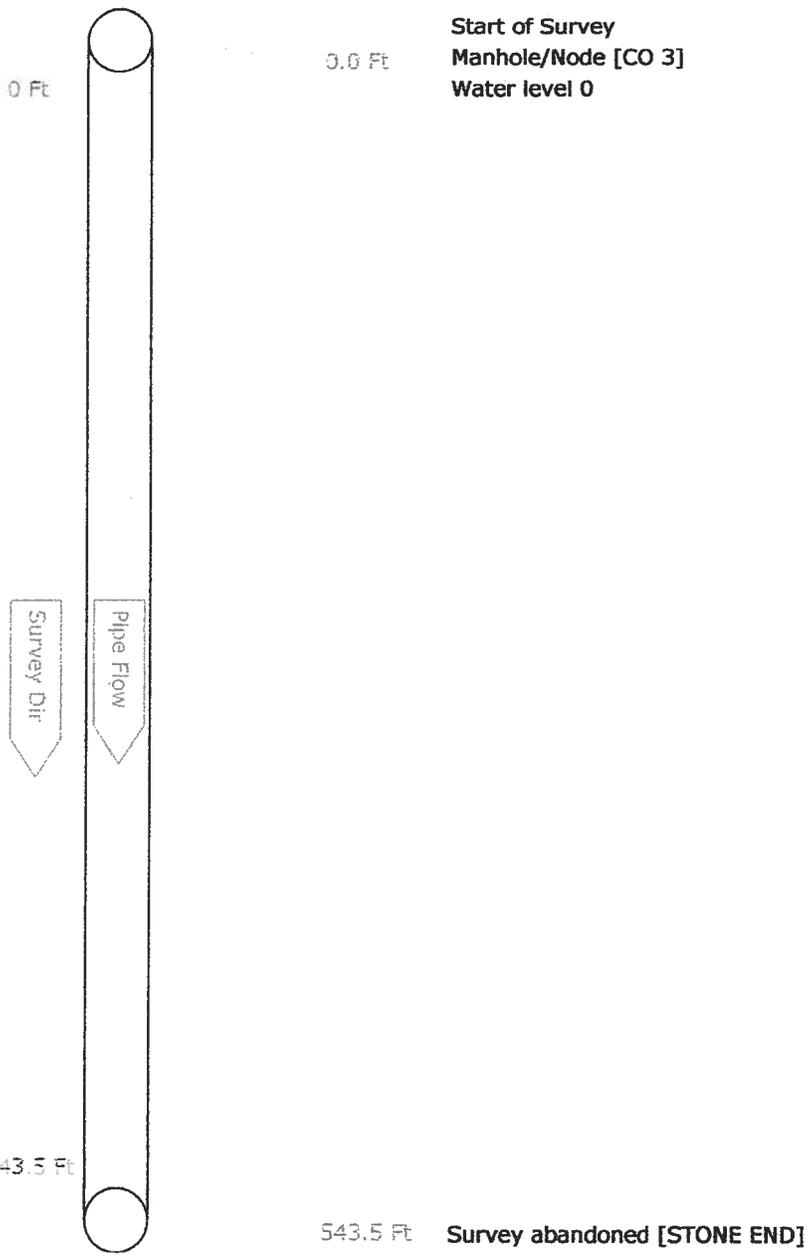
Pipe Graphic Report of PLR CO 2A W for Earnhardt Grading

Work Order	Contract	Video 1	Setup 3
Facility	Operator David	Van Ref NC-1	Surveyed On 02/15/2011
Street Name	Charlotte Motor Landfill	City	
Location type	LANDFILL		
Surface			
Survey purpose	Pre-acceptance - normally new sewers for adoption or private line goin		Weather Dry
Pipe Use LEACHATE	Schedule length	Ft	From CO 2 Depth Ft
Shape Circular	Size 8 by ins		To CO 2A Depth Ft
Material hdpe	Joint spacing Ft		Direction Upstream
Lining	Year laid 2011		Pre-clean Y Last cleaned 2/15/2011
General note			
Location note			



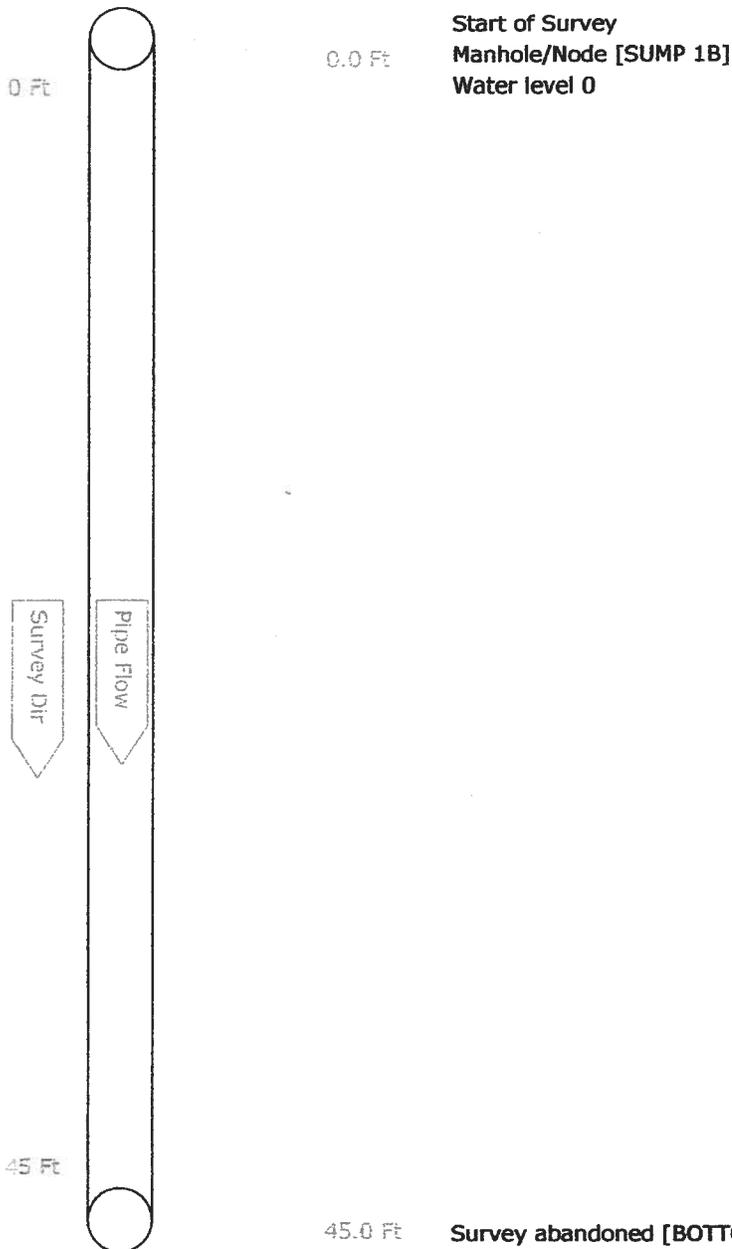
Pipe Graphic Report of PLR CO 3 W for Earnhardt Grading

Work Order	Contract	Video 1	Setup 4
Facility	Operator David	Van Ref NC-1	Surveyed On 02/15/2011
Street Name	Charlotte Motor Landfill	City	
Location type	LANDFILL		
Surface			
Survey purpose	Pre-acceptance - normally new sewers for adoption or private line goin		Weather Dry
Pipe Use LEACHATE	Schedule length	Ft	From CO 3 Depth Ft
Shape Circular	Size 8 by ins		To CO 3A Depth Ft
Material hdpe	Joint spacing	Ft	Direction Downstream
Lining	Year laid 2011		Pre-clean Y Last cleaned
General note			
Location note			



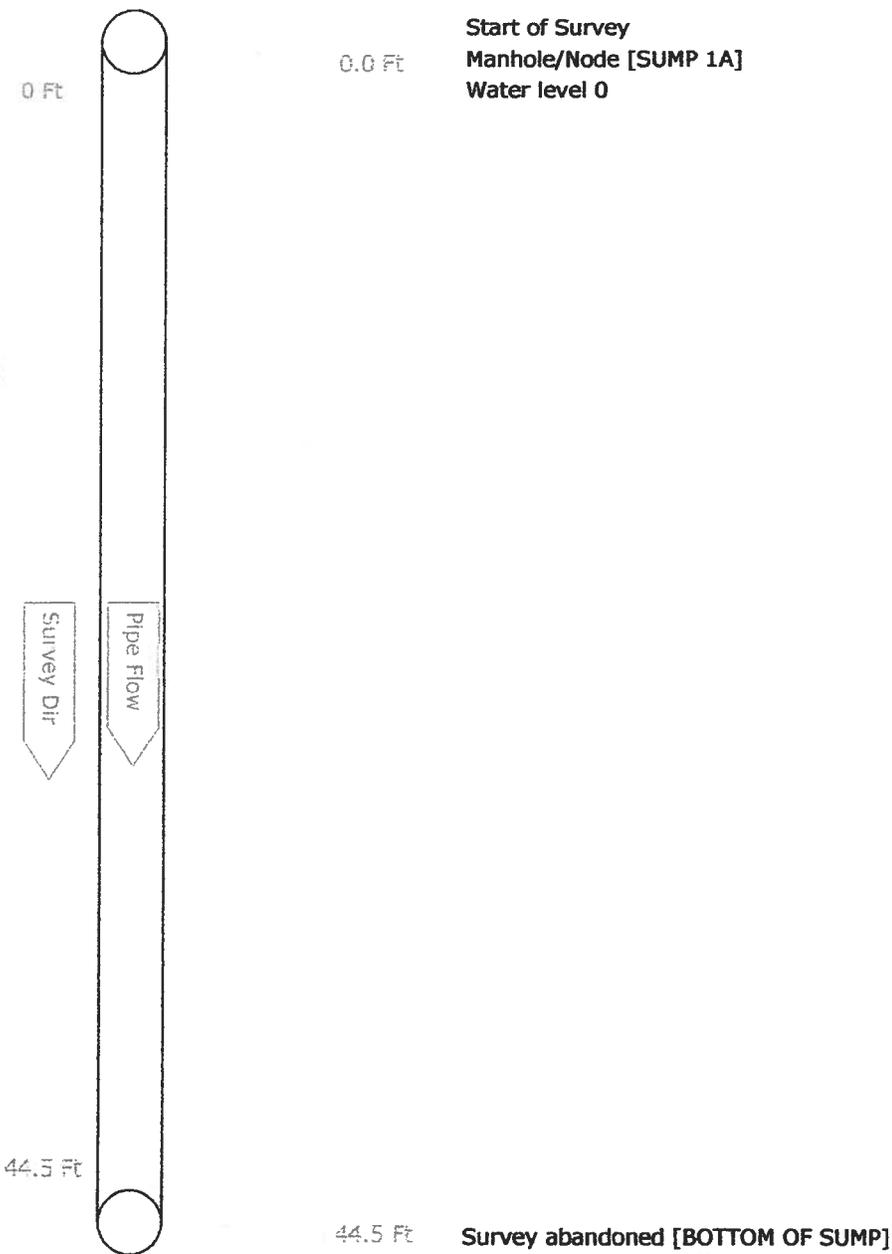
Pipe Graphic Report of PLR SUMP 1B W for Earnhardt Grading

Work Order	Contract	Video 1	Setup 5
Facility	Operator David	Van Ref NC-1	Surveyed On 02/15/2011
Street Name	Charlotte Motor Landfill	City	
Location type	LANDFILL		
Surface			
Survey purpose	Pre-acceptance - normally new sewers for adoption or private line goin		Weather Dry
Pipe Use LEACHATE	Schedule length	Ft	From SUMP 1B Depth Ft
Shape Circular	Size 24 by ins		To SUMP 1BA Depth Ft
Material hdpe	Joint spacing	Ft	Direction Downstream
Lining	Year laid 2011		Pre-clean Y Last cleaned
General note			
Location note			



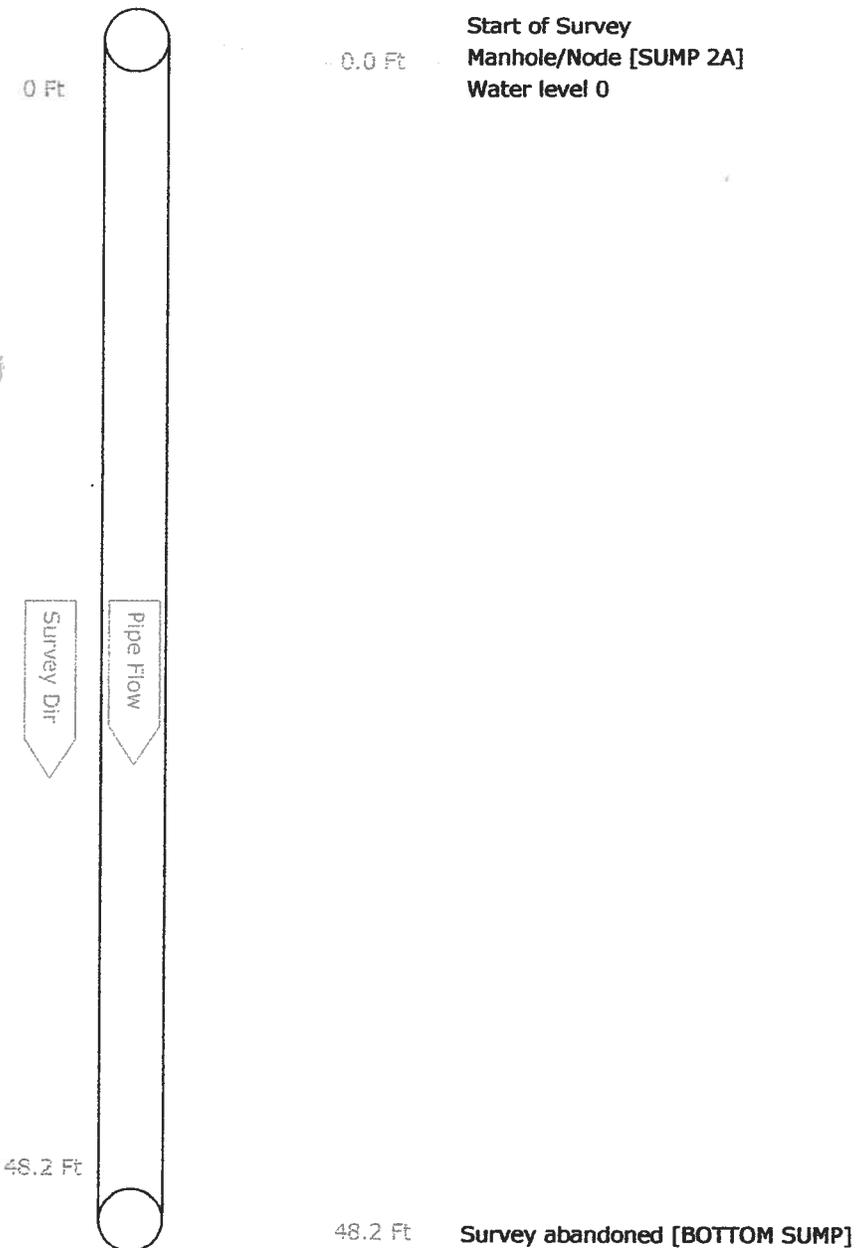
Pipe Graphic Report of PLR SUMP 1A W for Earnhardt Grading

Work Order	Contract	Video 1	Setup 6
Facility	Operator David	Van Ref NC-1	Surveyed On 02/15/2011
Street Name	Charlotte Motor Landfill	City	
Location type	LANDFILL		
Surface			
Survey purpose	Pre-acceptance - normally new sewers for adoption or private line goin		Weather Dry
Pipe Use LEACHATE	Schedule length	Ft	From SUMP 1A Depth Ft
Shape Circular	Size 24 by ins		To SUMP 1AA Depth Ft
Material hdpe	Joint spacing	Ft	Direction Downstream
Lining	Year laid 2011		Pre-clean Y Last cleaned
General note			
Location note			



Pipe Graphic Report of PLR SUMP 2A W for Earnhardt Grading

Work Order	Contract	Video 1	Setup 7
Facility	Operator David	Van Ref NC-1	Surveyed On 02/15/2011
Street Name	Charlotte Motor Landfill	City	
Location type	LANDFILL		
Surface			
Survey purpose	Pre-acceptance - normally new sewers for adoption or private line goin		Weather Dry
Pipe Use LEACHATE	Schedule length	Ft	From SUMP 2A Depth Ft
Shape Circular	Size 24 by	ins	To SUMP 2AA Depth Ft
Material hdpe	Joint spacing	Ft	Direction Downstream
Lining	Year laid 2011		Pre-clean Y Last cleaned
General note			
Location note			



Pipe Graphic Report of PLR SUMP 2B W for Earnhardt Grading

Work Order	Contract	Video 1	Setup 8
Facility	Operator David	Van Ref NC-1	Surveyed On 02/15/2011
Street Name	Charlotte Motor Landfill	City	
Location type	LANDFILL		
Surface			
Survey purpose	Pre-acceptance - normally new sewers for adoption or private line goin		Weather Dry
Pipe Use LEACHATE	Schedule length	Ft	From SUMP 2B Depth Ft
Shape Circular	Size 24 by	ins	To SUMP 2BA Depth Ft
Material hdpe	Joint spacing	Ft	Direction Downstream
Lining	Year laid 2011		Pre-clean Y Last cleaned
General note			
Location note			

