GUDE LANDFILL REMEDIATION GLCC/DEP MEETING NO. 52

DATE:	Thursday, December 6, 2018	
TIME:	7:00 PM to 9:00 PM	
LOCATION:	Montgomery County Recycling Center	
ATTENDANCE:		
Name	Organization	Designation
Laszlo Harsanyi	Gude Landfill Concerned Citizens (GLCC)	Member
Keith Ligon	Gude Landfill Concerned Citizens (GLCC)	Member
Dave Peterson	Gude Landfill Concerned Citizens (GLCC)	Member
Nick Radonic	Gude Landfill Concerned Citizens (GLCC)	Member
George Wolohojian	Gude Landfill Concerned Citizens (GLCC)	Member
Dom Perez	Capital Area Soaring Association (CASA)	Member
Don Birnesser	Montgomery County Dept. of Env. Protection (DEP)	Section Chief
Jamie Foster	Montgomery County Dept. of Env. Protection (DEP)	Senior Engineer
Stephen Lezinski	Barton & Loguidice, D.P.C. (B&L)	DEP Consultan
Mark Gutberlet	EA Engineering, Science, and Technology, Inc., PBC (EA)) DEP Consultant

The Meeting Agenda is included as Attachment 1.

The Meeting Sign-in Sheet for attendees is included as Attachment 2.

The EA 30% Design Presentation is included as Attachment 3.

The Floura Teeter Literature Review is included as Attachment 4.

The Primary Points of Discussion Summary for Meeting No. 52 is included as Attachment 5.

1. WELCOME AND OPENING REMARKS

- a. Donald Birnesser opened the meeting by welcoming the participants for attending.
- b. Stephen Lezinski noted that the draft minutes from GLCC/DEP Meeting No. 51 were distributed to GLCC on 11/20/18. GLCC members reviewed and accepted the meeting minutes via email on 11/21, 11/22, 11/30, and 12/5/18.

2. <u>PURPLE LINE / GUDE LANDFILL SOIL STOCKPILE PROJECT</u>

- a. Mr. Lezinski provided an update on the Soil Stockpile project. He stated that soil hauling has been intermittent due to inclement weather and the availability of suitable soil, and that 1,865 truckloads of soil have been stockpiled from 11/19/18–12/4/18 (approx. 18,000–22,000 CYs using an average of 10-12 CYs per truck load). Gannett Fleming continued to provide construction inspection services to monitor site activities. On-going project activities included: soil hauling, in-place grading, and roadway repairs. Additionally, due to recent rain events, the Purple Line Contractor implemented ES&C repairs for the super silt fence on-site and new inlet protection along the access road.
- b. Mr. Lezinski reviewed the estimated soil quantities (400,000 500,000) for the remediation construction project. Nick Radonic asked where the other soil is going to come from. Mr. Birnesser mentioned that soil could potentially come from other potential projects in the County and Mr. Lezinski added that the future Construction Contractor would be responsible for providing soil for the project, if it is not already located on-site. Meeting attendees discussed the current Walkins Mill Project Road excavation location off of Rt. 370.

3. <u>GUDE LANDFILL REMEDIATION – DESIGN ENGINEER PROJECT</u>

- a. Project Meetings EA Progress Meetings #8-9 were held in November and December 2018. County Senior Level Management Update Meeting #3 was held on December 6, 2018.
 - Ø Keith Ligon asked who is the Senior Level Management staff at these meetings. Mr. Birnesser indicated the attendees included: Patty Bubar (Acting DEP Director at this time); Willie Wainer (Chief, Division of Solid Waste); Chris Skaggs/Andrew of the Northeast Maryland Waste Disposal Authority; and Central Operations Staff including Don Birnesser and Jamie Foster. EA Engineering and Barton & Loguidice staff also attends upon request.
 - Ø Dave Peterson asked what County committee oversees this project. Mr. Birnesser indicated that the Transportation & Environmental (T&E) Committee oversees this project with respect to the County Council.
- b. Regulatory Meetings MDE Meeting #1 was held on November 9, 2018 to review the 30% design grading and drainage of the capping system including the northwest slope concept. A summary of the MDE meeting was reviewed in the EA Presentation under Attachment 3.
- c. 30% Design Review A summary of the 30% Design was reviewed in the EA Presentation under Attachment 3. A variety of discussions were held between meeting attendees regarding the following:
 - \emptyset the content and purpose of the 30% Design Documents;
 - \emptyset the future design document submissions including the 60%, 90%, and 100% and their relevance to permitting, procurements, and construction;
 - \emptyset the landfill gas management system, the phased implementation for improvements during construction, and maintaining system operation during construction including the continuous operation of the Flare;
 - \emptyset the administrative closeout meeting with MDE regarding the Gas-to-Energy Facility on 12/7/18 and the future market possibilities for the existing equipment;
 - \emptyset the future condition assessment of the Flare Station and Enclosed Flares in preparation for the remediation construction project;
 - \emptyset the landfill capping system drainage design and the stormwater collection system including the existing ponds and potential retrofits;
 - \emptyset the limit of waste, property boundaries, the limit of disturbance for the capping system, and what trees would be removed during the construction project (along the W/NW slope for the capping system installation);
 - Ø the west/northwest boundary cross section with the perimeter fence, monitoring wells, tree line, walking path/access road, drainage swale and the toe of slope for the landfill, and construction implementation options along the west/northwest boundary;
 - Ø the Floura Teeter land reuse literature review (Attachment 4), existing access points from Derwood Station to Needwood Park, Rock Creek Park, associated trailheads and connections; land reuse based on GLCC's preferred list of passive recreational uses; walking trails on top of the landfill; coordination needs with M-NCPPC for the trail connections; and estimated costs for the construction project, yard trim operational area, and land reuse;
 - \emptyset the weather station, prevailing wind direction (not from the east), and the continuous monitoring of weather conditions; and
 - \emptyset GLCC's affirmation to have a seat at the table for the land reuse decision making and the County's plan for stakeholder engagement.
- d. Summary of Discussions refer to Item #10 of these meeting minutes and Attachment 5.

4. CAPITAL AREA SOARING ASSOCIATION (CASA)

a. DEP and CASA held a meeting in late-October 2018 at the Oaks Landfill to review a preliminary location on-site for the model airplane club (northwest of the front entrance gate on relatively flat land). In mid-November 2018, CASA noted that the location would only work for a small portion of their club due to the size and location near the golf course. CASA would prefer an area on the elevated plateau of the Oaks Landfill; however, these areas are obligated to current/future facility operations at this time. Jamie Foster indicated to Dom Perez that they could visit the Oaks Landfill and review the site for other potential locations.

5. LANDFILL FLARE SYSTEM AND PERIMETER GAS MONITORING

- a. APTIM reported that they completed winterizing most of the Flare Station during November 2018. The remainder of the valves will be completed in December 2018.
- APTIM reported that the Landfill Flare System is operational (including the LFG collection system). The Flare(s) had an outage on 11/24 (ignitor failure equipment/system controls issue) and on 12/2/18 (louver control failure electrical/system controls issue). APTIM responded, performed system troubleshooting, and re-engaged the Flare(s).
- c. DEP continued the weekly monitoring of the LFG gas probes along the property perimeter.
- d. APTIM responded to intermittent LFG exceedences in the monitoring probes on the northwest, southern, and southeastern areas of the site during October-December 2018. APTIM performed field inspections, adjusted the well field vacuum, and re-engaged the Flares to address site conditions. Inclement weather (excessive rains) and Flare outages were likely contributing factors to the exceedences.
- e. The County is reviewing APTIM's plan to mitigate LFG migration to probe W-18 (SE site area).

6. GROUNDWATER MONITORING

- a. Prior to the meeting initiation, Mark Gutberlet of EA reviewed a map handout and groundwater trend plots (from the semi-annual groundwater report) with Dave Peterson to address a previous request for a graphical comparison of 2009/2010 and 2018 groundwater monitoring data in Derwood Station and at the Landfill site for potential contaminant migration. The County, Don Birnesser, and EA confirmed that the updated graphical comparison of groundwater monitoring data can be performed at the end of design phase.
- b. EA prepared the draft Fall 2018 semi-annual groundwater sampling report, which was under review by the County. Submission to MDE would occur in late-December 2018.

7. LANDFILL SITE MAINTENANCE

a. Mr. Lezinski noted that the County is creating a priority list and implementation plan for several cover system repairs (leachate seeps and areas with ponding water) along the NW Slope.

8. <u>GLCC MEETINGS AND ON-GOING COMMUNITY COMMUNICATION</u>

a. Monthly Meetings. 3rd Thursday at the Transfer Station or Recycling Center at 7:00 PM or a modified schedule as agreed by GLCC and the County.

9. <u>REVIEW OF OPEN ACTION ITEMS</u>

- a. Mr. Peterson requested a copy of the aerial flyover map for EA's remediation project. *The County's Consultant (B&L) provided this information via email on 10/19/18.*
- b. Mr. Radonic requested to obtain the photos of the trip to the Fresh Kills Landfill. *The County's Consultant (B&L) provided this information via email on 11/19/18.*
- c. Mr. Lezinski to electronically submit EA's 30% Design package to GLCC for review before the December 6th meeting. *The County's Consultant (B&L) provided this information via email for download on 11/19/18.*

- d. Mr. Peterson requested for EA to prepare an updated Total VOC Map diagram at the end of design phase. EA included a hand-out in today's meeting of a graphical map and groundwater trend plots (from the semi-annual groundwater report). Mark Gutberlet and Dave Peterson reviewed the graphical map and trends plots prior to the meeting starting. Mr. Peterson's main concern was the potential migration of contaminants into the first and second ring of Nature and Extent Investigation Groundwater Monitoring Wells. He is looking for a comparison of 2009/2010 vs. 2018 data (color aerial background with non-detects and detects) to show no further western/northwestern migration of contaminants into the Derwood Station Community. The County, Don Birnesser, and EA confirmed that this work can be performed at the end of design phase.
- e. Mr. Peterson requested a copy of the literature review for passive land re-uses. *EA Engineering included a hand-out in today's meeting.*
- f. The County asked GLCC (the HOA leads for Derwood Station Communities) to review the HOA right-of-way access points that border or are located in proximity to the natural gas pipeline. The County requested plat drawings with this information, if available. *Keith Ligon provided Plats and reviewed access points for Derwood Station South (off Indianola onto M-NCPPC property along northern border of community). Keith Ligon noted that most of access is NW end of Derwood Station South at the ROW to connect to Needwood Park/Trails. Nick Radonic suggested that the County use their own GIS system to gather the plats for trail access points. The County or EA may have to obtain this information for Floura Teeter, if necessary.*

10. SUMMARIZE NEW ACTION ITEMS FROM THE MEETING

- a. At the conclusion of the meeting, Mr. Lezinski asked GLCC and meeting attendees if it was acceptable to prepare a summary of the primary points of discussion. GLCC and the other meeting attendees agreed this approach was acceptable given the nature of group interactions and discussions during the meeting.
- b. Refer to Attachment 5 for a standalone summary document of the meeting's discussions, new action items, and next steps for the Gude Landfill Remediation Project. To provide a comprehensive set of minutes, this summary information is also provided below.
 - 20% Design The intent of the 30% level of design is to identify critical design elements and site features of the landfill with respect to: 1) compliance with the MDE Consent Order and Remedial Action Objectives; and 2) other design elements that could have significant impact to the project's permitting, construction, and cost. This aligns with the discussions during the 30% design review meeting with MDE. The 30% design documents are not meant to capture or portray all design elements and site features nor is it meant to be exclusionary of other future project work such as recreational land reuse for the community. The evaluation of recreational land reuse activities was scheduled for review between the 30% 60% designs (January 2019 April 2019).
 - Ommunity Land Reuse GLCC members reviewed the 30% design documents. GLCC commented that the commercial yard trim operation is included within the 30% design and Engineer's Estimate of Probably Construction Costs as a land reuse. However, it does not appear that land reuse for Derwood Station is included in the 30% design and Engineer's Estimate of Probably Construction Costs. Specifically, that land reuse for Derwood Station does not have narrative descriptions in the report text nor line items in the Engineer's Estimate of Probably Construction Costs or the Engineer's Opinion of Gude Landfill Remediation Schedule. GLCC expressed their concerns with this approach and desired both narrative descriptions and Engineer's Estimate of Probably Construction Costs and Engineer's Estimate of Probably Construction Schedule Landfill Remediation Schedule line items in the next design phase.

GLCC reiterated their desire to have a seat at the table for the land reuse decision making and to have additional information on the County's stakeholder engagement. GLCC also expressed specific desires for a connection point from the Derwood Station Community to Needwood Park and the Rock Creek Trail system through the Gude Landfill site. GLCC would like the County and EA/Floura Teeter to engage the Maryland-National Capital Park and Planning Commission (M-NCPPC) to assist with the potential for connection points. Coupled with the potential connection point to the park and trail, GLCC also expressed a desire to have access to the Gude Landfill following the remediation project. GLCC provided plat drawings for Derwood Station South (HOA lead Keith Ligon) that identified HOA community space and right-ofway areas that could be used as potential connection points. The HOA leads for Derwood Station and Derwood Station No. 2 were going to provide similar plat drawing information and/or GIS links to plat documentation to the County via email. Nick Radonic suggested that the County use their own GIS system to gather the plats for trail access points. The County or EA may have to obtain this information for Floura Teeter, if necessary.

Mext Steps – The County and EA will proceed with the review and comment on the 30% design during December 2018. The preparation of the 60% design will proceed from January 2019 – March 2019. The County and EA will evaluate budgetary considerations for recreational land reuse for the Derwood Station Community. The County and EA will engage Floura Teeter to develop initial concept plans for recreational land reuse at the landfill during December 2018 – February 2019, ahead of the full 60% design effort. The County and EA (with Floura Teeter) will engage M-NCPPC regarding the remediation project and the potential for connection points to Needwood Park and the Rock Creek Trail system from the Derwood Station Community. The County and EA will provide updates to these activities in GLCC/DEP Meeting No. 53 in February 2019.

11. <u>NEXT MEETING</u>

a. Meeting attendees agreed that the next meeting would be scheduled for <u>February 21, 2019</u>. The designated location at this time will be the <u>Recycling Center's Education Room</u>.

Gude Landfill Remediation Gude Landfill Concerned Citizens Monthly Meeting No. 52

Meeting Agenda

December 6, 2018 7:00 PM – 9:00 PM

1. Meeting Sign-In

2. GLCC/DEP Meeting Minutes (Meeting No. 51 held on 10/18/18)

- a. Draft Meeting Minutes were distributed to GLCC on 11/20/18.
- b. GLCC reviewed and accepted the Minutes via email on 11/21, 11/22, 11/30, and 12/5/18.

3. Purple Line / Gude Landfill Soil Stockpile Project

- a. Soil hauling has been intermittent due to inclement weather and availability of suitable soil.
- b. 1,865 truckloads of soil have been stockpiled from July 19 December 4, 2018. Approx. 18,000 22,000 CYs (avg. of 10-12 CYs per truck load). Gannett Fleming continued to provide construction inspection services to monitor site activities.
- c. On-going project activities: soil hauling, in-place grading, roadway repairs, and ES&C repairs. Due to recent rain events, the Purple Line Contractor implemented repairs to the erosion and sediment controls (ES&C) such as the super silt fence and inlet protection.

4. Gude Landfill Remediation – Design Engineer Project (EA Engineering)

- a. Project Meetings EA Progress Meetings #8-9 were held in November and December 2018. County Senior Level Management Update Meeting #3 was on December 6, 2018.
- b. Regulatory Meetings MDE Meeting #1 was held on November 9, 2018 to review the 30% design grading and drainage of the capping system including the northwest slope concept.
 30% Design Review (Refer to the EA Presentation).

5. Capital Area Soaring Association (CASA)

a. DEP and CASA held a meeting in late-October 2018 at the Oaks Landfill to review a preliminary location on-site (northwest of the front entrance gate on relatively flat land). In mid-November 2018, CASA noted that the location would only work for a small portion of their club due to the size and location near the golf course. CASA would prefer an area on the elevated plateau of the Oaks Landfill; however, these areas are obligated to current/future facility operations at this time.

6. Landfill Flare System and Perimeter Gas Monitoring

- a. APTIM completed winterizing most of the Flare Station during November 2018. The remainder of the valves will be completed in December 2018.
- b. The Landfill Flare System is operational (including the LFG collection system). The Flare(s) had an outage on 11/24 (ignitor failure – equipment/system controls issue) and 12/2/18 (louver control failure – electrical/system controls issue). APTIM responded, performed system troubleshooting and re-engaged the Flare(s).
- c. DEP continues the weekly monitoring of the LFG gas probes along the perimeter of the property.
- d. APTIM responded to intermittent LFG exceedences in monitoring probes on the northwest, southern, and southeastern areas of the site during October-December 2018. APTIM performed field inspections, adjusted the well field vacuum, and re-engaged the Flares to address site conditions. Inclement weather (excessive rains) and Flare outages contributed to the exceedences. The County is reviewing APTIM's corrective measure to mitigate LFG exceedences in gas W-18 (SE area of site).

Gude Landfill Remediation Gude Landfill Concerned Citizens Monthly Meeting No. 52

Meeting Agenda

December 6, 2018 7:00 PM – 9:00 PM

7. Groundwater Monitoring

a. EA prepared the draft Fall 2018 semi-annual groundwater sampling report, which is under review by the County. Submission to MDE will occur in late-December 2018.

8. Landfill Site Maintenance

a. Property Maintenance – The County is creating a priority list and implementation plan for several cover system repairs (leachate seeps and areas with ponding water) along the NW Slope.

9. Monthly GLCC Meetings and On-going Communication with the Community

a. Monthly Meetings on 3rd Thursday at the Transfer Station at 7:00 PM.

10. Open Action Items

- a. Mr. Peterson requested a copy of the aerial flyover map for EA's remediation project. *The County* (*B&L*) provided this information via email on October 19, 2018.
- b. Mr. Radonic requested to obtain the photos of the trip to the Fresh Kills Landfill. *The County* (*B&L*) provided this information via email on November 19, 2018.
- c. Mr. Lezinski to electronically submit EA's 30% Design package to GLCC for review before the December 6th meeting. *The County (B&L) provided this information via email for download on November 19, 2018.*
- d. Mr. Peterson requested for EA to prepare an updated Total VOC Map diagram at the end of design phase. *EA has included a hand-out in today's meeting of a graphical map and groundwater trend plots (from the semi-annual groundwater report).*
- e. Mr. Peterson requested a copy of the literature review for passive land re-uses. *EA Engineering* has included a hand-out in today's meeting.
- f. The County asked GLCC (the HOA leads for Derwood Station Communities) to review the HOA right-of-way access points that border or are located in proximity to the natural gas pipeline. The County requested plat drawings with this information, if available. *Keith Ligon has obtained plats for Derwood Station South HOA and noted for Laszlo Harsanyi to obtain plats for Derwood Station 2*.

11. Summarize New Action Items from the Meeting

12. Next Meeting

a. January 17, 2019 or February 21, 2019.

Date	December 6, 2018		Meeting No. 52		
Time	7;00 PM - 9;00 PM at the	Material Recycling Facility			
Meeting	Gude Landfill Remediatio	m: GLCC/DEP			
ame	Initial if Present	Affiliation	Phone	Email	Address
on Bimesser	CHAR	DEP/DSWS	240777-6569	Donald Bimesser@montgomerycountymd.gov	16101 Frederick Road Derwood, MD 20855
amie Foster	LOF	DEP/DSWS	240777-6574	lamie.foster@montgomervcountymd gov	16101 Frederick Road Derwood, MD 20855
ave Peterson	ANON	GLCC/DS1 HOA	301-921-6357	Kmpdhp@hotmail.com	7612 Anamosa Way Derwood, MD 20855
eith Ligon	ZM	GLCC	301-340-3358	keli ron 56/@tumail.com	15501 Moravia Court Derwood, MD 20855
ulia Tillery		GLCC	202-329-8740	Julia@tilleryoffice.com	15461 Indianola Drive Derwood, MD 20855
aszlo Harsanyi	Ph.	GLCC/DS2 HOA	301-840-3822	LaszloH@comcast.net	7228 Titonka Way Derwood, MD 20855
lick Radonic	Nr-	GLCC/DSS HOA	301-294-9124	Big Rad@gmail.com	15408 Indianola Drive Derwood, MD 20855
ieorge Wolohojian	N.	GLCC/DSS HOA	301-738-7148	gwolohojian@aol com	15448 Indianola Drive Derwood, MD 20855
harles Regan	20	GLCC/DSS HOA	202-510-1363	creaser620/degmail.com	15532 Grinnell Terrace Derwood, MD 20855
ther Meeting Attendees					
Jom Perez	05	Capital Area Soaring Assoc.		domcpercz@gmail.com	
tephen T. Lezinski	571	Barton & Loguidice, D.P.C.	(301) 918-8468	slezinski @bartonandlouuidice.com	4601 Presidents Drive. Suite 220 Lanham, MD 20706
Aark Gutberlet	ann	EA Engineering	410-584-7000	mgutberlet@caest.com	225 Schilling Circle, Suite 400 Hunt Valley, MD 21031
eannie Oxendine	1	DEP/DSWS Contractor support staff	I	leannic Oxendinc@montgomerycountymd gov	16101 Frederick Road Derwood, MD 20855

Recycled Paper

Gude Landfill Remediation Project Design Engineer Contract

Project Status Update 30% Design Review

Date: December 6, 2018



Outline

- Pre-Design Services Update
- 30% Design Review
- MDE Review Meeting Summary
- Project Schedule Update



Pre-Design Services

- Traffic Impact Study Draft to be submitted 12/20/18
- Aerial Survey Initial work complete, some supplemental field survey to be performed in next few months
- Utility Locating Final deliverable submitted 11/26/18
- Geotechnical Investigation Test pitting complete, potential borings to be performed as needed
- Landfill Gas Investigation Draft deliverable submitted 11/6/18, field investigation to occur in next two months



Landfill Cap Limit

- Cap limit follows the existing tree line and top of steep slopes around the north, east, and south sides of the Landfill
- Trees will be removed on the northwest slope so the slope can be capped







30% Design Review

Concept Landfill Grading



30% Design Review

Concept Landfill Drainage



Northwest Boundary and ROW

 Location of access road and perimeter swale will likely be switched to improve access to perimeter monitoring wells close to the property boundary





30% Design Review

Potential Operational Area



Landfill Cap Sections

 Geosynthetic closure cap will be constructed on Landfill except where asphalt pavement will be constructed in the operational area(s). Asphalt will be low-permeability layer in those area(s).





Landfill Gas System



Landfill Gas Condensate Traps

- Condensate traps will be located at low points in the LFG piping
- New condensate traps will drain into the Landfill







Construction Phasing

• Phasing plan represents a general idea of how phasing will occur. Phase boundaries will be refined for constructability.







30% Design Review

Potential Construction Schedule

• Schedule represents one possible remediation schedule to illustrate potential construction duration. This will be refined throughout the design phase.

				2020		2021		2022		2023		2024
Task Name 🗸	Duratior 🗸	Start 👻	Finish 🚽	H1	H2	H1	H2	H1	H2	H1	H2	H1
NTP	0 days	Wed 1/22/20	Wed 1/22/20	1/22								
Project Planning and Submittals	45 days	Thu 1/23/20	Wed 3/25/20	μ έ η Π								
Mobilization	20 days	Thu 3/26/20	Wed 4/22/20	l i								
Phase I	100 days	Thu 4/23/20	Wed 9/9/20	-	•							
Phase II	199 days	Thu 7/16/20	Tue 4/20/21		•	•						
Phase III	172 days	Wed 3/10/21	Thu 11/4/21				•					
Phase IV	202 days	Fri 9/10/21	Mon 6/20/22									
Phase V	222 days	Tue 4/26/22	Wed 3/1/23					•		•		
Phase VI	171 days	Thu 1/19/23	Thu 9/14/23							•	•	
Stormwater Management	40 days	Fri 9/15/23	Thu 11/9/23									
As-Built Survey	15 days	Fri 11/10/23	Thu 11/30/23								- i h	
Project Closeout and Demobilization	45 days	Fri 12/1/23	Thu 2/1/24								Ť	-
Construction Complete	0 days	Thu 2/1/24	Thu 2/1/24									a [*] 2/1



MDE Review Meeting

- Met with MDE on November 9, 2018 after completion of 30% Design
- Meeting Goals:
 - Obtain MDE feedback on concept design elements and approach before performing more detailed design
 - Discuss design compliance with regulations and standards
- MDE provided preliminary feedback but made no commitments at the meeting
- MDE asked about the continued community involvement and any community feedback on the project



MDE Review Meeting Summary (1 of 2)

- Major Discussion Points and Preliminary MDE Feedback:
 - Landfill Grading: MDE did not raise concerns about waste relocation, proposed landfill cap slopes, or landfill cap cross-section and will require us to show that drainage off the landfill cap is adequately addressed.
 - Potential Operational Area: MDE may consider allowing the pavement to serve as the landfill cap in the operational area if we can show adequate drainage and ability to handle projected settlement. MDE may require that the geosynthetic cap is constructed under the pavement.
 - LFG System: MDE did not raise concerns about the general layout or design of the LFG collection system. MDE will consider allowing condensate to drain into the Landfill with further evaluation of the condensate quality and anticipated quantity.





MDE Review Meeting Summary (2 of 2)

- Major Discussion Points and Preliminary MDE Feedback:
 - Waste Relocation and Leachate Management: MDE did not raise concerns about the approach of covering exposed waste at the end of each day. MDE did ask about odor control approaches and encouraged avoiding relocation of waste in the summer months when odors could be most significant.
 - Site Access and Security: MDE generally agreed with limiting site access and providing security measures during construction for safety purposes.
 - Land Use: MDE did not raise concerns about the proposed future land uses on the landfill but will need to approve the uses.



Design and Permitting Schedule

	2018				2019				2020
Task Name 🗸 🗸	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q 4	Q1
NTP	•	3/9							
Project Initiation and Subcontracting									
Task 1 - Project Management Services	ĺ ĺ								
Task 2 - Pre-Design Services	Ī								
Task 3 - Engineering Design Services									
Task 4 - Permitting and Right-of-Entry Services	8								
Task 5 - Construction Procurement Services (RFQ/RFP)									ġ
Task 6 - Stakeholder Engagement Services	l I								
Task 7 - Conceptual Land Use Planning Services									







December 5, 2018

SUBJECT: Gude Landfill Remediation Literature Review

This memo serves to supplement literature research and projects previously shared by EA Engineering to demonstrate examples and ideas for the future land use of the Gude Landfill after reclamation.

The prior reference documents and project examples include:

1. U.S. Environmental Protection Agency (EPA) titled "Closed Waste Sites as Community Assets: A Guide for Municipalities, Landfill Owners, and Regulators." <u>https://nepis.epa.gov/Exe/ZyPDF.cgi/P100LHOS.PDF?Dockey=P100LHOS.PDF</u>

<u>Relevance</u>: This document provides an overview of the common approaches to utilize closed landfills as community assets, as well as the environmental and regulatory challenges faced when implementing these projects. The document includes case studies and photos.

2. Freshkills Landfill; Staten Island, NY http://freshkillspark.org/the-park/the-park-plan

<u>Landfill Size</u>: 2,200 acres <u>Status of Reuse</u>: Masterplan; Limited recreation access for special events a couple of times a year.

<u>Relevance:</u> Innovative reclamation and monitoring practices. An example of a large and diverse landfill reclamation and reuse project. NY Department of Sanitation is designing and implementing the landfill reclamation in coordination with NYC Parks Department and a non-profit organization Freshkills Park Alliance are leading the effort in the design and vision for reuse development of park amenities, maintenance and operations of park amenities.

3. Puente Hills Landfill; Los Angeles, CA <u>https://www.hillworks.us/projects/pp/puentehills/</u>

<u>Landfill Size:</u> 1,300 acres <u>Status of Reuse:</u> Masterplan

<u>Relevance:</u> The reuse masterplan for park amenities creates an adaptive framework to respond and adapt to the landfill changes expected over time. The masterplan establishes three themes: celebrate industrial heritage, enhance ecologies, expand activities. The plan includes public recreation, habitat creation to attract target species, and education/interpretation opportunities. County of Los Angeles Department of Parks and Recreation is involved.





4. Millennium Park; Boston, MA https://www.asla.org/guide/site.aspx?id=39818

Landfill Size: 100 acres

Status of Reuse: Complete and open for public use.

<u>Relevance:</u> The website includes photos of park amenities and design and engineering solutions that mitigate for stormwater runoff. The project includes a hierarchy of trails with a specific design application and character for each type. City of Boston Parks & Recreation Department is involved.

Additional reference documents and project examples include:

5. Mount Trashmore; Cedar Rapids, IA https://www.solidwasteagency.org/mount-trashmore

<u>Landfill Size:</u> 100 acres <u>Status of Reuse:</u> Complete and open for public use- restricted to a schedule established by Solid Waste Agency.

<u>Relevance:</u> A seasonally open trail network for pedestrians, bicyclists, and dogs on leash; trails lead to a vantage point that provides stunning views. A good example for creating a framework for gated access and a public access statement and rules. It is identified as *trails & overlook* and not a park.

6. Henry Palmisano Park; Chicago, IL https://www.site-design.com/projects/henry-palmisano-park/

<u>Landfill Size:</u> 27 acres <u>Status of Reuse:</u> Complete and open for public use restricted - to a schedule established by Solid Waste Agency.

<u>Relevance:</u> Henry Palmisano Park demonstrates how stormwater management conveyance can become an attraction within a site. Masterplan focuses on trail networks, incorporating art and education, habitat creation and stormwater management and edge treatments along adjacent properties.

7. Green Hills County Park (North Wake Landfill Park); Raleigh, NC http://www.wakegov.com/recycling/division/Documents/nwlf/NWLF%20Post%20 Closure%20Land%20Use%20Plan.pdf

<u>Landfill Size:</u> 260 acres <u>Status of Reuse:</u> Complete and open for public use

Relevance: Demonstrates examples of recreation amenities for reclaimed landfill.

8. Byxbee Park; Palo Alto, CA https://www.cityofpaloalto.org/news/displaynews.asp?NewsID=102 http://www.hargreaves.com/work/byxbee-park/





Landfill Size: 150 acres Status of Reuse: Complete and open for public use

<u>Relevance:</u> Reuse is primarily as a passive park with a trail system accessing site specific sculpture and earthworks incorporated into the site.

9. :metabolon; Germany https://www.bavweb.de/-metabolon/Aktuelles (Will need to translate to English)

Landfill Size: 110 acres Status of Reuse: Sections of landfill are still accepting refuse while sections are complete and open for public use

<u>Relevance:</u> Interesting approach and combination of recreation amenities, trail system, and art.

10. Attracting Birds of Prey https://www.winesandvines.com/features/article/162592/Attracting-Birds-of-Prey#

<u>Relevance:</u> Provides information for attracting various species of raptors (birds of prey) to aid in natural control of small mammal populations. This can also provide opportunities for bird watching within the park.

11. EPA Landfill Cover Systems <u>https://www.epa.gov/sites/production/files/2015-</u> 04/documents/gr factsheet landfill covers and energy.pdf

<u>Relevance</u>: This document provides technical information on the construction and best management practices for landfill reclamation and reuse including PV solar arrays.

Gude Landfill Remediation GLCC/DEP Meeting No. 52 December 6, 2018

Primary Points of Discussion

- <u>30% Design</u> The intent of the 30% level of design is to identify critical design elements and site features of the landfill with respect to: 1) compliance with the MDE Consent Order and Remedial Action Objectives; and 2) other design elements that could have significant impact to the project's permitting, construction, and cost. This aligns with the discussions during the 30% design review meeting with MDE. The 30% design documents are not meant to capture or portray all design elements and site features nor is it meant to be exclusionary of other future project work such as recreational land reuse for the community. The evaluation of recreational land reuse activities was scheduled for review between the 30% 60% designs (January 2019 April 2019).
- 2. <u>Community Land Reuse</u> GLCC members reviewed the 30% design documents. GLCC commented that the commercial yard trim operation is included within the 30% design and Engineer's Estimate of Probably Construction Costs as a land reuse. However, it does not appear that land reuse for Derwood Station is included in the 30% design and Engineer's Estimate of Probably Construction Costs. Specifically, that land reuse for Derwood Station does not have narrative descriptions in the report text nor line items in the Engineer's Estimate of Probably Construction Costs or the Engineer's Opinion of Gude Landfill Remediation Schedule. GLCC expressed their concerns with this approach and desired both narrative descriptions and Engineer's Estimate of Probably Construction Costs and Engineer's Opinion of Gude Landfill Remediation Schedule line items in the next design phase.

GLCC reiterated their desire to have a seat at the table for the land reuse decision making and to have additional information on the County's stakeholder engagement. GLCC also expressed specific desires for a connection point from the Derwood Station Community to Needwood Park and the Rock Creek Trail system through the Gude Landfill site. GLCC would like the County and EA/Floura Teeter to engage the Maryland-National Capital Park and Planning Commission (M-NCPPC) to assist with the potential for connection points. Coupled with the potential connection point to the park and trail, GLCC also expressed a desire to have access to the Gude Landfill following the remediation project. GLCC provided plat drawings for Derwood Station South (HOA lead Keith Ligon) that identified HOA community space and right-of-way areas that could be used as potential connection points. The HOA leads for Derwood Station and Derwood Station No. 2 were going to provide similar plat drawing information and/or GIS links to plat documentation to the County via email. Nick Radonic suggested that the County use their own GIS system to gather the plats for trail access points. The County or EA may have to obtain this information for Floura Teeter, if necessary.

3. <u>Next Steps</u> – The County and EA will proceed with the review and comment on the 30% design during December 2018. The preparation of the 60% design will proceed from January 2019 – March 2019. The County and EA will evaluate budgetary considerations for recreational land reuse for the Derwood Station Community. The County and EA will engage Floura Teeter to develop initial concept plans for recreational land reuse at the landfill during December 2018 – February 2019, ahead of the full 60% design effort. The County and EA (with Floura Teeter) will engage M-NCPPC regarding the remediation project and the potential for connection points to Needwood Park and the Rock Creek Trail system from the Derwood Station Community. The County and EA will provide updates to these activities in GLCC/DEP Meeting No. 53 in February 2019.