

SUNSHINE CANYON LANDFILL



A REPUBLIC SERVICES COMPANY

September 8, 2015

Ms. Lisa Webber
SCL TAC Co-Chair
City of Los Angeles
Department of City Planning
200 N. Spring Street
Los Angeles, CA 90012

Mr. Jon Sanabria
SCL TAC Co-Chair
Los Angeles County
Department of Regional Planning
320 W. Temple St, 13th Floor
Los Angeles, CA 90012

Subject: Report to the Joint Sunshine Canyon Landfill Technical Advisory Committee
SCL TAC Meeting Date - September 29, 2015

Dear Ms. Webber and Mr. Sanabria:

This report provides an update of items requested to be included in the report to the Joint Sunshine Canyon Landfill Technical Advisory Committee (TAC) for the meeting to be held on September 29, 2015.

1.0 Cell Development

1.1 Cell CC-3B, Part 1

As reported in the June 2014 TAC Report, the Design Report for Cell CC-3B was submitted to the LA RWQCB on May 22, 2013; a conditional approval for Cell CC-3B liner construction was received on August 29, 2013 with final approval contingent on the submittal of a design report for the construction of the West Drainage.

On June 5, 2015, an addendum to the approved Cell CC-3B Design Report was submitted to the Los Angeles Regional Water Quality Control Board. The addendum was proposed to construct the Cell CC-3B liner in a series of construction phases during the period of 2015 – 2017 beginning with Cell CC-3B Part 1. The proposed Cell CC-3B Part 1 liner will be constructed in advance of the proposed West Drainage Channel which is currently under design. This cell will provide approximately 6.5 MCY of airspace and will include active surface water management features consisting of new and existing channels and basins constructed consistent with the site's Waste Discharge Requirements. Approval for the design of Cell CC-3B Part 1 was received on June 26, 2015 (Attachment A).

Subgrade excavation activities for Cell CC-3B Part 1 began on July 27, 2015. Liner construction is currently underway.

1.1.1 Phase 1 Temporary Construction By-Pass Road

Construction of the Phase 1 temporary construction by-pass road was completed on July 25, 2015 with traffic moving over to the by-pass road on July 27th. As reported in previous TAC reports, environmental reviews and surveys were conducted in the Phase 1 Temporary Construction By-Pass Road project area by a qualified biologist prior to the start of construction. All work was overseen by a construction quality assurance (CQA) engineer as well as our third party archaeological/paleological monitor (JMA).

2.0 Fill Sequence, Soil Usage, Stockpile/Borrow Areas and Disposal on County Top Deck

2.1 Fill Sequence

Fill operations will continue in CC-3A, Part 2 until CC-3B, Part 1 is completed, e.g. until the fourth quarter of 2015. There have been no disposal activities on the County top deck since early March 2014.

2.2 Soil Usage

As reported in the June 2014 TAC report, based on daily soil tracking, approximately 30% of the site's consumed airspace is taken up by soil used for daily cover. This volume is directly related to the requirement from the LA County Department of Public Works to place nine (9) inches of compacted soil cover at the end of each working day that cannot be removed prior to the next day's operations. This requirement has been followed since the end of September 2010. Prior to September 2010, typically 15-18% of the site's consumed airspace was soil used for cover.

2.3 Stockpile/Borrow Areas

Placement and subsequent removal of stockpile material is an operational activity that occurs over the life of the landfill. There are three stockpile areas on site that have been designated for such purpose. These stockpile areas are shown on the figure included in Attachment B. Only the stockpile area on City South is being used to provide material for the daily soil cover requirements. The other stockpile areas will be used as deemed appropriate by site operations personnel; however, it should be noted that although there is stockpiled soil on the County portion of the site, the presence of the aboveground piping for the gas collection system makes it prohibitive for these stockpiled soils to be accessed at this time. There is currently no stockpiled soil on the eastern stockpile area; soil may be stockpiled in this area in the future.

3.0 Landfill Gas Collection and Control System

Significant improvements to the site's landfill gas collection and control system (GCCS) have been on-going since August 2011. These improvements include the installation of vertical and horizontal gas collection wells, the installation of two new, state of the art flare systems, and a robust monitoring and operations and maintenance program. A summary of these activities is provided in the following sections.

3.1 GCCS Completed Improvements and Planned Upgrades

3.1.1 Completed Improvements

Improvements to the site's landfill gas collection system include the installation of the following:

- 454 vertical extraction wells;
- 18,500 linear feet of 36-inch and 24-inch perimeter header piping;
- Over 52,000 linear feet of horizontal collectors in the waste mass;
- 3,000 linear feet of perimeter liner collectors;
- Over 21,000 linear feet of lateral piping and slope collectors;
- New 200 Horsepower blowers at Flares 1, 3.

In addition, two new flare stations have been constructed and placed into operation as follows:

- Flare 9 was constructed and placed into operation in August 2012. Flare 9 is a state-of-the-art, Zink Ultra Low Emission (ZULE) flare capable of controlling 5,000 standard cubic feet per minute (scfm) of landfill gas;
- Flare 10, which is also a 5,000 scfm ZULE flare, was constructed and placed into operation in August 2013. Operation of Flare 10 commenced on August 15, 2013, which was within 90 days of permit issuance. The initial startup sequence was completed and the initial source performance test was conducted in September 2013;
- The temporary flare, which became operational in February of 2012, was permanently taken out of service on August 21, 2013.
- Flare 8 was decommissioned and was physically removed in May'15.

3.1.2 GCCS Current Work and Planned Upgrades

The following activities have recently been completed or are currently in progress on the site's GCCS:

- 6,100 linear feet of horizontal floor collectors were installed in January 2015 in Cell CC-3A, Part 2;
- Twenty Nine vertical gas extraction wells were installed between May and July 2015;
- 30 new pumps will be installed in vertical gas wells by the end of September 2015;
- Installation of approximately 1,820 linear feet of 18" header pipe was completed at the end of May 2015.
- Approximately 5,000 linear feet of horizontal collectors are being installed in Cell CC-3A and will be completed by September 2015.

3.2 Landfill Gas Monitoring

3.2.1 Wellhead Monitoring

Monitoring of the site's landfill gas collection system is conducted in accordance with Federal NSPS (New Source Performance Standards) which require readings of pressure, temperature and oxygen be taken on a monthly basis from each monitoring point. Beginning in March 2011, SCL contracted with Brian A. Stirrat (BAS) and Associates to conduct weekly monitoring of the site's gas collection wells. The frequency was reduced to bi-monthly monitoring in July 2011 after system improvements had been made. This bi-monthly monitoring schedule has remained in effect.

3.2.2 Surface Emission Monitoring

Monthly surface emission monitoring (SEM) is conducted in accordance with SCAQMD Rule 1150.1 requirements. SEM monitoring consists of instantaneous and integrated monitoring conducted over an approved grid system established over the site. Each grid is 50,000 square feet or approximately 1.2 acres. The following is a summary of the cumulative results of the instantaneous and integrated SEM conducted for the first and second quarter of 2015.

- Instantaneous SEM monitoring: the City side of the landfill had 15 locations over a total of 1045 grids monitored showing surface emissions over 500 ppm Total Organic Carbon (TOC); the County side of the landfill had 116 locations over a total of 889 grids that had surface emissions over 500 ppm TOC. These locations were repaired and re-monitored in accordance with SCAQMD Rule 1150.1. Each of the locations passed either a 10-day re-check, a second 10-day re-check, or a third 45-day re-check with the gas system being expanded as allowed by Rule 1150.1;
- Integrated SEM monitoring: the City side of the landfill had 14 grids out of a total of 1044 grids monitored that showed results over 25 ppm TOC. The County side of the landfill had 34 grids out of a total of 889

grids that showed results over 25 ppm TOC. The grids were repaired and re-monitored in accordance with Rule 1150.1. Each of the grids passed either a 10-day re-check, a second 10-day re-check, or a 45-day re-check with the gas system being expanded as allowed by Rule 1150.1.

3.3 Perimeter Probe Monitoring

Rule 1150.1 monitoring requires monthly monitoring of the site's perimeter probes. There were no probes that exceeded the regulatory threshold of 5% methane (%CH₄) during the second quarter of 2015. T

4.0 Development of Gas-to-Energy Facility (City/County)

Sunshine Gas Producers, L.L.C. (SGP) is the owner and operator of the turbine power plant. The power plant began commercial power generation on September 1, 2014 and currently places approximately 18.5 MW of renewable energy on the grid. The plant consists of five (5) Solar Mercury turbines rated at 4.6 MW each. Significant milestones related to this project include the following:

- Air permit issued to DTE Biomass Energy in April 2012;
- Building permit received from LA County in June 2013;
- SCE began construction of their substation in August 2013; construction was completed in November 2013.
- Four new 66kV line poles were installed in October 2013 and stringing of the line was completed in December 2013;
- Commercial operations of the power plant began on Sept 1, 2014.

5.0 Groundwater Monitoring (City/County)

The groundwater monitoring program approved by the LA RWQCB for Sunshine Canyon Landfill is based on quarterly and semi-annual monitoring of 18 groundwater monitoring wells. Samples are analyzed by an EPA-approved analytical laboratory for more than 100 individual potential contaminants as specified by the approved monitoring program. Statistical analyses are used to identify any trends or changes in concentrations of constituents that could indicate a potential release from the site. In addition to the groundwater wells, samples are collected from sub-drains and lysimeters. Reports of sampling and monitoring activities, including all analytical results, are submitted to the LA RWQCB on a semiannual and annual basis.

5.1 Summary of Results of First Semi-Annual Groundwater Monitoring Period of 2015

During the first and second quarter events, the WQPS was exceeded for 1,4-dioxane and t-butanol in the sample from well MW-1 and for 1,4-dioxane in the sample from well MW-5. Additionally, the WQPS was exceeded during the first quarter for ammonia-N in the samples from wells DW-3 and DW-5; for chemical oxygen demand

(COD) in the sample from well MW-6; and for t-butanol and chloride in the sample from well DW-2. The following WQPS were exceeded during the second quarter: 1,4-dioxane in the sample from well MW-13R; for allyl chloride in the sample from well DW-5; and for potassium at well PZ-4. These results are generally similar to past monitoring event results, as most constituent/well pairs were previously in tracking mode. However, verification retesting was required for the following first quarter WQPS exceedances: t-butanol and chloride at well DW-2; and COD at well MW-6. Only COD at well MW-6 was confirmed at concentrations that exceed the WQPS. Retesting was conducted for the second quarter WQPS exceedance of potassium at well PZ-4, and the results will be presented in the Second Semiannual 2015 Water Quality Monitoring Report.

During the first semiannual 2015 monitoring period, several volatile organic compounds (VOCs) were detected in the first and second quarter samples collected from Subdrain N and Combined Subdrains. These findings are consistent with historical results, and as a result, the liquids collected at the subdrains are conveyed to the water treatment system prior to reuse.

Lysimeters LY-6 and LY-7 were sampled on a quarterly basis, though lysimeter LY-6 was dry during both sampling events. Both samples from lysimeter LY-7 contained at least four VOCs at quantifiable concentrations, and the types and concentrations of detected VOCs were similar to historical results for this monitoring point.

Annual leachate sampling was performed in October 2014. Based on the results obtained, verification retest samples were collected from "Leachate" in April 2015 and analyzed for one semi-VOC and two chlorinated herbicides. MCPA and 3-methylphenol+4-methylphenol were confirmed in the April 2015 retest sample.

6.0 Leachate Collection and Treatment System (City/County)

There have been no changes to the leachate collection and treatment system. Leachate is collected in the leachate collection system installed beneath the City and County portions of the site. Leachate is collected in a gravel-packed riser sump at the low point of each area, and pumped via extraction pumps to the influent tank at the leachate treatment facility (LTF). The site produces about 10,000 – 15,000 gallons per day (gpd) of leachate.

LTF Process Description

The LTF treatment system consists of filters and granular activated carbon (GAC) vessels. The leachate first passes through the bag filter units, to remove suspended matter from the leachate and protect the GAC media from clogging which could reduce the treatment capacity and performance.

The filtered leachate then undergoes treatment in three GAC vessels, which are configured in series. The second and third GAC vessels serve as polishing units, ensuring effective removal of low level VOCs. The effluent routinely meets the WDR limits for VOCs.

The treated effluent from the third GAC vessel is routed to the effluent tank where it is conveyed by gravity to the gray water tank at the gray water treatment system. The treated effluent is blended with other site waters. The treated effluent from the gray water system is then pumped to two storage tanks; one 265,000 gallon tank and one 100,000 gallon tank. These tanks are used for temporary storage prior to the treated effluent being used on-site for dust control and irrigation. The gray water used onsite routinely meets the WDR limits, and is in compliance with the site's WDRs. Approximately 120,000 -150,000 gpd is processed in the gray water treatment system and re-used on site for dust control.

7.0 Surface Water Management System, Including Drainage and Erosion Control (City/County)

Management of surface water from the site and the substantial upland non-landfill area that drains to it is a major part of the site's environmental compliance and operational programs.

Functions of the surface water management system include the following:

- Prevent or minimize erosion from the landfill surface;
- Prevent discharge of sediments from the site in excess of regulatory standards;
- Maintain peak stormwater discharges at levels no greater than the pre-landfill condition of the site; and,
- Manage the 100-year, 24 hour storm as required by Title 27 of the California Code of Regulations (CCR).

The surface water management system at Sunshine Canyon has been designed according to requirements of CCR Title 27 and the County of Los Angeles. Its major components were evaluated in the Joint Technical Document for the City/County Landfill, and determined to be in conformance with all requirements.

7.1 Existing Stormwater Management System

The existing surface water management system at Sunshine Canyon consists of three subsystems of drainage controls:

- Permanent Perimeter Drainage System;
- Interim Interior Drainage System; and
- Temporary Erosion and Sediment Control Measures

Elements of each system are described below. Elements of permanent drainage facilities at the site as well as some interim facilities such as concrete drainage channels, are shown on the figure included in Attachment C.

7.1.1 Permanent Perimeter Drainage System

The perimeter drainage system is comprised of the major permanent control systems for the landfill. It intercepts all run-on of surface water from non-

landfill areas and diverts it away from the landfill area, and manages runoff from landfill areas where refuse elevations are above the site perimeter drainage elevations. Existing elements of the perimeter system include the following, all of which have been designed to handle the peak discharge from a 100-year, 24-hour storm:

- Sedimentation Basin D, located at the far north end of the County area, which receives run-on from the native canyons north of the landfill area;
- Sedimentation Basin B, located on the east side of the County area, which receives runoff from the native East Canyon area and from portions of the landfill area. Basin B is concrete-lined and has a discharge structure designed to level out peak discharges of stormwater;
- Sedimentation Basin A, located on the west side of the County area, which receives run-on from slope and canyon areas west of the landfill area, and runoff from portions of the landfill area on the County side. Basin A is lined with concrete;
- East Perimeter Drainage Channel is currently completed from Basin D to the Terminal Basin. The final phase of this channel improvement was completed in September 2012;
- Terminal Sedimentation Basin, located near the site entrance at San Fernando Road. All surface water discharge from the site passes through this concrete-lined basin, which is designed to manage the peak flow from the 100-year storm and discharge no greater flow than the pre-landfill condition of the site.
- West Perimeter Drainage Channel is currently completed from Basin D to Basin A. It presently discharges to the interim interior drainage system, as described in the following section. When completed, the West Perimeter Drainage Channel will collect all drainage from the west side of the Closed City Landfill and discharge directly to the Terminal Basin. Construction of Phase 1 of the West Drainage Channel is tentatively scheduled for 2016. Phase 2 of the West Drainage Channel will be constructed after the completion of Phase 1.

7.1.2 Interim Interior Drainage System

Until all areas of the City/County Landfill have been developed and filled to elevations above the site perimeter, run-off from areas of the site interior must be managed in a system of basins and channels discharging through the center of the site to the Terminal Basin. At present, this includes the entire west side of the Closed City Landfill, currently areas of Cells CC-1, CC-2 and CC-3, and most of Cell A. The interim interior system is modified on an annual basis to accommodate ongoing construction activity. System elements in place include the following:

- Significant improvements were completed on the interim primary drainage channel running from Basin A to the scalehouse area. The initial segment of the asphalt and concrete-lined channel conveying discharge from Basin A along access roads to a point approximately 700 feet below the entrance to the Administration area remains as is; improvements to the remainder of this channel have been made as follows:
 - Installation of approximately 2,100 linear feet of trapezoidal channel to replace plastic-lined channels; this channel has been completed with concrete and asphalt.
- Two 90-inch corrugated steel pipes buried below the main site access road, which discharge to the Terminal Basin;
- The drainage system for the Closed City Landfill features one large shallow sedimentation basin and a series of semi-permanent and temporary channels that collect runoff and convey it to the primary interior drainage channel described above. In the future, this system will discharge to the West Perimeter Drainage.

7.1.3 Temporary Erosion and Sediment Control Measures

Temporary erosion control systems are installed on an annual basis in advance of the rainy season. A drainage plan is prepared annually which includes a variety of measures that not only reduce soil erosion but also reduce peak flows by slowing down and leveling discharges from the site. These measures include the following:

- Removal of deposited silt in site basins and drainage channels;
- Removal of deposited silt in Terminal Basin;
- Removal of rock filter around risers in Terminal Basin and replacement with new rock filter;
- Removal of old filter material around risers in Terminal Basin and replacement with new filter material;
- Grading benches to promote positive drainage;
- Removal of vegetation from pipes and inlets;
- Installation of temporary geosynthetic downdrain channels and chutes where required on the active fill area slopes;
- Installation of a geosynthetic-lined stormwater retention basin;
- Installation of a grated road crossing on paved entry road to separate runoff flows from vehicle traffic.

Temporary erosion and sediment control measures are installed by October 1st each year. After each rain event, erosion and sediment control measures are inspected and evaluated, and repairs are made as needed prior to the next rain event.

8.0 Current Odor Control Mitigation Measures (City/County)

Odor control mitigation measures continue to be implemented as follows:

- To eliminate the potential contribution of odors from loads carried by transfer trucks, site supervisors continue to patrol areas close to the site where transfer trucks have been observed parking to wait for the site gates to open at 6 AM. If a transfer truck or any other waste truck is observed parking within a 5-mile radius of the site, they are reminded of the site's policy, told to leave the area and banned from entering the site for the day. Repeat offenders are reported to the hauling company and the drivers are banned from entering the site for a week;
- Starting on October 17, 2011, transfer trucks from Republic-operated transfer stations were delayed from coming to the site until after 9 AM Monday through Friday irrespective of wind conditions. This practice has continued although when favorable wind conditions are present, Operations Supervisors may exercise the option to receive transfer trucks from Republic-operated transfer stations earlier than 9 AM. The receipt of transfer station loads on Saturdays prior to 9 AM is dependent on whether adverse wind conditions are present;
- SCL has worked with one major customer whose wastestream has been identified as odorous to delay the receipt of their containers until after 9 AM. This practice went into effect on February 1, 2012 continued until mid-August 2012 when it was agreed that these trucks could enter the site at 8:30 AM due to routing of these loads. This practice remains in effect;
- Procedures for the handling and management of odorous loads at Republic-operated transfer stations have been developed and the Operations Supervisors at the transfer stations have been trained on these procedures. These procedures involve identifying odoriferous loads at the transfer stations and notifying SCL personnel when these loads are coming into the site so they can be properly managed. The procedures also call for not accepting the loads if they are deemed too odorous to be handled at SCL. These procedures remain in effect;
- The procedures for the management of odorous loads at the site have been developed and the site scale house operators have been trained on these procedures. The procedures include identifying loads that register a '4' on SCAQMD's odor classification scale and notifying the site supervisor on duty so the load can be immediately taken to the working face, deposited and covered with a layer of soil. As indicated previously, loads are not accepted if they are deemed too odorous to be handled at SCL. These procedures have remained in effect;
- The procedures for the minimization of odors and emissions during installation and trenching of vertical wells and horizontal collectors remain in effect. These procedures are being followed by all SCL contractors when they are performing work that involves the installation of wells and/or trenching for the installation of horizontal collectors;

- The four DustBoss systems remain in use;
- Three orchard fans were operated in the old scalehouse area of the site until February 28, 2015. Power to the old scalehouse was re-located at that time as part of the preparations for the construction of Cell CC-3B, Part 1. Placement of the orchard fans on another area of the site will be evaluated in the near future.
- New vapor odor control systems were installed in August – September 2014. A notification of the operation of these systems was sent to the LEA and SCAQMD on October 7 2014. Modifications to these systems were finished in July 2015, however the system located off of the oil field road was turned off on April 2, 2015 and remains off as of the date of this report. The location of this system is currently being evaluated.
- A new misting system was installed on the wind fences that are placed at the working face in February 2015. The misting system is operated every morning from 6 AM to 10 AM.

9.0 Revegetation Plans and Recent Hydroseeding Efforts on Temporary Slopes and Stockpiles (City/County)

A quarterly vegetation report is submitted which provides discussions on the vegetation efforts and any hydroseeding activities conducted during the quarter. The vegetation report for the first quarter of 2015 was submitted on May 6, 2015; the second quarter 2015 vegetation report was submitted on August 3, 2015.

Hydroseeding activities were conducted in late February – early March 2015 over approximately 12 acres of CC-3A Part 2 slopes. A figure showing the hydroseeded areas is included in Attachment D. Hydroseeding of approximately three acres of cut slope area was also done in June 2015 as part of the construction activities for the Phase 1 temporary construction by-pass road project.

10.0 Venturan Coastal Sage Mitigation Plan (City's M.4.4.1 (60) &(61))

As reported in previous TAC reports, a landscape architecture and planning contractor, Architerra Design Group (Architerra), was hired to design and develop a habitat restoration and landscape improvement plan for the City South C Trial Plot. This project is intended to be a pilot or demonstration project to determine the most effective course of action for re-vegetation of the closed deck and slopes area on the City South area of the site. Work on this project began in the first quarter of 2013 with construction/planting activities completed in May of 2013. Weekly activities have been conducted in the pilot project area since that time consisting of maintenance, selective pruning and repairs to the irrigation system when needed.

An assessment of the site's sage mitigation areas, including the pilot project area, is conducted by a qualified biologist on a quarterly basis and is included in the quarterly vegetation reports. The quarterly monitoring consists of an overall assessment of the site's sage mitigation areas (City and County mitigation areas) as well as a sampling and

assessment of the pilot project area in accordance with the procedure presented in the First Quarter Vegetation Report entitled "*Methodology for Monitoring Percent Cover and Species Richness within Each Seeded Application Method on the Coastal Sage Scrub Pilot Project at the Sunshine Canyon Landfill*".

Many positive observations were noted in the fourth quarter report including the following:

- Salvia, Encelia and Artemesia species are ending the flowering cycle but look healthy in appearance and appear to be reseeding locally;
- All bioswales appear healthy and vigorous in growth and have helped to provide cover to a number of new germinated natives. More Sage, Encelia and California Buckwheat seedlings can be found within the shaded portions of the mosaics;
- A large California Whiptail lizard was spotted in the understory along with a smaller, second lizard.

Recommendations for additional work within the pilot area have been made and include the following:

- Additional seeding is recommended in selected areas in addition to scarification and additional straw wattle placement. The seeding is planned for the first quarter of 2016 to maximize germination and establishment of new seedlings;
- New seeding will not include Atriplex (saltbush) due to the frequency of this species in the trial area. Pound rates of other species will likely be increased to help establish more Coastal Sage Scrub (CSS) species within areas currently barren or where minimal coverage exists;
- New straw wattles will be installed every twenty linear feet where surface flow and minor erosion is obvious;
- Dead container plants will be replaced with adapted CSS;
- Modifications to the existing bubbler irrigation system will be evaluated before any new planting is conducted.

11.0 Chatsworth Mitigation (City Q.C.9)

The ordinance amending Section 12.04 of the Los Angeles Municipal Code has not been finalized as of the date of this report. Comments on the draft Ordinance were received from the Army Corps of Engineers (ACOE) on April 17, 2015 and forwarded to the City the same day. There are no other activities to report on for the Chatsworth Mitigation for this TAC report.

12.0 Status of Alternative Fuels Vehicles (City/County)

SCL continues to fuel the E-85 vehicles with Ethanol 85 approximately once a week at a fueling station located at 12881 Encinitas Avenue, Sylmar. Currently the site owns and operates eleven vehicles that use E-85 fuel.

Three light-duty site trucks were purchased in 2013; one was converted to use LPG in late 2013. It was planned to convert the other two trucks to LPG in early 2014, but due to difficulties in fueling with LPG, the decision was made to use E-85 for the other two site trucks. A tipper fueled by LPG is expected to be put into operation in early 2015; at the CAC meeting held on November 13, 2014, SCAQMD indicated the permit for this tipper will be issued soon. According to SCL's research, there have been no advancements in technology for alternative fuel for heavy machinery.

13.0 Backup Generator (City/County)

As reported in previous TAC reports, SCL is in compliance with CUP Condition 83. Generators needed to provide power to the landfill gas flaring system have been identified and secured by a contractual arrangement with Quinn Power Systems.

The transfer switches for Flares 1, 3, 9 and 10 have been installed. Please note SCL has not made a decision on the purchase of permanent generators and will only do so after the permitting efforts have been completed. The permit applications were submitted to the SCAQMD on March 25, 2013. As of the date of this report, permits for the generators have not been received from SCAQMD.

14.0 Soil Importation

On July 28, 2015, Republic Services submitted a request to LA County DPW for approval to import clean soil that will be made available from the Los Angeles County's Devil's Gate Reservoir Sediment Removal and Management Project located in Pasadena, California (Attachment E). By email dated August 26, 2015, DPW requested additional information before the request would be considered. Sunshine Canyon Landfill personnel are currently working on compiling the requested information and it is expected it will be submitted to DPW no later than the end of September 2015.

15.0 Current and Planned Projects Outside the Disposal Area

There are no projects being conducted outside the disposal area as of the date of this report.

Planned projects outside the disposal area include the the SCE Power Pole Relocation Project and a project to create a structural buttress prior to the construction of future Cell CC-4.

15.1 SCE Power Pole Relocation Project

This project includes the removal of approximately 4,200 feet of the 66kV subtransmission line currently running through the center of the landfill and relocating the line along the perimeter of the County portion of the site. This prevents the line from interfering with landfill operations and will also serve to ensure compliance with the subtransmission line clearance requirements found in Commission General

Order (GO) 95. Relocating the 66 kV line will also ensure sufficient power can be provided to Southern Californian Gas Company's planned proposed electric-driven compressors which have been approved for installation and operation at the Aliso Canyon Natural Gas Storage Field located to the southwest of the landfill. The relocation project has been approved and a decision granting SCE a permit to construct the project was issued by the California Public Utilities Commission (CPUC) on April 2, 2014.

Prior to the installation of the new tubular steel poles (TSPs) by SCE, grading activities will be conducted at each pole location to create the required access and pads for each pole. Grading outside the current, approved site grading limits as defined by CUP Exhibit A, is proposed for four of the poles (Poles 8, 9, 14 and 15). Accordingly, an application for a Revised Exhibit A was submitted to the Los Angeles County Department of Regional Planning on September 2, 2015. Grading plans have been developed and were submitted to DPW for review and approval on September 3, 2015.

15.2 Future Cell CC-4 Stability Buttress

An earthen stability buttress is being proposed in order to construct the west slope of the CC-4 liner unit. CC-4 will be constructed in the southwest portion of the site along the southwestern boundary of Phases I and II-B and west of CC-2 and CC-3A Part 1. The rationale for the design of the proposed stability buttress is included in the Design Report for CC-4 which has been submitted to the LARWQB and is currently being revised to include additional information.

Earthwork for this project is estimated at 3.2 million cubic yards (MCY) of excavation and 1.5 MCY of compacted structural fill (as of the most recent aerial survey dated February 2015). At the conclusion of the buttress construction, a perimeter surface water channel (West Drainage Channel) will be constructed to serve the west side of the landfill mound and undeveloped areas to the west. This project is expected to occur over a minimum of two years and will be accomplished in distinct phases to correspond to liner development projects within CC-4.

16.0 Recent Landfill Activities and Planned Activities for Next Six Months

Recent activities conducted at the landfill are discussed in previous sections and include the following:

- Installation of new vertical gas wells and associated piping;
- Continued maintenance of City South Coastal Sage Mitigation Area;
- Site wet weather preparedness activities;
- Completion of the Phase 1 Temporary By-Pass Road;
- Excavation activities for the subgrade for Cell CC-3B Part 1;
- Re-location of site administration buildings and maintenance area.

Planned activities for the fourth quarter of 2015 include:

- Construction and completion of Cell CC-3B, Part 1;
- Installation of horizontal collectors and vertical extraction wells;
- Continued maintenance of City South Coastal Sage Mitigation Project area;
- Implementation of the one-year pilot project to use geosynthetic panel product as alternative daily cover (ADC).

Please do not hesitate to contact me at (818) 362-2072 if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Rob Sherman". The signature is fluid and cursive, with the first name "Rob" and last name "Sherman" clearly legible.

Rob Sherman
General Manager
Sunshine Canyon Landfill

Cc: Ly Lam, City Planning
Nick Hendricks, City Planning
Maria Masis, LA County Regional Planning
Martins Aiyetiwa, County of Los Angeles, Department of Public Works
David Thompson, SCL-LEA Program Lead
Gerry Villalobos, SCL-LEA
Rob Sherman, Republic Services
Michael Stewart, Republic Services
Wayde Hunter, SCL CAC
Becky Bendikson, SCL CAC

ATTACHMENT A

Los Angeles Regional Water Quality Control Board

June 26, 2015

Ms. Patti Costa, Environmental Manager
Sunshine Canyon Landfill
14747 San Fernando Road
Sylmar, CA 91342

APPROVAL OF ADDENDUM 1 TO CELL CC-3B DESIGN REPORT - SUNSHINE CANYON CITY/COUNTY LANDFILL, SYLMAR, CALIFORNIA (ORDER NO. R4-2008-0088, FILE NO. 58-076, GEOTRACKER GLOBAL NO. L10006014618)

Dear Ms. Costa:

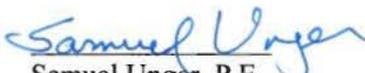
Reference is made to your letter to the Los Angeles Regional Water Quality Control Board (Regional Board), date June 5, 2015, transmitting *Addendum 1, Sunshine Canyon Landfill Cell CC-3B Design Report Cell CC-3B, Part 1 - 2015 Construction* (Addendum 1) that proposed the construction of Part 1 of Cell CC-3B liner system at the for the Sunshine Canyon City/County Landfill (Landfill), which is regulated under waste discharge requirements (WDRs) included in Order No. R4-2008-0088 adopted by the Regional Board on October 2, 2008. Cell CC-3B is an approximate 20-acre planned development within the permitted footprint of the Landfill. Part 1 is an approximately 8-acre subsection of Cell CC-3B.

The design report for Cell CC-3B, dated July 2013, was approved by Regional Board staff in a letter dated August 29, 2013, with the condition that the West Drainage Channel, a permanent storm drain along the west perimeter of the Landfill, be constructed separately but in coordination with Cell CC-3B, and that a separate design report for the West Drainage Channel be submitted to the Regional Board. A proposed West Drainage Channel design report was submitted to the Regional Board in January 2015. A revised design plan for the drainage channel is currently being prepared by the Landfill operator to address comments from the Regional Board staff and other regulatory agencies and is expected to be submitted to the Regional Board in the next 2 to 3 months. Amendment 1 was submitted to demonstrate that the current drainage system at the site is adequate for the construction of Cell CC-3B, Part 1.

We have reviewed the information submitted and concur with you that the current drainage system at the site, with proper maintenance, is adequate for the construction of Cell CC-3B, Part 1. The proposed Amendment 1 is therefore approved, with the condition that all liner installation activities must be completed by October 1, 2015, when the rainy season starts in southern California.

If you have any questions or need additional information, please call Dr. Wen Yang, Chief of Landfill Disposal Unit, at (213) 620-2253.

Sincerely,



Samuel Unger, P.E.
Executive Officer

Patti Costa
Sunshine Canyon Landfill

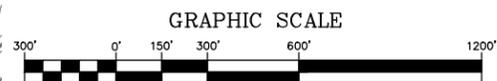
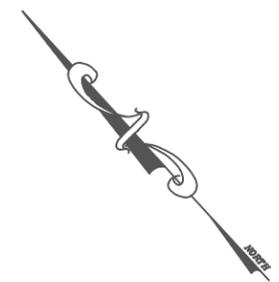
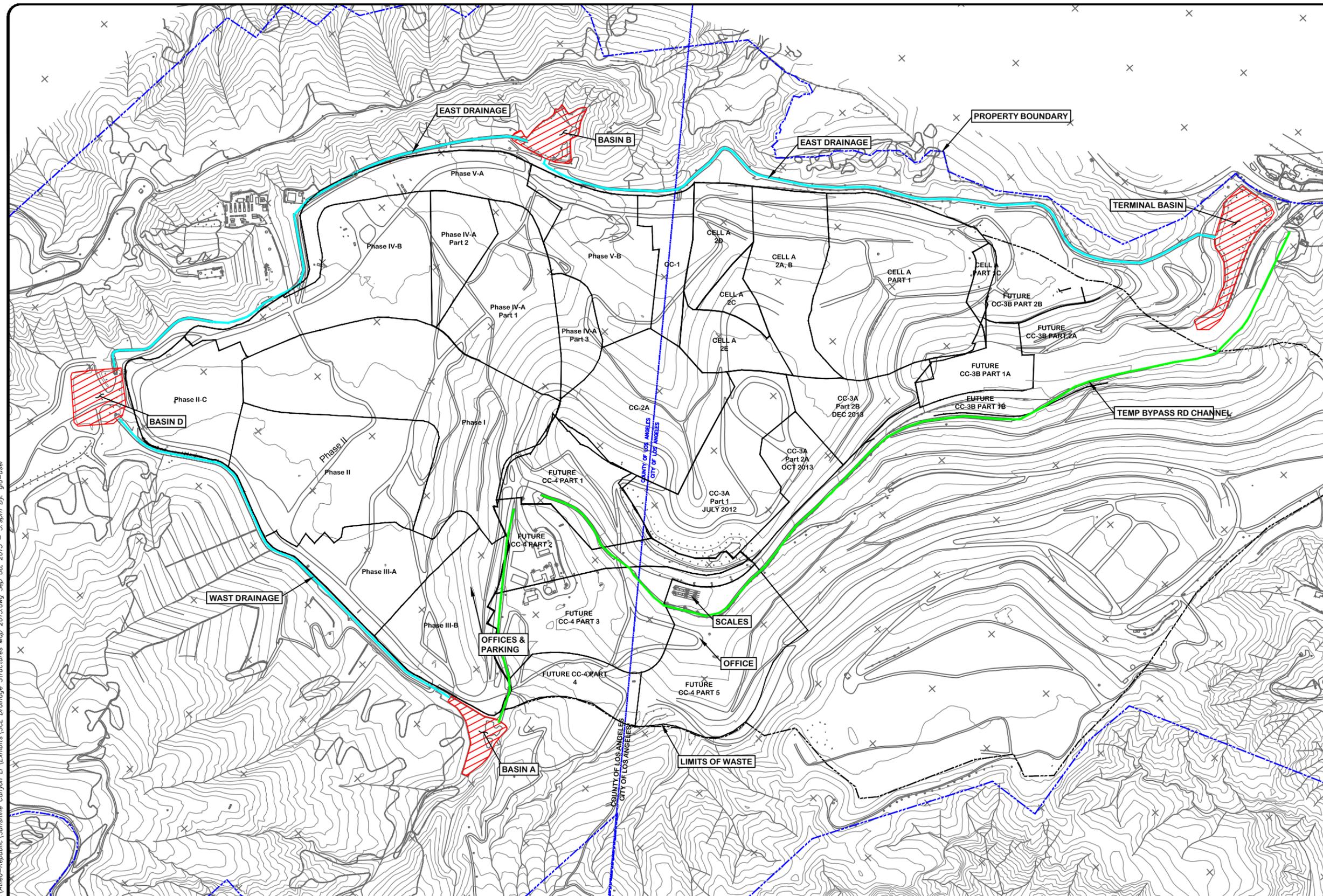
- 2 -

June 26, 2015

cc: Gerardo Villalobos, Los Angeles County, DPH, Baldwin Park
David Thompson, City of Los Angeles, Environmental Affairs Department
Wayde Hunter, North Valley Coalition, Granada Hills
Ali Mehrazarin, A-Mehr, Inc.

ATTACHMENT B

ATTACHMENT C



LEGEND

- EXISTING 25 FT CONTOUR
- PROPERTY BOUNDARY
- EXISTING APPROVED LINERS
- LIMIT OF FUTURE WASTE FILL
- PERMANENT DRAINAGE CHANNEL
- TEMPORARY DRAINAGE CHANNEL
- SEDIMENTATION BASIN

This drawing has not been published but rather has been prepared by Geo-Logic Associates, Inc. for use by the client named in the title block, solely in respect of the construction operation, and maintenance of the facility named in the title block. Geo-Logic Associates, Inc. shall not be liable for the use of this drawing on any other facility or for any other purpose.

FOR REVIEW ONLY

EXISTING TOPOGRAPHY PREPARED BY COOPER AERIAL SURVEYS DATED FEBRUARY 9, 2015

REV. NO.	DATE	DESCRIPTION	APPROVED BY
REV1	DATE1	DESCRIPTION1	DRAWN1
REV2	DATE2	DESCRIPTION2	DRAWN2
REV3	DATE3	DESCRIPTION3	DRAWN3
REV4	DATE4	DESCRIPTION4	DRAWN4
REV5	DATE5	DESCRIPTION5	DRAWN5
REV6	DATE6	DESCRIPTION6	DRAWN6

DATE OF ISSUE: SEPT 2015
 DESIGNED BY: C. BARRETT
 DRAWN BY: C. BARRETT
 CHECKED BY: C. BARRETT
 APPROVED BY: C. BARRETT



250 W. FIRST STREET
 SUITE 228
 CLAREMONT, CA
 91711
 (909) 626-2282
 www.geo-logic.com



SUNSHINE CANYON LANDFILL
 SYLMAR, CALIFORNIA
 TAC REPORT
 SITE DRAINAGE COMPONENTS

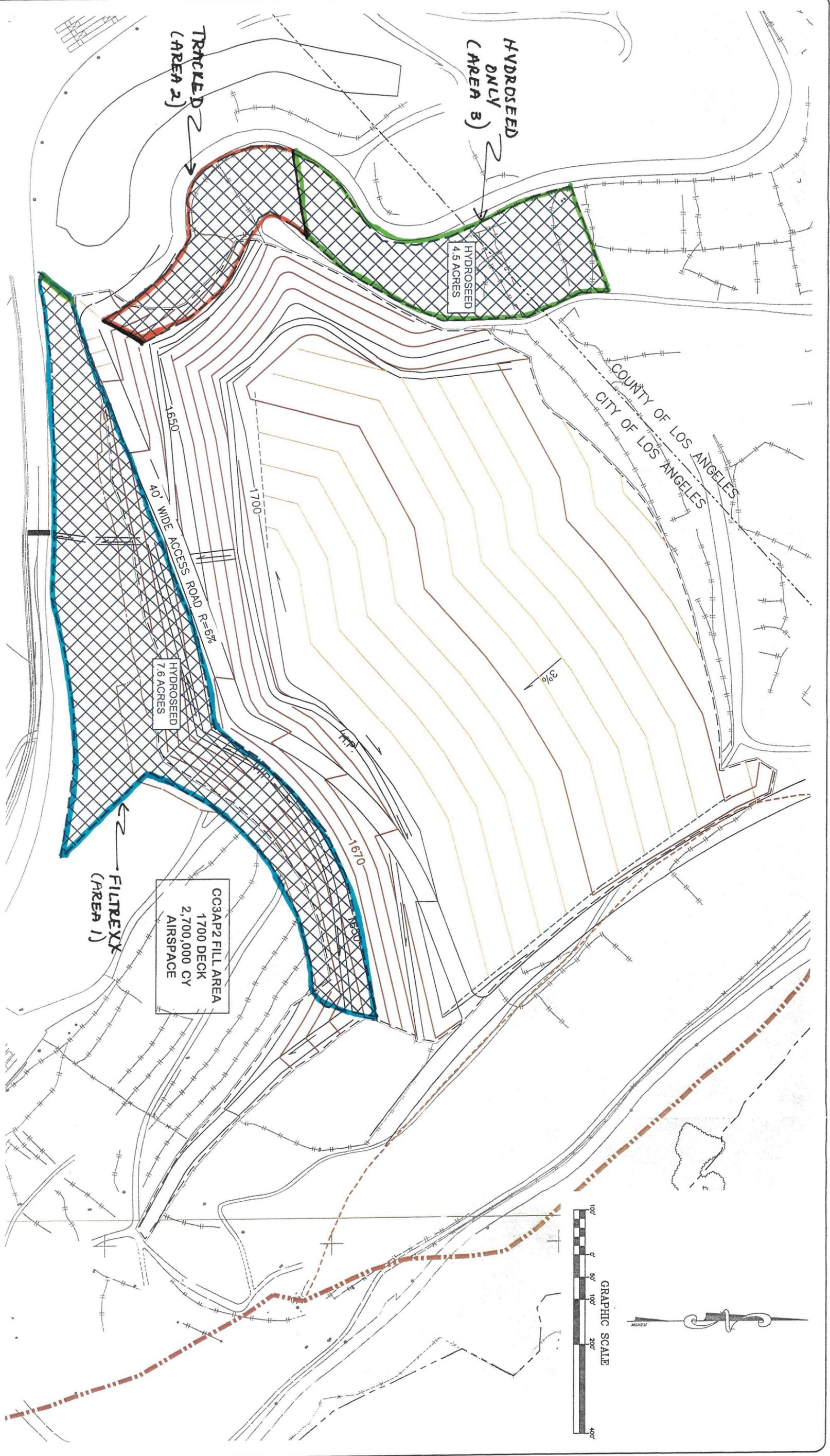
DWG NO. **1**
 PROJECT NO. 2015.0028

C:\Users\glo-user\Documents\Allied-Republic\Sunshine Canyon LF\Exhibits\SCL Drainage Structures Map 2015.dwg Sep 08, 2015 3:39pm By: glo-user

ATTACHMENT D

This drawing has not been reviewed and approved by Geologic Associates, Inc. for use by the client, and is not a record drawing. It is intended for informational purposes only. The client is responsible for the accuracy and completeness of the information provided. Geologic Associates, Inc. shall not be held liable for the use of this drawing or any other facility or for any other purpose.

FIGURE 1
AIRSPACE VOLUME INDICATED BASED ON MARCH 12, 2014 AERIAL SURVEY BY COOPER AERIAL SUPPLEMENTED BY JAN 2015 GROUND SURVEY BY PINNACLE LAND SURVEYING



REV. NO.	DATE	DESCRIPTION	APPROVED BY
REV.1	DATE	DESCRIPTION	DESIGN
REV.2	DATE	DESCRIPTION	DESIGN
REV.3	DATE	DESCRIPTION	DESIGN
REV.4	DATE	DESCRIPTION	DESIGN
REV.5	DATE	DESCRIPTION	DESIGN
REV.6	DATE	DESCRIPTION	DESIGN

DATE OF ISSUE: OCT. 2014
 DESIGNED BY: R. JOHNSON
 DRAWN BY: R. GARRILLO
 CHECKED BY: R. JOHNSON
 APPROVED BY: R. JOHNSON

DIGALFRT

Geo-Logic ASSOCIATES
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 www.geo-logic.com

REPUBLIC SERVICES

SUNSHINE CANYON LANDFILL
 SYLMAR, CALIFORNIA
1Q2ADIS HYDRDSEEDING
 PROJECT NO. 2014.0023

ATTACHMENT E

SUNSHINE CANYON LANDFILL

July 28, 2015

Mr. Martins Aiyetiwa
County of Los Angeles Department of Public Works
Environmental Programs Division
900 S. Fremont
Alhambra, CA 91803

Subject: Request for Approval for Importation of Soil, Sunshine Canyon Landfill
Los Angeles County Devil's Gate Reservoir Sediment Removal and
Management Project

Dear Mr. Aiyetiwa,

By email dated January 20, 2015, I requested clarification regarding the information that is required to be submitted to the Los Angeles County Department of Public Works (DPW) to support approval for the importation of clean soil to Sunshine Canyon Landfill as is allowed under Condition Use Permit (CUP) 00-194-(5) Conditions 1.D and 1.N. By email dated February 12, 2015, Mr. Bahman Hajialiakbar, responded and provided a list of the information required to be submitted.

Attached to this letter is the information requested for the importation of clean soil that will be made available from Los Angeles County's Devil's Gate Reservoir Sediment Removal and Management Project located in Pasadena, California. Some of the information has been provided to Republic Services by Ms. Alma Fuentes, Los Angeles County Department of Public Works, Water Resources Division, Water Conservation Planning Section. The information provided by Ms. Fuentes has been so noted in the attachment.

We are available at any time to discuss the information provided and look forward to working with the County on this important project.

Sincerely,



Rob Sherman
General Manager
Sunshine Canyon Landfill

Mr. Martins Aiyetiwa
Los Angeles County, Department of Public Works
Request for Importation of Clean Soil
Sunshine Canyon Landfill
CUP 00-194-(5)

Cc: Mr. Pat Proano, DPW
Mr. Bahman Hajialiakbar, DPW
Ms. Alma Fuentes, County of Los Angeles Public Works, Water Resources
Division
Mr. Ron Krall, Republic Services
Mr. Michael Stewart, Republic Services
Ms. Elena Goodhall, Republic Services
Dr. Wen Yang, Los Angeles Regional Water Quality Control Board
Mr. David Thompson, SCL LEA
Mr. Gerry Villalobos, SCL LEA
Mr. Wayde Hunter, SCL CAC

Attachment