February 15, 2021

CD'EVS'ILG NOLUTIONS

Ms. Sharon Svitek
Pennsylvania Department of Environmental Protection
Southwest Regional Office
Waste Management Program
400 Waterfront Drive
Pittsburgh, Pennsylvania 15222-4745

Subject: Westmoreland Sanitary Landfill, LLC – Sanitary Landfill

Consent Order and Agreement Executed October 7, 2020

Corrective Action Plan – Response to Comments

Rostraver Township, Westmoreland County, Pennsylvania.

PADEP Permit No. 100277

Design Solutions Project 2020-040

Civil Design Solutions, Inc. (Design Solutions) is pleased to provide this response to the PADEP comments received via Email on January 11, 2021 for the Corrective Action Plan for the Westmoreland Sanitary Landfill, LLC. – Sanitary Landfill facility located in Rostraver Township, Westmoreland County, Pennsylvania. The Corrective Action Plan was previously approved on December 28, 2020 but was requested to be revised via Email on January 11, 2021 based upon current conditions at the site.

Each PADEP comment is identified below and a written response is provided. A complete replacement of the Corrective Action Plan with a newly added Figure is included with this response. Please note, during the preparation of the revised CAP, WSL personnel met with PennDOT personnel to discuss removing sediment build-up along Tyrol Boulevard. The revised CAP includes a method for removing the sediment along Tyrol Boulevard directly in front of the landfill to improve stormwater flow. Additionally, WSL met with PADEP representatives from both surface water and solid waste at the landfill facility and as a result of these discussions, the improvements outlined in the revised CAP are being proposed.

1. Mud washout onto Tyrol Boulevard and the need to prevent this is not mentioned in the Onsite Runoff and Stormwater Management section. The Corrective Action Plan (CAP) should include detailed interim and long-term measures to be implemented to cease the discharge of storm water and mud to offsite roadways from vehicle traffic. The CAP should contain a detailed schedule for all proposed E&S and stormwater controls to be installed or modified. Serious consideration should be given to submit a permit modification for the site access road, specifically to build a longer access road within the permitted area to allow trucks to drive a longer distance to drop off their excess mud onsite before they enter the public access road.

Response: The revised CAP includes detailed short-term and long-term improvements for stormwater management and erosion and sedimentation controls at the facility. The short-term improvements are intended to provide immediate improvements to the existing sedimentation controls at the facility while working towards implementing the long-term improvements. Also, a discussion is presented with the long-term improvements for the evaluation of potential new facility entrance options.

A complete replacement of the CAP is included with this response as well as a Figure which depicts the locations of the proposed short-term and long-term improvements.

2. Any changes to storm water controls and conveyances at the site needs to conform with the NPDES stormwater permit and the Chapter 102 permit for the site. The CAP should include a discussion of the stormwater and BMP monitoring and sampling requirements contained in the NPDES permit and how compliance with this permit will be achieved and maintained.

Response: The revised CAP included with this response presents a new section which details stormwater and BMP inspections as well as sampling and inspections of the NPDES outfalls. The inspections and testing will be performed in accordance with the NPDES Permit.

3. The On-site Tracking of Mud and Access Road Maintenance Section states that "...the facility may employ their street sweeper or onsite water truck (or similar) with pressurized water applications to address excessive buildup of dirt and mud on the site roads to minimize tracking potential." This section should clarify that a pressurized water truck will not be used on any public or offsite roads and that only street sweeping will occur on the offsite roads. Furthermore, using a pressurized water truck to spray off the excessive build-up of mud on the on-site roads may be adding to the problem of mud washout onto Tyrol Boulevard; therefore, this idea should be revisited and possibly eliminated as a means of addressing the On-site Tracking of Mud issues at the Westmoreland Sanitary Landfill.

Response: The CAP has been revised to clearly identify pressurized water will not be utilized on public or offsite roads where only street sweeping may be performed. The revised CAP includes significant short-term and long-term improvements that once completed are anticipated to greatly minimize the potential of offsite tracking of mud from the facility.

Ms. Sharon Svitek Page 3 February 15, 2021

If you have any additional questions concerning this Corrective Action Plan, please do not hesitate to contact Mr. Rich Walton of Sanitary Landfill at (610) 698-9291 or our office at (412) 299-2700.

Sincerely,

Civil Design Solutions, Inc.

Michael E. Zucatti, P.E.

Senior Project Manager, Ext. 157

David W. Murray, P.E.

Principal Engineer, Ext. 151

cc: Mr. Rich Walton, Westmoreland Sanitary Landfill – 1 Copy (electronic)

Mr. Brian Stewart, Westmoreland Sanitary Landfill – 1 Copy (electronic)

This Corrective Action Plan has been prepared for the Westmoreland Sanitary Landfill (WSL) as required by Corrective Action Paragraph 3.e of the Consent Order and Agreement (COA) executed October 7, 2020. The following sections present a description of actions and procedures to be performed by the facility to address longer-term issues at the facility to minimize the risk of future violations.

Onsite Runoff and Stormwater Management

WSL has been working to improve existing erosion and sedimentation controls as well as implement new controls as needed. WSL has removed sediment, reshaped and installed new rip-rap in approximately 1,250-lf of roadside channel, cleaned out multiple culverts and cleaned out over 2,000-lf of additional roadside channel in preparation of installing new rip-rap. Additionally, two (2) new culverts were installed from the entrance of the gas plant to pond C in accordance with the permit. A channel has been re-established behind the recently constructed wheel wash which will be lined with rip-rap.

The proposed improvements outlined below are consistent with the Erosion Control and Improvements Plan submitted to the PADEP as required by the PADEP Industrial Waste Compliance Inspection Report dated January 21, 2021.

The following sections present a description of proposed short-term and long-term erosion control improvements as well as a discussion of existing NPDES outfall locations in relation to an observed discharge from a catch basin near the scales. The short-term improvements are intended to provide immediate improvements to the existing sedimentation controls at the facility while working towards implementing the long-term improvements.

Short-Term Improvements

The short-term improvements outlined here discuss both ongoing as well as newly proposed erosion and sedimentation controls followed by an estimated timeframe to complete each item.

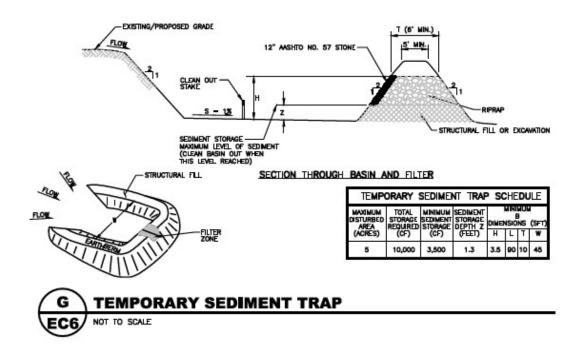
The following work is estimated to be completed on or before March 12, 2021. It should be noted that an earthwork contractor was hired over one month ago and has been working onsite continuously to improve erosion and sedimentation controls. The contractor will continue to work on the improvements and will assist with completing the repair work on time.

• Channel Improvements – WSL has been working to remove sediment, re-establish, and re-install rip-rap in the roadside channels from the site entrance up to the entrance of the gas plant. It is estimated that approximately 75% of this channel work has been completed to date. WSL will continue working to complete the remaining 25% of the channel improvements. Additionally, culverts within the roadside channels will be

inspected and cleaned / repaired as needed.

• Sedimentation Traps – WSL has been working to install three (3) temporary sedimentation traps within the flow line of the channel on the western side of the haul road. The sedimentation traps were constructed by excavating 4-ft deep within the flow line of the channels to form the trap base and sideslopes. Sediment Trap 1 is approximately 20-ft long by 10-ft wide. The traps include a berm on the lower end with a rip-rap filter zone to filter water as it passes through. The traps are nearly complete. A sediment cleanout stake will be added to each trap to identify when cleanout is necessary. The traps will be inspected on a weekly basis and it is currently anticipated the smaller traps (Traps 2 and 3) will require cleanout every other week and the larger Trap 1 will require cleanout on a monthly basis.

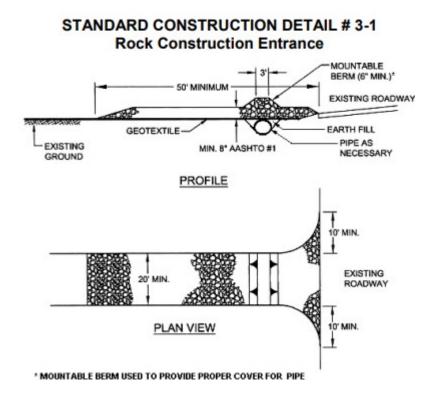
The sediment traps will be built in general accordance with trap configuration presented on Detail G (shown below) on Drawing Number EC6 of the facility's Permit Drawings. However, due to the accelerated installation and short-term nature of the improvement as well as the frequency of installation (3 traps), the traps will be slightly smaller than detailed in the trap schedule.



• Borrow Area Entrance – the current borrow area for the landfill is located west of the main haul road immediately across from the existing landfill footprint. The existing borrow area is accessed through two temporary entrance ramps which cross the haul road channels. One is located directly across from the entrance to the newly

constructed Cell S6A and the other is further north. A trench will be excavated perpendicular to the entrance ramps to allow for the installation of new culverts within the existing haul road channel. Additionally, the access ramps which currently include a soil-like surface, will be scraped free of any soft soils with a bulldozer and topped with a minimum of 12-inches of site rock.

The rock construction entrances will be installed in general accordance with the recommendations presented in the PADEP Erosion and Sediment Pollution Control Program Manual (E&S Manual) as follows.



• Tyrol Boulevard Sediment Removal – Sediment has accumulated along State Route 3003 (Tyrol Boulevard) on both sides of the road between the guard rails and the pavement surface. The accumulated sediment is restricting stormwater from entering the roadside channels and is also leading to additional sediment laden runoff as stormwater slowly washes the sediment away. WSL is currently discussing a plan to remove the sediment with PennDOT representatives. The work will include the use of earthwork and hand equipment to carefully remove the sediment along the roadway and haul it to the active landfill area for disposal. The work will be performed by WSL under the discretion of PennDOT representatives with the use of a third-party traffic control company. WSL will notify PADEP when the work is anticipated to

occur and following completion of the work.

• NPDES Outfalls and Site Discharges – During the January 21, 2021 inspection and as outlined in the Inspection Report, there is a catch basin on the east side of the scales that discharges onto the hillside and ultimately into Speers Run. The NPDES permit for the facility includes three outfalls (001, 002 and 003) and one of the existing outfalls (Outfall 002) is located in the immediate vicinity of the outlet of the catch basin. WSL is proposing to extend the existing culvert southeast of its current discharge location such that it discharges into a rip-rap outlet of an existing culvert that ultimately leads to Outfall 002. In addition, a filter bag will be installed within the catch basin to collect any potential sediment prior to entering the culvert and discharging into the rip-rap outlet just above Outfall 002. The filter bag will be inspected on a weekly basis and cleaned as needed by WSL personnel.

It should be noted that the extension of this culvert would not change the estimated drainage area for Outfall 002 as previously estimated with the last NPDES Annual Report submitted May 1, 2020. The drainage areas for each outfall will be reevaluated as part of the next annual report submittal due May 1, 2021.

The location and configuration of the proposed short-term repair improvements are presented on the Stormwater Improvement Plan figure included with this Plan. The short-term improvements are anticipated to be completed on or before March 12, 2021. WSL will prepare and submit a Summary Report to the PADEP once all of the work has been completed.

Long-Term Improvements

The long-term improvements outlined here discuss currently designed and permitted features to be completed as well as potential improvements to be evaluated. The proposed long-term erosion and sedimentation control improvements and an estimated timeframe to complete each improvement is as follows.

• Pond C Improvements – The existing sedimentation pond just south of the existing landfill footprint (Pond C) manages a significant portion of stormwater for the facility. Improvements to be completed for Pond C include cleaning out sediment, replacing the existing riser structure, re-establishing the pond base and berm grades and inspecting / repairing the outlet channels as needed. This work will be performed in accordance with the enhanced design for Pond C approved as part of the Gas Plant Minor Permit Modification and other relevant permit drawings for stormwater features associated with the pond. In addition, the outlet channel from Pond C to the landfill entrance which ultimately flows into Speers Run will be inspected, cleaned and repaired as needed.

Due to the nature of this work, the improvements are better suited to be completed in warm dry weather. The Pond C improvements and outlet channel repairs are estimated to be completed by the end of June, 2021. The location of Pond C and the outlet channel are presented on the Stormwater Improvement Plan figure included with this Plan.

• Landfill Haul Road – As part of the pending Leachate Evaporator Minor Permit Modification, an improved alignment to the future landfill access road was proposed which will allow for easy access to the wheel wash and the ability to use the space near the gas management area for the proposed leachate management system. The future landfill road eventually replaces the entire existing landfill access road beginning near existing Pond C just north of the landfill office.

Following approval of the pending Leachate Evaporator Minor Permit Modification, WSL will begin constructing portions of the permanent future landfill access road, the next landfill cell (Cell S6B) and Sediment Basin E. Additionally, a temporary haul road will be constructed to access Cell S6B from the newly constructed portion of the access road. The construction of portions of the future access road, Cell S6B and the Cell S6B temporary road will replace approximately 1,100-LF of the existing haul road. Additionally, a permitted temporary stormwater sump and dewatering facility will be installed just north of Cell S6B between the new cell and the Cell S6B temporary haul road. This new temporary stormwater sump will improve stormwater management and reduce the potential of sediment laden water on the landfill access road.

It is currently estimated that the permanent landfill access road construction and the temporary Cell S6B haul road would begin in April, 2021 (pending approval of Leachate Evaporator Minor Permit Modification) and be completed in November, 2021. Additionally, it is estimated that construction of the stormwater sump / dewatering facility and Sedimentation Basin E could be completed in November, 2021. The construction of Cell S6B would begin concurrently with the completion of the haul road and it is estimated Cell S6B would be completed in June 2022. The location of the future access road, Cell S6B, the Cell S6B temporary road and Sedimentation Basin E are presented on the Stormwater Improvement Plan figure included with this Plan. The construction of these items would be carried out in accordance with the Permitted Designs and the CQA / QC Plan.

• New Entrance Evaluation – WSL is currently exploring several potential new entrance options for the facility. The various options are being considered to provide a longer runout for truck traffic, a change in grade and movement of the entrance to

allow for improved stormwater management through the addition of pond(s) and channels. WSL will continue to actively explore the potential entrance options and it is anticipated that WSL will present conceptual layouts to the DEP for discussion by June, 2021.

• PPC Plan Update – WSL has been working to update the facility's Pollution Prevention Control (PPC) Plan which also includes the Spill Prevention, Control and Countermeasure (SPCC) Plan. The PPC and SPCC Plans will be updated to represent the current configuration and contents of the site as well as current landfill contacts. The updated Plans will be submitted to the PADEP in the form of a solid waste Minor Permit Modification as a proposed revision to Form L. Following approval of the Plans, representative WSL employees will be trained on the contents of the Plans as well other stormwater documents and recordkeeping. It is currently anticipated the PPC / SPCC Plans will be submitted as a solid waste Minor Permit Modification in May 2021.

The long-term improvements presented here include upgrades to the existing Pond C, constructing portions of the future landfill access road, constructing Pond E, constructing Cell S6B with a temporary haul road, and constructing a stormwater sump / dewatering facility north of Cell S6B. These long-term improvements will be completed in accordance with their permitted designs and the facility's permit. A construction notification will be submitted to the PADEP prior to beginning the work and certification reports will be prepared as required. Conceptual designs will be prepared for new potential landfill entrance options and it is anticipated that a meeting will be schedule with the PADEP to discuss these potential entrance options and their associated permitting requirements.

These ongoing and proposed improvements to the facilities stormwater management system are anticipated to greatly minimize onsite runoff and restore the intention of the stormwater management system. Following completion of these improvements, the stormwater management system will be re-evaluated if needed.

Stormwater Monitoring and Sampling

WSL has recently implemented a Daily Activity Report and Weekly Inspection Report where a responsible official will inspect onsite operational items and other aspects of the facility for their condition. As part of the Weekly Inspection Report, personnel will inspect key stormwater controls (channels, culverts, traps and ponds) and identify any concerns with their condition. Should stormwater controls not be functioning properly, the responsible official will notify the operations manager or another official in a supervisory role to ensure the items are corrected as needed. In addition, the stormwater BMPS and outfall locations are inspected on a monthly basis as part of the NDPES permit. Copies of the completed

Daily Activity Reports and Weekly Inspection Reports and kept in the scale house and eventually moved to the landfill office for longer term storage. Copies of the records are available to the PADEP upon request.

Sampling and testing of the Outfalls (currently 001, 002 and 003) is performed in accordance with the facility's NPDES permit.

Leachate Seeps and Erosion Gullies

WSL will work to minimize the presence of leachate seeps and erosion gullies by improving the process and procedure for the application of daily cover and intermediate cover. Additionally, temporary benches will be placed as needed on interim slopes to reduce erosion and more easily access leachate seeps for repair. WSL will designate a landfill employee as a responsible official to complete Daily Activity Reports and Weekly Inspection Reports that will include the inspection of daily cover, intermediate cover as well as the presence of seeps. The use of these forms will make landfill personnel more aware of the conditions of the landfill to properly address any issues as needed.

An updated Form 14 is currently being prepared as required by Corrective Action Paragraph 3.h of the Consent Order and Agreement (COA) executed October 7, 2020. The updated Form 14 will be submitted to the Department for review and approval on or before November 6, 2020 and will include a Daily Activity Report log and Weekly Inspection Report that will be used by the facility to track daily operations as well as the overall condition of the facility. Following approval of the Form 14, the facility will begin completing the proposed Daily Activity Reports and Weekly Inspection Reports or utilize similar equivalent forms.

Intermediate Cover and Slope Requirements

WSL will assign a responsible official for ensuring the daily operational items presented on the Daily Activity Report have been completed. The responsible official will also complete a Weekly Inspection Report which includes a review of vegetation, erosion, leachate seeps among other items related to slope requirements and the condition of the landfill. The completion of these forms will ensure the intermediate cover and slope requirements are being met in accordance with 25 Pa. Code Section 273.233. Should the intermediate cover or slope requirements not be met, the responsible official will notify the operations manager or another official in a supervisory role to ensure the items are corrected as needed.

The Daily Activity Report and Weekly Inspection Report are discussed further under the Leachate Seeps and Erosion Gullies section of this Plan.

Vegetation

WSL will observe the conditions of vegetation on the intermediate cover slopes on a daily

basis through completion of the Daily Activity Report. Vegetation on the final cover slopes as well as other vegetated areas outside of the waste disposal footprint will be observed on a weekly basis through completion of the Weekly Inspection Report. Stressed or absent vegetation will be noted by the responsible official and will be shared with the Landfill Manager to properly address areas of concern as needed.

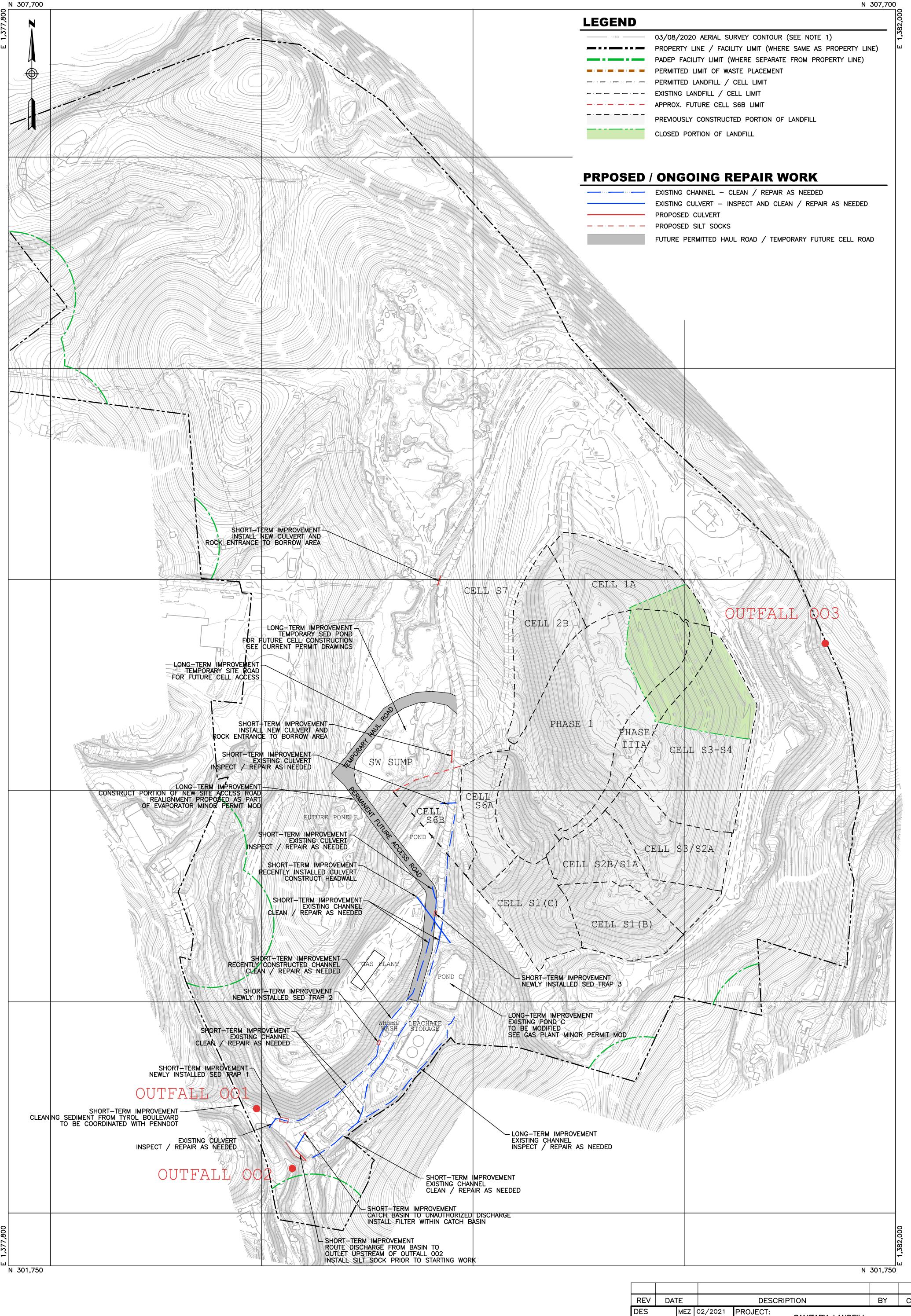
Additionally, overall seeding of intermediate and final cover slopes will be performed biannually as needed. Stressed vegetation identified as part of daily or weekly observations will be repaired as needed. Seeding and vegetated areas will be tracked annually as part of the Annual Operation Report as required by 25 Pa. Code Section 273.313.

On-site Tracking of Mud and Access Road Maintenance

The wheel wash, paved roads and unpaved roads will be inspected on a daily basis to reduce the potential for tracking of dirt of mud. WSL will assign a responsible official for ensuring these items, which are presented on the Daily Activity Report, have been completed. Should the roads or wheel wash require maintenance, the responsible official will notify the Operations Manager or another official in a supervisory role to ensure maintenance is performed as needed. Additionally, the facility may employ their street sweeper or onsite water truck (or similar) with pressurized water applications to address excessive build up of dirt and mud on the site roads to minimize tracking potential. Pressurized water will only be utilized on site roads and not on public or offsite roads. Only street sweeping will be allowed on public or offsite roads.

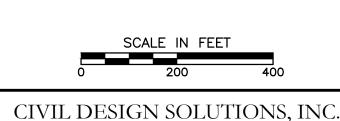
Further, the Responsible Official will also complete a Weekly Inspection Report that will include the access road, truck wash, E&S controls, leachate storage facilities and general site conditions. This weekly inspection will provide an additional level of review of the facilities components to further minimize tracking potential. The Daily Activity Report and Weekly Inspection Report are discussed further under the Leachate Seeps and Erosion Gullies section of this Plan.

Additionally, WSL has been working to improve existing stormwater management control features at the site. As discussed under the Onsite Runoff and Stormwater Management section of this plan, WSL will be performing significant improvements and will be also be evaluating new potential entrance options. These combined efforts will improve the quality of the access road and reduce the potential of tracking of mud throughout the landfill.



NOTES

- 1. EXISTING TOPOGRAPHY WAS OBTAINED FROM AERIAL PHOTOGRAPHY PERFORMED ON MARCH 08, 2020 BY SOUTHERN RESOURCES MAPPING.
- 2. PERMIT FUTURE ROAD CONFIGURATION PRESENTED IN PENDING LEACHATE EVAPORATOR MINOR PERMIT MODIFICATION. THE UPPER PORTION OF THE ROADWAY SHOWN IS THE ANTICIPATED CONFIGURATION OF THE TEMPORARY ROAD TO ACCESS THE FUTURE CELL. THE LIMITS OF THE FUTURE CELL S6B ARE APPROXIMATE.
- 2. THE LOCATION OF THE PROPOSED SEDIMENTATION TRAPS (TRAP 1, TRAP 2 AND TRAP 3)
 ARE APPROXIMATE AND MAY VARY SLIGHTLY IN THE FIELD.



1331 State Avenue • Coraopolis, PA 15108 (412) 299-2700 • (412) 299-2922

| REV | REV DATE | | DESCRIPTION | | | BY | CHK |
|----------|----------|-----|-------------|--------------------------------|---------------------------------|----|-----|
| DES | DES | | 02/2021 | PROJECT: | SANITARY LANDFILL | | |
| CHEC | CHECK | | 02/2021 | ROSTRAVER | R TWP., WESTMORELAND COUNTY, PA | | |
| APPROVED | | MEZ | 02/2021 | SHEET TITLE: | | | |
| SCALE | SCALE | | = 200' | STORMWATER IMPROVEMENT PLAN | | | |
| ISSUE | ISSUED | | 2021 | | | | |
| REVISI | REVISION | | | | | | |
| | | | | | DD444410 014555 | | |



DRAWING SHEET:

(2021-040)-01