

January 30th, 2024

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Sylmar, CA 91342

Ms. Tiffany Butler
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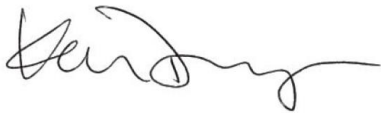
Subject: Report to the Joint Sunshine Canyon Landfill Technical Advisory
Committee SCL TAC Meeting Date – February 13th, 2024

Dear Ms. Butler,

Attached please find an electronic copy of the Report to the Joint Sunshine Canyon Landfill Technical Advisory Committee for the February 13, 2024, TAC meeting.

Please do not hesitate to contact me should you have any questions regarding this report.

Sincerely,



Kate Downey
Environmental Manager
Sunshine Canyon Landfill

Cc: Michael Stewart, General Manager
Andrew Thompson, West Area Environmental Manager
Kate Downey, Team Environmental Manager

January 30th, 2024

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 - February 13th, 2024

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 February 13, 2024. Sunshine Canyon Landfill Team provided a draft copy of the report to the City of Los Angeles Department of City Planning on January 31st, 2024 for review.

1.0 Cell Development

1.1 Cell CC-4, Part 4B & 4C

The most recently constructed cell was CC-4 Part 4B & 4C, cell construction was completed in July 2022. The cell has 17.2 acres of overliner. Approval for disposal operations in Cell CC-4 Part 4B&C was received from the LARWQCB on July 18, 2022 (Attachment A).

1.2 Future Cells

The ultimate access way into Sunshine Canyon Landfill from San Fernando Road and the Cascade Oilfield Road shall be designed to accommodate a geotechnical stability toe berm to complete the future cell construction of CC-5. The new road will house the

main road access onto the site for access to the Administration offices & breakroom, SCL-LEA building, Scalehouse, Maintenance Shop, and access to the Cascade Oilfield office. The geotechnical and structural engineering consultant, Geo-Logic Associates designed the ultimate entryway. As part of the design the east and west stormwater drainage channels and dampener structures were also modified as part of the projects redesign. Ongoing construction activities for this project commenced in early March 2021, and are anticipated to continue through 2025. The approval letter from the Los Angeles Department of Building and Safety Grading Division for all phases of the project are provided (Attachment L).

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

2.1 Fill Sequence

Disposal operations were conducted in CC-4 Part 4A, 4B, 4C, and CC3B and CC3A from August of 2023 (the date of the last TAC Report) to the end of December 2023. Disposal operations in CC-4 Part 4B/C began at the end of July 2022 after the cell was certified by LARWQCB.

2.2 Soil Usage

Based on soil usage logs, approximately 15% of airspace volume consumed in 2023 was daily 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 two primary stockpile areas on site that have been designated for such purpose, which primarily includes imported soil and is used for either daily cover, intermediate cover or construction materials. These stockpile areas are shown on the figure included in Attachment B.

3.0 Landfill Gas Collection and Control System

Improvements to the site's landfill gas collection and control system (GCCS) are conducted on an annual basis. This year's improvements to date include the installation of vertical and horizontal gas collection wells and the continuation of improvements as a component of our robust monitoring, maintenance, and operations program. Summaries of these activities have been provided in prior TAC reports.

The following is a summary of the GCCS activities that were completed in 2023 to date:

- Installation and activation of 83 new and replacement vertical collection points
- Installation and activation of approximately 8,468 LF of horizontal/slope collectors in the working face

- Installation of approximately 34 dewatering pumps in vertical gas extraction wells
- Installation of approximately 1,500 LF of 18-inch header

A robust operations and maintenance program continues to ensure all components of the GCCS are working effectively and efficiently. A force main line maintenance program has been implemented. Gauges installed on wells with pumps and throughout the force main monitor the force main back pressure. This information is plotted and reviewed on a weekly basis to identify the location of blockages or restrictions in the force main piping. Once identified the blockages can then be remediated. A blockage prevention program includes the installed electronic de-scalers, dosing of de-scaling chemical strategically into specific force main lines, and/or jetting of the force main lines as needed to prevent the accumulation of scaling.

Republic Services continues to conduct gas well monitoring and tuning of the wellfield on a semi-monthly basis, or more as-needed.

3.1 Surface Emissions Monitoring

Second Quarter 2023 SEM Results

Instantaneous SEM monthly monitoring:

- During the month of April, 2023, the City side of the landfill had 26 out of 233 grids monitored indicating instantaneous surface emissions over 500 ppm Total Organic Carbon, measured as methane (TOC). This resulted in 35 locations having monitoring results higher than 500 ppm. Of the 177 grids on the county side, 30 had readings of 500 ppm or higher. This resulted in 41 specific locations with readings greater than 500 ppm.
- During the month of May 2023, the City side of the landfill had 19 out of 208 grids monitored indicating instantaneous surface emissions over 500 ppm Total Organic Carbon, measured as methane (TOC). This resulted in 19 locations having monitoring results greater than 500 ppm. Of the 158 grids monitored on the County side, 26 had readings of 500 ppm or higher. This resulted in 36 specific locations with readings greater than 500 ppm.
- During the month of June 2023, the City side of the landfill had 32 out of 213 individual grids monitored indicating instantaneous surface emissions over 500 ppm Total Organic Carbon, measured as methane (TOC). This resulted in 44 locations having monitoring results greater than 500 ppm. Of the 138 grids monitored on the County side, 30 had readings of 500 ppm or higher. This resulted in 34 specific locations that had readings of 500 ppm or higher.

- These locations were repaired and re-monitored in accordance with SCAQMD Rule 1150.1. Each of the locations originally identified as being in excess of the 500 ppm threshold passed on either the first or second 10-day re-check as allowed by Rule 1150.1.

Integrated SEM monitoring:

- During the month of April 2023, the City side of the landfill had 233 grids monitored for integrated surface emissions greater than 25 ppm Total Organic Carbon, measured as methane (TOC). The integrated surface monitoring results showed 4 of the grids had readings higher than 25 ppm. The County side of the landfill had 148 grids monitored, 4 of which had readings greater than 25 ppm.
- During the month of May 2023, the City side of the landfill had 209 grids monitored for integrated surface emissions greater than 25 ppm Total Organic Carbon, measured as methane (TOC). The integrated surface monitoring results showed 21 of the grids had readings higher than 25 ppm. The County side of the landfill had 164 grids monitored, 19 of which had readings greater than 25 ppm.
- During the month of June 2023, the City side of the landfill had 216 grids monitored for integrated surface emissions greater than 25 ppm Total Organic Carbon, measured as methane (TOC). The integrated surface monitoring results showed 14 of the grids had readings higher than 25 ppm. The County side of the landfill had 140 grids monitored, 23 of which had readings greater than 25 ppm.
- The exceedances were addressed and re-monitored in accordance with Rule 1150.1. Each of the locations originally identified as being in excess of the 25 ppm threshold passed on either the first or second 10-day re-check as allowed by Rule 1150.1.

Third Quarter 2023 SEM Results

Instantaneous SEM monthly monitoring:

- During the month of July 2023, the City side of the landfill had 18 out of the 218 grids monitored indicating instantaneous surface emissions of over 500 ppm Total Organic Content, measured as methane (TOC). This resulted in 30 locations having monitoring results greater than 500 ppm. Of the 158 grids monitored on the County side, 25 had readings greater than 500 ppm. This resulted in 31 locations with monitoring results greater than 500 ppm.
- Instantaneous Surface Monitoring was not performed on the City side of the landfill in August 2023. During the month of August 2023, the County side of

the landfill had 44 of the 148 grids monitored indicating instantaneous surface emissions of over 500 ppm Total Organic Content, measured as methane (TOC). This resulted in 60 locations with monitoring results greater than 500 ppm.

- Instantaneous Surface Monitoring was not performed on the City or County side of the landfill in September 2023.
- These locations were repaired and re-monitored in accordance with SCAQMD Rule 1150.1. Each of the locations originally identified as being in excess of the 500 ppm threshold passed on either the first or second 10-day re-check as allowed by Rule 1150.1.

Integrated SEM monitoring:

- During the month of July 2023, the City side of the landfill had 227 grids monitored for integrated surface emissions greater than 25 ppm Total Organic Carbon, measured as methane (TOC). The integrated surface monitoring results showed 11 of the grids had readings higher than 25 ppm. The County side of the landfill had 145 grids monitored, 36 of which had readings greater than 25 ppm.
- During the month of August 2023, the City side of the landfill had 218 grids monitored for integrated surface emissions greater than 25 ppm Total Organic Carbon, measured as methane (TOC). The integrated surface monitoring results showed 35 of the grids had readings higher than 25 ppm. The County side of the landfill had 155 grids monitored, 31 of which had readings greater than 25 ppm.
- During the month of September 2023, the City side of the landfill had 203 grids monitored for integrated surface emissions greater than 25 ppm Total Organic Carbon, measured as methane (TOC). The integrated surface monitoring results showed 14 of the grids had readings higher than 25 ppm. The County side of the landfill had 154 grids monitored, 26 of which had readings greater than 25 ppm.
- The exceedances were addressed and re-monitored in accordance with Rule 1150.1. Each of the locations originally identified as being in excess of the 25 ppm threshold passed on either the first or second 10-day re-check as allowed by Rule 1150.1.

3.2 Perimeter Probe Monitoring

Rule 1150.1 monitoring requires monthly monitoring of the site's perimeter probes. During Quarter 2 of 2023 there were three perimeter probes with percent methane

greater than 3.0%. Probe 245 had values higher than 3.0% in May and June. Probe 205R had a value higher than 3.0% in July. During quarter 3 of 2023 there were 5 perimeter probe readings greater than 3.0% methane. Probe 245 had readings higher than 3.0% in July, August, and September. Probe 205R had readings higher than 3.0% in August and September. The monitoring results from April, 2023 through December, 2023 are included in Attachment C. To note, no probes had readings exceeding 5.0% methane at anytime during the year.

4.0 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 per hour or 445 MW per day of renewable energy onto the grid. The plant consists of five (5) Solar Mercury turbines rated at 4.6 MW per hour each.

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 2023

During the first semi-annual 2023 monitoring period, environmental monitoring was conducted on a quarterly basis during March (first quarter) and June (second quarter 2023). The 1st Semi-Annual 2023 Groundwater Report was submitted on August 15th, 2023. The results were generally similar to past monitoring event results, as most analyte/well pairs were previously in tracking mode.

During the first semi-annual 2023 monitoring period, samples were not obtainable from Subdrain N due to the pumping system offline from nearby construction. Samples were collected from the Combined Subdrains. These findings are consistent with historical results, and as a result, the liquids collected at the subdrains are conveyed to the nearby

sewer system under a City of Los Angeles Bureau of Sanitation Industrial Wastewater Discharge permit. Currently, none of the collected liquid is being reused onsite and all of the subdrain liquids are discharged to the sewer. With the exception of 1,4-dichlorobenzene and benzene concentrations in the second quarter of 2023 sample all VOC concentrations in subdrain samples were measured below State and federal drinking water standards. As is typical for Sunshine Canyon Landfill subdrain samples, concentrations of sulfate, fluoride, TDS, iron and manganese exceeded state secondary drinking water standards.

Lysimeters LY-6 and LY-7 are sampled on a quarterly basis if there is a presence of liquids. During the monitoring period, they were monitored in March (first quarter) and June (second quarter). LY-6 was dry during both quarterly monitoring events. This was also documented in the 2nd Semi-Annual 2022 Groundwater Report uploaded to GeoTracker on February 15, 2023. In March 2023, the pump on LY-7 was repaired and samples were able to be obtained for both Quarters 1 and 2 of 2023.

The 2nd Semi-Annual 2023 Groundwater Report will be submitted by February 15th, 2024.

6.0 Leachate Collection and Treatment System (City/County)

A revised Industrial Waste Water permit (Permit W-535428) was issued on September 1, 2023 and is currently in effect with an expiration of August 31, 2026 (as shown as Attachment D).

Within Attachment D of this TAC Report, a Revised Fact Sheet was prepared and submitted to the City to support the industrial wastewater application; this Fact Sheet is included in Appendix A. Appendix B provides a description of the liquids generated at the facility as well as the site liquids management plan and other supporting documentation. As shown on Figure 1, liquids generated at the facility include, leachate, gas well liquids, condensate, seep water, subdrain and cut-off wall water. The major components of the site's liquid management plan include:

- Direct discharge of all site liquids including leachate, gas well liquids and condensate to the sewer with hydrogen peroxide as needed;
- Optional on-site treatment of seep, subdrain and cut-off wall water after which the effluent can be used on-site for dust control

Figures 2 and 3 in the Fact Sheet provides the process flow schematic for the optional on-site water reuse treatment system. This treatment system (formerly call the LTF treatment system in prior TAC reports) has changed. The current system relies on 16

frac tanks to collect all liquids. This liquids is then treated with 27% Hydrogen Peroxide (H_2O_2) to neutralize the dissolved sulfide prior to discharge to the public sewer system.

[FJ1]

7.0 Surface Water Management System, Including Drainage and Erosion Control (City/County)[FJ2]

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 existing 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 E.

7.1.1 Permanent Perimeter Drainage System

The perimeter drainage systems are the major permanent control systems for the landfill. They intercept 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 minimum of a 100-year, 24-hour storm:

- Sedimentation Basin D, located at the far north end of the County portion of the facility, which receives run-on from the native canyons north of the landfill area;
- Sedimentation Basin B, located on the east side of the County portion of the facility, 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 portion of the facility, 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 which runs from Basin D to the Terminal Basin and receives run-on from sloped Canyon areas of the landfill area.
- 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. Upgrades in the form of water discharge skimmers and new outfall structures have been installed in early 2018 to extend the retention time and optimize the capacity of this basin.
- The West Perimeter Drainage Channel is currently completed from Basin D to roughly 4,327 feet south of 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. Approval of the Revised West Drainage Channel Master Plan was received from the LARWQB by letter dated October 24, 2016 (Attachment F).
- The Front Entrance Toe Berm Project when completed will provide a new access roadway for traffic and improved surface water drainage to the Terminal Basin and completion of the West Drainage Channel. At this time, the project is undergoing construction in the first two phases of the project and temporary BMPs will be utilized as needed until final construction activities have been completed in 2025.

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, CC-3, CC-4 Parts 1, 2, 3, and 4 parts A, B & C, and most of Cell A. The interim interior system is modified to accommodate ongoing construction activity. Construction includes drainage elements to ensure stormwater is directed to existing stormwater conveyance systems which ultimately discharge to the Terminal Basin.

The interim interior drainage system consists of an asphalt and concrete-lined trapezoidal channel which runs along the western side of the main haul road. This channel discharges to a box culvert which directs discharge from the trapezoidal channel along the temporary Phase 1 By-Pass Road that discharges 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 Channel.

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 are included in the annual Wet Weather Preparedness plan (Attachment G), and include the following:

- Installed 26 acres of ClosureTurf (2017) to provide slope protection on slope areas east of the administration buildings (See Drawing 2).
- Inspected Filtrex compost rolls at the toe of disturbed slopes throughout various areas of the site and replaced/added rolls on an as needed basis.
- Track-walked slopes throughout the site to reduce slope erosion and allow establishment of seeded or native vegetation in non-active areas.
- Inspected the basin risers filter fabric in Basins A, B, and D, replaced or repaired as needed.
- Repaired damaged riser in terminal basin.
- Cleaned the skimmer systems in the Terminal Basin to make sure they are functioning properly.
- Installed more than 20 acres of fiber rolls spaced at 15-feet vertically on multiple slopes around the landfill blueprint.
- Graded active landfill decks to prevent erosion by avoiding overly steepened swales and decks.

- Based in operational wet weather deck with recycled asphalt concrete.
- Installed rumble strips at the exit to help prevent drag out.
- Graded soil cover in active landfill areas to prevent surface ponding.
- Removed silt, gravel check dams, and vegetation from the perimeter channels.
- Cleaned out sediment from Basins A, B, D, and the Terminal Basin.
- Cleaned out the access road trench drain systems.
- Graded benches to promote positive drainage and reduce overtopping.
- Cleaned pipes and inlets of vegetation and litter.
- Fiber rolls were installed prior to down drain flumes/channels, and at the base of all stockpiles.
- Construction of Diversion Berms and swales were created or reconstructed to create flows towards drainage inlets/perimeter channels.
- Repaired a perimeter drainage pipe.
- Repaired pipe joints and reset down-drains as required.

Temporary erosion and sediment control measures are documented and reported to the LEA, the Los Angeles Regional Water Quality Control Board and the County of Los Angeles, Department of Public Works. The most recent Wet Weather Preparedness Plan (2023) submitted to these agencies is included in Attachment G. The 2024 Wet Weather Preparedness Plan will be available October 1st, 2024. After each rain event, erosion and sediment control measures are inspected and evaluated, and repairs made as needed prior to the next rain event.

8.0 Current Odor Control Mitigation Measures (City/County)

This section provides an overview of the odor control mitigation measures that have been on-going as well as providing the current status of odor control systems in place.

8.1 On-Going Odor Control Measures

As part of regular daily operations, the site employs several aggressive odor control measures, such as placing odor-neutralizing chemicals on stationary equipment strategically positioned throughout the site, altering fill operations to reduce odors during unfavorable wind conditions, and implementing a rigorous program for monitoring, operating, and maintaining landfill gas. These actions are continuously assessed for efficiency and changed in real time as required. New stationary vapor lines have been installed in three key locations throughout the site that started operating at the beginning of 2023 as part of new odor mitigation technology. We continue to test and evaluate the effectiveness of the new odor control equipment to improve our efforts and plan for future odor control measures.

In addition, the site personnel began establishing up a new procedure that we call a "Laydown Yard" in late November to early December. The laydown yard's goal is to lessen the potential odors during tipping activities while still removing the necessary volume of waste from the City of Los Angeles' network of transfer stations. The idea is to continue to minimize the amount of time the waste remains in the transfer station network. The general procedure for the laydown yard involves tipper loads being brought and placed in the yard (covered) as soon as the facility opens at 6 a.m. The loads are kept there until later in the day, when the weather conditions typically improve and there is less potential for odors during tipping.

The site continues to have full time positions filled for odor controlled-related activities with personnel specifically tasked with upkeeping odor management initiatives such as daily on-site and neighborhood odor patrols. Odor control remains a top priority for the site team and the landfill remains committed to its goal of zero odor complaints.

Sunshine Canyon Landfill received more complaint calls and NOVs in the second half of the year (July 2023-December 2023) than in the first half. The number of complaint calls increased from 798 to 919, and there were 31 NOVs issued for odor nuisance (Attachment H). The unexpected Tropical Storm Hillary rain event in August, brought 5.44 inches of rain on the site in less than 24 hours and is a predominant factor in the increase in complaints and violations observed during the second part of the year. This rain resulted in minor rills and erosions across the site with challenging locations that could not be reached rapidly due to safety concerns, because of significant saturation of soil. Seven of the nine odor NOVs were issued in the days immediately following Tropical Storm Hillary. The site saw an increase of 229 more calls with the majority of calls, 217 of them, coming after the rain event. This was primarily due to the back up of the transfer station network throughout Southern California, caused by long wait times at regional landfills. This backup led to prolonged exposure to the summer heat throughout the transfer station network. This odorous waste was unusual for summer months and resulted in a significant amount of trash odor complaints in the early morning hours of operation. Additionally, in October through December, a total of 5.76 inches also disturbed the prompt movement of trash out of the transfer station, as traffic impacts led to additional time in the transfer station network leading to another spike in complaints and NOV's. As the site address these challenges, our focus is on implementing proactive waste management strategies to mitigate the impact of extreme weather conditions on our transfer station networks.

Site personnel have worked closely with South Coast Air Quality Management District, the SCL-LEA, and the LA County Department of Public Works to develop strategies to mitigate odors. These strategies have included delayed or adjusting tipping times, pausing operations, implementation of neutralizer product, installation of gas collection and leachate collection infrastructure and community patrols, among many others. The

SCL team is dedicated to continue those partnerships to effectively mitigate any off-site impacts due to odors.

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 reports for the second quarter of 2023 and third quarter of 2023, submitted on July 31, 2023 and October 31, 2023 respectively. These reports are included in Attachment M.

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 Third 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*".

The most recent observations of the Deck C sage mitigation area noted that overall the area looks healthy, and is recovering well from the impacts of the 2019 Saddleridge Fire. The area will continue to be monitored on a quarterly basis and those observations will be included in the quarterly vegetation reports.

10.1 Phase 2 Coastal Sage Scrub Pilot Mitigation Project

On August 15, 2016, a proposal for a second phase of the Venturan Coastal Sage Scrub (CSS) mitigation was submitted to the TAC. This proposal presented two options to be considered for the Phase 2 CSS mitigation; the option to implement the second phase on Deck B was selected. This includes approximately 9.5 acres with the majority of the

area being relatively flat although there are some shallow slopes along the edges. The area contains established CSS which would be protected during the construction of the area.

The construction of the Phase 2 CSS mitigation area on Deck B was initiated in October 2017. Grading of the area was completed in early November 2017 and the project has been completed in December 2018. Ongoing maintenance for the first year's establishment was underway for 2019 and monitoring and reporting for Deck B has been implemented during the CSS quarterly vegetation program.

11.0 Chatsworth Mitigation (City Q.C.9)

The following presents a summary of the work conducted in 2017 related to the Chatsworth Mitigation project.

11.1 Ordinance Amending Section 12.04 of the Los Angeles Municipal Code

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. A conference call was held on July 7, 2016 to discuss the status of the draft Ordinance. Based on that call, Republic Services proceeded with work to develop an Addendum to the Mitigated Negative Declaration (MND) as a supporting document to the Ordinance (Section 11.2).

A conference call was held with representatives from the California Department of Fish and Wildlife (CDFW) in June 2017 to discuss their comments on the draft Ordinance. Fish and Wildlife personnel stated they could not agree with the Ordinance since the site permit required a Conservation Agreement. In addition, Republic Services was informed that the original Streambed Alteration Agreement (SAA) R5-2002-0163 had expired and could not be amended to include a reference to the City Ordinance. In response to this, Republic Services submitted a Notification of Lake or Streambed Alteration Notification to the CDFW on October 26, 2017. By letter dated November 27, 2017, the CDFW notified Republic Services the submitted Notification was deemed complete (Attachment I). CDFW also stated that if it is determined an Agreement is required for the project, a draft Agreement would be issued no later than January 26, 2018.

By letter dated January 26, 2018, CDFW notified Republic Services that because the CDFW did not submit a draft Lake or Streambed Alteration Agreement by January 26, 2018, Republic Services does not need an agreement to proceed with the proposed work given that all federal, state and local laws are observed. Currently, Republic Services is awaiting the approval of the City Ordinance (Attachment J).

12.0 Status of Alternative Fuels Vehicles (City/County)

The filling station located at 12881 Encinitas Avenue, Sylmar intermittently has E-85 fuel available. When available, pickup trucks used onsite fuel with E-85. When E-85 is not available, unleaded fuel is used. There is no other E-85 filling station close enough to Sunshine Canyon Landfill that is viable for this purpose.

13.0 Backup Generator (City/County)

As reported in previous TAC reports, SCL is in compliance with CUP Condition 83. In addition to the 800 kw generator on-site, 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, 10 and 11 have been installed. One generator has been purchased and is staged on-site. The permit to operate this generator was received from SCAQMD in April 2017 (Permit No. G46227).

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. By letter dated May 4, 2016, DPW approved the importation of this material to Sunshine Canyon Landfill (Attachment K).

By email dated September 12, 2016, Mr. Ken Zimmer (Senior Civil Engineer, Water Conservation Planning, LA County Department of Public Works) informed Republic Services personnel there would be a delay in the Devil's Gate Reservoir Sediment Removal Project and stated the LA County Flood Control District would plan on sending a portion or all of the material from the Pacoima Spreading Grounds to Sunshine Canyon Landfill. Sunshine Canyon Landfill met with representatives from Sunshine Canyon Landfill Local Enforcement Agency and the LA County Flood Control District on June 14, 2018. The Pacoima Spreading Grounds project subsequently commenced in the Fall of 2021.

SCL imports clean soil for daily cover from a variety of sources within the region. In quarters 2 and 3 of 2023, Sunshine Canyon Landfill had soil imported from the following vendors: WF Holdings LLC, L.A.C. FLOOD CONTROL DISTRICT, Valverde Construction, TUTOR PERINI O&G/A Joint Venture, and TUTOR-PURPLE LINE 2.

In May, 2023, Los Angeles County Department of Regional Planning (Regional Planning) issued a Notice of Violation for alleged exceedance of daily tonnage limits as a result of the imported clean soil. On October 16, 2023, Regional Planning issued a

Recission of the Notice of Violation. SCL has continued to import clean soil for daily cover on an as-needed basis.

15.0 Current and Planned Projects Outside the Disposal Area

The site plans to eventually relocate the existing maintenance shop to outside the disposal area. An application for grading approval will be submitted to the County of Los Angeles in 2024 or 2025 with anticipation to complete the grading work and relocate the maintenance shop in 2025.

15.1 Front Entrance Toe Berm

The ultimate access way into Sunshine Canyon Landfill from San Fernando Road and the Cascade Oilfield Road shall be designed to accommodate a geotechnical stability toe berm to complete the future cell construction of CC-5. The new roads will house the main road access on to the site for access to the Administration offices & breakroom, SCL-LEA building, Scalehouse, Maintenance Shop, and access to the Cascade Oilfield office. The geotechnical and structural engineering consultant, Geo-Logic Associates designed the ultimate entryway. As part of the design the east and west stormwater drainage channels and dampener structures were also modified as part of the projects redesign. Ongoing construction activities for this project commenced in early March 2021, and are anticipated to continue through 2025. The approval letter from the Los Angeles Department of Building and Safety Grading Division is provided (Attachment L).

16.0 Current Monitoring Activities

The following monitoring activities have been conducted during the reporting period:

- Third Party Mitigation Monitoring

Scope: Third-party Mitigation Monitoring
Consultant: UltraSystems

- Surface Emission Monitoring

Scope: Monitoring required by SCAQMD Rule 1150.1 (Surface Emission Monitoring, etc.)
Consultant: RES Environmental

- Biological Monitoring

Scope: Coastal Sage, Oak Tree and Big Cone Fir Mitigation Monitoring
Consultant: Rincon Consultants (Formerly JMA)

- Ambient Air Monitoring

Scope: Third-party Ambient Air Monitoring
Consultant: Sonoma Technology, Inc. (STI)

- Gas Well & Perimeter Probe Monitoring

Scope: NSPS Monitoring
Consultant: SCS Engineers

Please note that off-site odor monitoring conducted in nearby neighborhoods is conducted by Republic Services' employees.

17.0 Response to Third Party Mitigation Monitor Observations

UltraSystems provides the third party mitigation monitoring as required by Q Condition C.12.c. UltraSystems personnel perform monitoring visits in order to observe operational site activities and determine compliance status with conditions and/or mitigation measures. After each site visit, UltraSystems and Republic personnel meet to discuss the findings and observations.

18.0 Recent Landfill Activities and Planned Activities for Next Six Months

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

- Continued maintenance of City South Coastal Sage Mitigation Area;
- Graded low areas in Deck A to prevent ponding
- Cleaned stormwater channels and basin
- Removed sediment and debris
- Developed a plan for mitigation of Deck A
- Installed 83 vertical extraction wells and installed 34 pumps
- Installed over 8,468 linear feet of horizontal gas collectors
- Excavated waste for new cell development
- Constructed and paved Phase 2 Bypass Road of Front Entrance Project
- Extended West Drainage Channel
- Installed 60" storm drain pipe

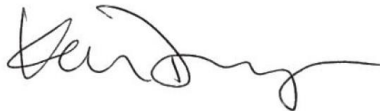
Planned activities for the first and second quarter of 2024 include:

- Installation of 40 wells, with an additional 15 wells designed
- Liquids management designed for new wells, as needed
- Approximately 2,000 linear feet of header pipe installed
- Gas infrastructure installed under the cell CC5A overliner and side slopes adjacent to the cell footprint.

- Quarterly liquid level data reviewed, improvements suggested, and implemented as needed
- Realignment of gas infrastructure that will be affected by Phase 4 Front Entrance Project
- SEM data managed and improvements made by the second 10-day check
- Construction and grading of subsequent phases of Front Entrance Toe Berm as well as temporary, internal access road grading
- Phase 2 Coastal Sage Scrub Pilot Mitigation Project;
- Continued maintenance of City South Coastal Sage Mitigation Project area.
- Design and construction of 5.4 acres of VCSS on Deck B City South;

Please do not hesitate to contact me at (818) 362-2124 if you have any questions.

Sincerely,



Kate Downey
Team Environmental Manager
Sunshine Canyon Landfill

Cc:

Tiffany Butler, City Planning
Lisa Webber, City Planning
Jon Sanabria, LA County Planning
David Nguyen, LA County Planning
Alex Garcia, LA County Planning
Edgar DeLaTorre, LA County Planning
Timothy Fargo, City Planning
Claudia Rodriguez, City Planning
Jason Valencia, City Planning
David Thompson, SCL-LEA
Dorcas Hanson-Lugo, SCL-LEA

ATTACHMENT A

Los Angeles Regional Water Quality Control Board

July 18, 2022

Ms. Valorie Moore, Environmental Manager
Sunshine Canyon Landfill
14747 San Fernando Road
Sylmar, CA 91342
VMoore3@republicservices.com

APPROVAL OF CONSTRUCTION QUALITY ASSURANCE REPORT FOR CC 4, PARTS 4B&C, LINER INSTALLATION - SUNSHINE CANYON LANDFILL, SYLMAR, CALIFORNIA (FILE NO. 58-076, ORDER NO. R4-2008-0088, GEOTRACKER GLOBAL ID L10006014618)

Dear Ms. Moore:

The Los Angeles Regional Water Quality Control Board (Regional Water Board) has received the report titled *Final Report of Construction Quality Assurance Report, CC-4 Parts 4B&C, Sunshine Canyon Landfill* (Report), which was prepared by Geo-Logic Associates (GLA) for Republic Service (Discharger), dated July 2022, and submitted to the Regional Water Board on July 1, 2022. The Report documents the construction quality assurance (CQA) services performed by GLA during the construction of the CC-4, Parts 4B and 4C, liner system at the Sunshine Canyon Landfill (Landfill) in Sylmar, California, which is owned and operated by the Discharger.

The Report is submitted to comply with waste discharge requirements (WDRs) Order No. R4-2008-0088, which was adopted by the Regional Water Board for the Landfill on October 2, 2008, and applicable requirements in title 27 of the California Code of Regulations (27 CCR). In addition to documenting CQA activities during the construction of the liner system, the Report also includes a *Geology Report* that describes the geologic conditions encountered during subgrade excavation and a *Geotechnical Assessment of Uncertified Fill* that provides geotechnical data to demonstrate that soils excavated on site from 2004 to 2010 and stockpiled in the Cell CC-4, Part 4B and 4C, area meet the requirements for prepared subgrade for liner installation.

The CC-4, Parts 4B and 4C, liner system consists of approximately 17.2 acres, including approximately 13 acres of decks and side slopes in Part 4B and 4.2 acres of side slopes in Part 4C. The composite liner system consists of the following components (from top to bottom):

- 2-foot-thick protective soil layer, 10 feet up from the base of the slopes;

JAMES STAHL, ACTING CHAIR | RENEE PURDY, EXECUTIVE OFFICER

- 16 ounces per square yard geotextile;
- 80-mil thick double-sided textured high-density polyethylene (HDPE) geomembrane;
- Geosynthetic clay liner;
- 60-mil thick double-sided textured HDPE geomembrane;
- Geosynthetic clay liner;
- 30-mil thick double-sided textured HDPE geomembrane;
- Prepared subgrade.

The Report indicates that construction of the CC-4 Parts 4B and 4C liner system commenced with earthwork on September 22, 2021, and liner placement was completed on May 20, 2022. During the construction of the liner system, GLA provided CQA services on both earthwork and geosynthetic components installation. The earthwork tasks included geologic mapping, mass excavation, subgrade preparation, granular drainage materials, and the protective operations layer. The geosynthetics tasks included installing the HDPE geomembrane, geosynthetic clay liner, and geotextile.

Regional Water Board staff has reviewed the Report and, based on the information provided and our observations during site inspections conducted on October 25, 2021, March 9, 2022, and May 25, 2022, determined that the CC-4, Parts 4B and 4C, liner system at the Landfill meets the requirements in Section D of the WDRs (Requirements for Containment Structures) and Section 20310 et seq. of 27 CCR (Waste Management Construction Standards). Discharge of municipal solid wastes, as defined in Section A of the WDRs (Acceptable Materials), in this area of the Landfill is hereby approved.

If you have any questions, please contact Dr. Wen Yang, Supervisor of the Regional Water Board Land Disposal Unit, at wen.yang@waterboards.ca.gov or (213) 620-2253.

Sincerely,

Renee Purdy
Executive Officer

Cc:

Michael Wochnick, CalRecycle (Michael.Wochnick@CalRecycle.ca.gov)
Dorcus Hanson-Lugo, Sunshine Canyon Landfill LEA (dlugo@ph.lacounty.gov)
David Thompson, Sunshine Canyon Landfill LEA (david.thompson@lacity.org)
Wayde Hunter, North Valley Coalition, Granada Hills (WHunter01@aol.com)

Los Angeles Regional Water Quality Control Board

August 3, 2021

Mr. Chris Coyle, General Manager
Sunshine Canyon Landfill
14747 San Fernando Road
Sylmar, CA 91342
CCoyle@republicservices.com

APPROVAL OF DESIGN REPORT ADDENDUM 1, PHASE CC-4 PARTS 1 TO 5 - SUNSHINE CANYON LANDFILL (FILE NO. 58-076, ORDER NO. R4-2008-0088, CI- 2043, GEOTRACKER GLOBAL NO. L10006014618)

Dear Mr. Coyle:

The Los Angeles Regional Water Quality Control Board (Regional Water Board) has received a document titled *Design Report – Addendum 1, Phase CC-4 Parts 1 to 5* (Addendum), dated May 2021 and prepared by Geo-Logic Associates for the Sunshine Canyon Landfill (Landfill), which is owned and operated by Republic Services (Discharger). The Addendum documents the revisions of phasing limits of Landfill liner construction that were originally proposed in the *Design Report Phase CC-4 Parts 1 to 5 for Sunshine Canyon Landfill* (Design Report), dated September 2015, that was approved by the Regional Water Board Executive Officer in a letter dated March 15, 2015. The Addendum indicates that the revisions were due to business and permit considerations and stability concerns, and are summarized in the following table:

Proposed in Original Design Report		As-Built		Construction Completion Date
Description of Unit	Areas (Acres)	Description of Unit	Areas (Acres)	
Phase CC-4 Part 1	8.8	Phase CC-4 Part 1	8.6	February 27, 2017
Phase CC-4 Part 2	8.1	Phase CC-4 Part 2	6.2	October 11, 2017
Phase CC-4 Part 3	14.3	Phase CC-4 Part 3A	9.6	September 20, 2019
		Phase CC-4 Part 3B	6.4	December 19, 2019
Phase CC-4 Part 4	4.4	Phase CC-4 Part 4A	4.0	October 16, 2020
Phase CC-4 Part 5	19.5	Phase CC-4 Part 4B	13.0	2021 (anticipated)
		Phase CC-4 Part 4C	4.0	2022 (anticipated)
Total	55.1	Total	51.9	

LAWRENCE YEE, CHAIR | RENEE PURDY, EXECUTIVE OFFICER

The Addendum includes updated drawings showing the revised liner limits and the as-built subgrade, top of liner grade, and liner limits of CC-4 Parts 1 through CC-4 Part 4A and the proposed grading and liner limits of CC-4 Parts 4B and 4C. No other revisions are proposed to the original Design Report. The configurations of the double composite liner system for the Landfill, which are required in the Regional Water Board Waste Discharge Requirements Order No. R4-2008-0088, are not changed.

We have reviewed and herein approve the Addendum. If you have any questions regarding this matter, please contact Dr. Wen Yang, Chief of Land Disposal Unit, by calling (213) 620-2253 or wen.yang@waterboards.ca.gov.

Sincerely,

Renee Purdy
Executive Officer

cc: Michael Wochnick, CalRecycle (Michael.Wochnick@CalRecycle.ca.gov)
Shikari Nakagawa-Ota, Sunshine Canyon Landfill LEA (sota@ph.lacounty.gov)
David Thompson, Sunshine Canyon Landfill LEA (david.thompson@lacity.org)
Martin Aiyitiwa, LA County Department of Public Works (maiyet@dpw.lacounty.gov)
Courtney Barrett, Geo-Logic Associates (cbarrett@geo-logic.com)

ATTACHMENT B

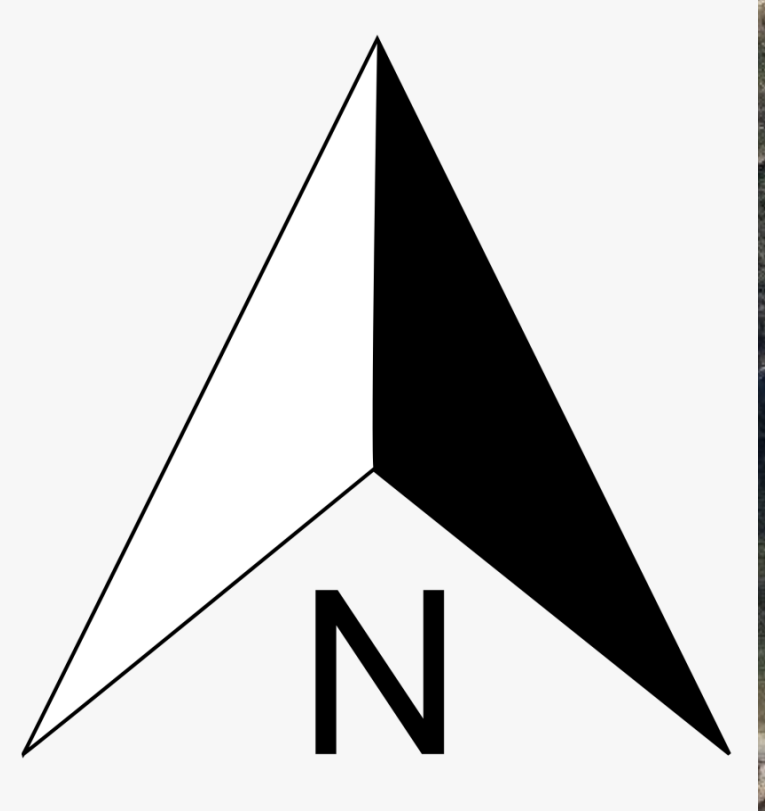
Sunshine Canyon Landfill Stockpile Locations

Legend

Stockpile

North Stockpile

South Stockpile



ATTACHMENT C

SUNSHINE CANYON COUNTY PERIMETER PROBE MONITORING DATA

TECHNICIAN: AMANDO MARTINEZ			TEMPERATURE: 75°F		BARO. PRESSURE: 30.10"				
GEM SERIAL # G503346			WEATHER CONDITIONS: Mostly Sunny						
PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
202									
A-10								2	REMOVED DUE TO CONSTRUCTION
B-25								2	REMOVED DUE TO CONSTRUCTION
C-38								3	REMOVED DUE TO CONSTRUCTION
203									
A-10	4/20/23	10:49	0.0	0	3.4	17.0	79.6	2	
B-25	4/20/23	10:53	+0.01	0	4.0	14.8	81.2	2	
C-40	4/20/23	10:57	0.1	0	1.9	17.1	81.1	3	
206									
A-10	4/20/23	9:08	-0.10	0	11.1	9.0	79.9	2	
B-25	4/20/23	9:11	-0.15	0	19.3	3.8	76.9	2	
C-40	4/20/23	9:15	-0.12	0	21.4	3.6	75.0	3	
207									
A-10	4/26/23	14:06	-0.64	0	0.6	18.8	80.6	2	
B-25	4/26/23	11:10	-0.70	0	1.1	18.3	80.6	2	
C-40	4/26/23	14:02	+0.96	0	0.1	20.0	79.9	3	
208									
A-9.1	4/20/23	10:50	-0.11	0	11.0	14.1	74.9	2	
B-25	4/20/23	10:53	-0.02	0	17.1	6.9	75.9	2	
C-40	4/20/23	10:57	+0.03	0	1.7	18.8	79.3	3	
210									
A-10	4/20/23	11:56	+0.06	0	2.0	18.0	80.0	2	
B-25	4/20/23	11:59	-0.17	0	0.8	18.5	80.7	2	
C-39	4/20/23	12:03	-0.17	0	0.4	18.8	80.8	3	
242									
C-42	4/20/23	11:36	-0.07	0	1.1	18.3	80.5	3	
D-60	4/20/23	11:42	-0.14	0	9.6	1.5	88.9	4	
E-78	4/20/23	11:47	+0.01	0	1.1	18.5	80.4	4	
243									
A-11	4/20/23	8:53	-0.21	0.6	11.3	2.6	85.5	2	
B-20	4/20/23	8:57	-0.11	0	7.6	11.4	81.1	2	
C-33	4/20/23	9:01	+0.15	0.3	2.6	19.0	78.1	3	

SCS SIGNATURE: AMANDO MARTINEZ

LEA SIGNATURE _____

SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
244									
A-11	4/20/23	11:09	-0.20	0	11.5	6.4	82.1	2	
B-21	4/20/23	11:13	+1.4	0	7.4	15.6	77.1	2	
C-36	4/20/23	11:20	-0.27	0	5.3	15.7	74.0	3	
245									
A-11	4/20/23	9:17	-0.09	0	9.3	11.3	79.4	2	
B-20	4/20/23	9:20	-0.05	0.3	2.4	19.6	77.8	2	
C-35	4/20/23	9:37	-0.01	0.4	20.8	1.6	77.1	3	
D-50	4/20/23	9:43	-0.17	0	9.8	6.4	83.8	4	
E-64	4/20/23	9:48	-0.06	0	0.1	20.7	79.2	4	
246									
A-9								2	REMOVED DUE TO CONSTRUCTION
B-16								2	REMOVED DUE TO CONSTRUCTION
205R									
A-11	4/20/23	8:11	-0.05	0	8.0	4.2	87.8	2	
B-20	4/20/23	8:13	-0.74	0	0.2	20.5	79.3	2	
C-33	4/20/23	8:16	-0.71	0.5	29.4	7.5	62.6	3	
D-48	4/20/23	8:20	-1.67	1.4	32.4	6.6	59.7	4	
E-62	4/20/23	8:24	-16.08	0	12.3	13.6	74.5	4	
239									
A-11	4/20/23	12:12	-0.03	0	12.4	11.1	70.5	2	
B-20	4/20/23	12:14	+0.02	0	0.1	19.6	80.3	2	
C-35	4/20/23	12:18	0.0	0	0.0	19.7	80.2	3	
D-50	4/20/23	12:25	-3.89	0	0.0	19.9	80.0	4	
E-64	4/20/23	12:30	-0.11	0	0.0	20.0	79.9	4	
240									
A-11	4/20/23	12:42	+0.02	0	6.4	11.0	82.5	2	
B-20	4/20/23	12:45	+0.05	0	0.7	19.6	79.7	2	
C-33	4/20/23	12:50	-0.26	0	0.1	20.1	73.8	3	
D-49	4/20/23	12:55	-0.06	0	0.1	20.0	79.8	4	
E-61	4/20/23	12:59	+0.19	0	0.1	20.1	79.9	4	

SCS SINGNATURE:

LEA SIGNATURE: _____

[illegible]

LEA SIGNATURE _____

SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

[illegible]

SCS SIGNATURE: AMANDO MARTINEZ

LEA SIGNATURE: _____

SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
220									
A-14	4/18/23	7:37	-0.38	0.0	0.2	20.4	79.4	2	
B-40	4/18/23	7:39	-0.60	0.0	0.2	20.5	79.3	2	
C-87	4/18/23	7:41	-0.39	0.0	0.8	19.3	79.8	3	
D-124	4/18/23	7:44	-0.41	0.0	0.1	20.8	79.1	4	
E-158	4/18/23	7:48	-0.27	0.0	0.2	20.9	78.9	4	
220B									
A-14	4/18/23	8:14	-0.24	0.0	2.3	15.8	81.9	2	
B-38	4/18/23	8:16	-0.68	0.0	4.3	18.8	77.0	2	
C-62	4/18/23	8:20	-0.25	0.0	6.8	8.0	85.0	3	
D-86	4/18/23	8:24	-0.59	0.0	6.2	11.9	81.9	4	
E-110	4/18/23	8:30	-0.24	0.0	7.4	10.3	82.4	4	
221									
A-13	4/18/23	9:06	-0.22	0.0	4.1	17.0	78.9	2	
B-56	4/18/23	9:09	-0.09	0.0	0.2	20.5	79.3	2	
C-99	4/18/23	9:10	-0.26	0.0	6.5	11.6	81.8	3	
D-142	4/18/23	9:13	-0.14	0.0	0.1	20.6	79.3	4	
E-185	4/18/23	9:18	-0.13	0.0	4.3	12.9	82.8	4	
222									
A-13	4/18/23	9:35	-0.09	0.0	7.4	11.9	80.7	2	
B-54.8	4/18/23	9:37	-0.07	0.0	0.3	20.3	79.4	2	
C-96.5	4/18/23	9:39	-0.06	0.0	3.3	16.9	79.8	3	
D-138.3	4/18/23	9:42	-0.73	0.7	7.9	8.4	83.1	4	
E-180	4/18/23	9:48	-0.75	0.6	8.3	0.0	91.1	4	
223									
A-13	4/18/23	10:21	-0.08	0.0	2.2	17.4	80.5	2	
B-37.5	4/18/23	10:22	-0.03	0.0	3.9	14.7	81.4	2	
C-62	4/18/23	10:24	-0.01	0.0	0.9	19.6	79.5	3	
D-86.5	4/18/23	10:39	-0.04	0.0	2.3	17.2	80.5	4	
E-111	4/18/23	10:43	-0.20	0.0	0.9	19.4	79.7	4	
224									
A-13	4/18/23	11:02	-0.04	0.0	0.4	20.6	79.0	2	
B-67.5	4/18/23	11:04	-0.13	0.0	0.1	20.9	79.0	2	
C-122	4/18/23	11:07	-0.17	0.0	0.1	20.9	79.0	3	
D-177.5	4/18/23	11:09	-11.11	0.0	0.1	20.9	79.0	4	
E-232	4/18/23	11:14	-7.64	0.0	0.1	20.9	79.0	4	

SCS SINGNATURE:

LEA SIGNATURE: _____

SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
225									
A-13	4/18/23	13:53	+0.8	0.5	1.8	20.6	77.1	2	
B-72	4/18/23	13:39	-4.47	0.2	1.6	20.1	78.2	2	
C-1131	4/18/23	13:34	-9.06	0.1	2.1	18.2	79.6	3	
D-190	4/18/23	13:46	-9.13	0	0.0	20.7	79.2	4	
E-244	4/18/23	13:50	-9.19	0	0.0	20.9	79.1	4	
226									
A-13	4/18/23	8:10	-0.05	0	0.1	20.8	79.1	2	
B-64	4/18/23	8:13	+0.61	0	0.1	20.9	79.0	2	
C-114	4/18/23	8:18	-8.01	0	0.1	21.0	79.0	3	
D-164	4/18/23	8:23	-8.46	0	0.1	21.0	79.0	4	
E-208	4/18/23	8:29	-9.54	0	0.1	21.0	79.0	4	
227									
A-13	4/18/23	8:42	-0.10	0	1.3	16.5	82.2	2	
B-48.7	4/18/23	9:03	+0.10	0.8	7.0	0.0	92.2	2	
C-84.4	4/18/23	8:50	+1.04	0.4	6.4	1.8	91.4	3	
D-114	4/18/23	8:55	+1.05	0.1	4.9	0.0	95.1	4	
E-115.7	4/18/23	8:59	+0.88	0	5.6	0.0	94.4	4	
228									
A-13	4/18/23	9:13	-0.66	0	1.2	18.2	80.6	2	
B-63	4/18/23	9:16	+0.51	0	6.9	3.9	89.3	2	
C-113	4/18/23	9:21	-0.04	0.8	7.6	0.2	91.4	3	
D-163	4/18/23	9:26	-0.04	0.1	2.2	12.7	85.0	4	
E-213	4/18/23	9:32	+0.17	0	4.7	1.3	94.0	4	
229									
A-13	4/18/23	7:39	-0.47	0	2.7	20.5	78.8	2	
B-48.7	4/18/23	7:44	-0.07	0	0.1	20.9	79.0	2	
C-84.4	4/18/23	7:49	-8.57	0	0.7	19.4	79.9	3	
D-114	4/18/23	7:55	-16.84	0	0.6	20.0	79.4	4	
E-155.7	4/18/23	8:01	-0.05	0	0.1	20.9	79.0	4	
230									
A-16								2	REMOVED DUE TO CONSTRUCTION
B-33								2	REMOVED DUE TO CONSTRUCTION
C-50								3	REMOVED DUE TO CONSTRUCTION
231									
A-13								2	REMOVED DUE TO CONSTRUCTION
B-26								2	REMOVED DUE TO CONSTRUCTION
C-39								3	REMOVED DUE TO CONSTRUCTION
D-51								4	REMOVED DUE TO CONSTRUCTION
E-66								4	REMOVED DUE TO CONSTRUCTION

SCS SIGNATURE: AMANDO MARTINEZ

LEA SIGNATURE: _____

SUNSHINE CANYON CITY PERIMETER PROBE MONITORING DATA

TECHNICIAN: RYAN M.			TEMPERATURE: 55		BARO. PRESSURE: 28.23				
GEM SERIAL #: 505463			WEATHER CONDITIONS: Sunny						
PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
213									
A-13	4-18	9:52	-.06	0.0	0.1	20.5	79.4	2	
B-29	4-18	9:55	.07	0.0	0.1	20.4	79.5	2	
C-45	4-18	9:58	-.36	0.0	0.1	20.5	79.4	3	
D-61	4-18	10:03	-.06	0.0	0.1	20.4	79.5	4	
E-77	4-18	10:08	-17.76	0.0	0.1	20.2	79.7	4	
214									
A-13	4-18	10:18	-.02	0.0	0.5	19.7	79.8	2	
B-30	4-18	10:21	-1.2	0.0	0.0	19.8	80.1	2	
C-48	4-18	10:26	.01	0.0	0.1	19.8	80.1	3	
215									
A-13	4-18	10:35	.05	0.0	0.0	20.1	79.9	2	
B-30	4-18	10:38	.01	0.0	6.0	7.5	86.5	2	
C-47	4-18	10:42	.22	0.0	0.0	20.4	79.6	3	
D-64	4-18	10:47	-.05	0.0	0.1	20.5	79.3	4	
E-81	4-18	10:53	-.10	0.0	3.9	12.8	83.4	4	
216									
A-14	4-18	11:04	.01	0.0	0.0	20.7	79.3	2	
B-43	4-18	11:08	-.02	0.0	0.0	20.7	79.3	2	
C-62	4-18	11:12	.03	0.0	0.0	20.6	79.4	3	
D-86	4-18	11:16	-.01	0.0	0.1	20.6	79.3	4	
E-110	4-18	11:21	.02	0	0.2	20.4	79.4	4	
217									
A-13	4-18	11:28	.04	0.0	2.2	18.7	79.0	2	
B-30	4-18	11:31	.01	0.0	6.5	5.0	88.4	2	
218R									
A-11	4-18	11:39	-.01	0.0	7.4	9.4	83.2	2	
B-26.5	4-18	11:42	.04	0.0	0.9	17.5	81.6	2	
B-30	4-18	11:44	.5	0.0	7.4	17.0	75.5	2	
219									
A-13	4-18	1:33	.04	0.0	1.5	19.2	79.2	2	
B-64	4-18	1:35	.01	0.0	5.2	11.2	83.6	2	
C-115	4-18	1:39	.04	0.0	1.9	18.7	79.5	3	
D-166	4-18	1:44	.04	0.0	6.2	8.8	85.1	4	
E-217	4-18	1:49	.05	0.0	7.0	7.0	86.0	4	

SCS SIGNATURE: 

LEA SIGNATURE _____

2

2



LEA SIGNATURE: _____

SUNSHINE CANYON COUNTY PERIMETER PROBE MONITORING DATA

TECHNICIAN: <u>A MARTINEZ</u>			TEMPERATURE: <u>64°F</u>		BARO. PRESSURE: <u>29.84"</u>				
GEM SERIAL #: <u>G503346</u>			WEATHER CONDITIONS: <u>cloudy</u>						
PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
202									
A-10								2	REMOVED DUE TO CONSTRUCTION
B-25								2	REMOVED DUE TO CONSTRUCTION
C-38								3	REMOVED DUE TO CONSTRUCTION
203									
A-10	5/25/23	10:04	-0.04	0	4.3	16.5	79.2	2	
B-25	5/25/23	10:07	-0.05	0	4.6	13.8	81.5	2	
C-40	5/25/23	10:11	-0.04	0	2.6	16.2	81.3	3	
206									
A-10	5/25/23	11:38	-0.07	0	12.1	9.6	78.3	2	
B-25	5/25/23	11:41	-0.01	0	19.0	6.4	74.7	2	
C-40	5/25/23	11:45	-0.21	0	25.0	4.4	70.5	3	
207									
A-10	5/25/23	10:59	-1.18	0	2.9	18.4	78.7	2	
B-25	5/25/23	11:02	-1.79	0	0.5	20.6	78.8	2	
C-40	5/25/23	11:05	+3.33	0.1	0.2	21.0	78.7	3	
208									
A-9.1	5/25/23	12:01	+0.29	0	15.1	0.3	84.5	2	
B-25	5/25/23	12:04	-0.04	0.4	22.0	0.2	77.4	2	
C-40	5/25/23	12:07	-7.75	0	0.3	20.7	78.9	3	
210									
A-10	5/25/23	8:43	-0.01	0	1.4	19.9	75.8	2	
B-25	5/25/23	8:45	-0.16	0	1.4	19.9	78.7	2	
C-39	5/25/23	8:49	-0.17	0	1.4	19.9	78.7	3	
242									
C-42	5/25/23	9:03	+0.01	0	2.3	17.0	80.6	3	
D-60	5/25/23	9:07	0.0	0	7.7	6.5	85.7	4	
E-78	5/25/23	9:11	-0.04	0	4.5	12.0	83.5	4	
243									
A-11	5/25/23	8:01	-0.09	0.9	11.1	4.3	83.6	2	
B-20	5/25/23	8:04	-0.08	0	10.4	7.2	82.4	2	
C-33	5/25/23	8:08	-0.01	0	9.8	7.2	82.9	3	

SCS SIGNATURE: AMANDO MARTINEZ

LEA SIGNATURE _____

SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

[illegible]

SCS SINGNATURE:

AMANDO MARTINEZ

LEA SIGNATURE: _____

[illegible]

LEA SIGNATURE _____

SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

[illegible]

SCS SIGNATURE: A MARTINEZ

LEA SIGNATURE: _____

SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
220									
A-14	5/23	9:07	-0.06	0.0	2.3	18.4	79.3	2	
B-40	5/23	9:12	-0.11	0.0	0.0	20.9	79.1	2	
C-87	5/23	9:15	-0.08	0.0	0.9	19.3	79.8	3	
D-124	5/23	9:21	-0.16	0.0	0.0	21.0	78.9	4	
E-158	5/23	9:26	-0.13	0.0	0.1	21.0	78.9	4	
220B									
A-14	5/23	9:33	-0.09	0.0	4.7	13.7	81.5	2	
B-38	5/23	9:36	-0.08	0.0	6.6	8.4	85.0	2	
C-62	5/23	9:40	-0.06	0.0	6.8	8.3	84.9	3	
D-86	5/23	9:44	-0.08	0.0	8.1	6.0	85.9	4	
E-110	5/23	9:49	-0.47	0.0	5.7	11.9	82.9	4	
221									
A-13	5/23	10:11	-0.10	0.1	4.8	12.5	82.7	2	
B-56	5/23	10:14	-0.10	0.0	8.3	1.7	89.9	2	
C-99	5/23	10:18	-0.10	0.0	10.1	1.7	88.2	3	
D-142	5/23	10:23	-0.09	0.0	2.2	16.0	81.9	4	
E-185	5/23	10:28	-0.10	0.0	4.0	11.9	84.1	4	
222									
A-13	5/23	10:35	-0.10	0.0	0.7	13.7	79.5	2	
B-54.8	5/23	10:38	-0.07	0.0	0.2	20.8	79.0	2	
C-96.5	5/23	10:42	-0.05	0.0	2.2	18.6	79.1	3	
D-138.3	5/23	10:47	-0.07	0.1	4.2	14.7	80.9	4	
E-180	5/23	10:52	0.99	0.9	8.9	0.0	90.1	4	
223									
A-13	5/23	8:42	-0.22	0.0	6.1	11.3	82.6	2	
B-37.5	5/23	8:44	-0.09	0.0	8.7	8.3	83.0	2	
C-62	5/23	8:48	-0.08	0.0	10.4	4.4	85.6	3	
D-86.5	5/23	8:53	-0.18	0.0	3.4	16.6	80.0	4	
E-111	5/23	8:58	-0.08	0.0	2.7	17.6	79.7	4	
224									
A-13	5/23	8:54	-0.13	0.0	2.4	13.5	84.1	2	
B-67.5	5/23	8:57	-0.14	0.2	1.1	18	80.7	2	
C-122	5/23	9:01	-0.52	0.5	3.4	14.2	81.9	3	
D-177.5	5/23	9:07	-10.99	0	0.1	21.0	78.8	4	
E-232	5/23	9:12	-7.53	0	0.1	21.0	78.9	4	

SCS SINGNATURE:

LEA SIGNATURE: _____

SUNSHINE CANYON CITY PERIMETER PROBE MONITORING DATA

TECHNICIAN: <u>MARCOS M</u>			TEMPERATURE: <u>64°</u>			BARO. PRESSURE: <u>27.80</u>			
GEM SERIAL #: <u>506081</u>			WEATHER CONDITIONS: <u>CLOUDY</u>						
PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
213									
A-13	5/23	8:09	.09	0.0	0.2	20.5	79.4	2	
B-29	5/23	8:12	-.52	0.0	0.1	20.6	79.3	2	
C-45	5/23	8:15	.04	0.0	0.1	20.5	79.4	3	
D-61	5/23	8:21	.08	0.0	0.1	20.9	79.0	4	
E-77	5/23	8:26	.01	0.0	0.1	20.8	79.0	4	
214									
A-13	5/23	8:32	.04	0.0	0.1	19.9	80.0	2	
B-30	5/23	8:35	.01	0.0	0.2	20.4	79.4	2	
C-48	5/23	8:38	.03	0.0	1.8	18.8	81.1	3	
215									
A-13	5/23	8:46	.03	0.0	0.2	20.4	79.3	2	
B-30	5/23	8:49	.04	0.0	0.1	13.0	86.9	2	
C-47	5/23	8:53	.02	0.0	0.2	20.2	79.5	3	
D-64	5/23	8:58	-.01	0.0	0.1	19.2	80.6	4	
E-81	5/23	9:04	-.01	0.0	0.0	13.5	86.5	4	
216									
A-14	5/23	9:14	.06	0.0	0.1	20.8	79.1	2	
B-43	5/23	9:18	-.01	0.0	0.1	20.1	79.7	2	
C-62	5/23	9:22	.01	0.0	0.2	20.6	79.1	3	
D-86	5/23	9:28	-.01	0.0	0.2	20.9	78.9	4	
E-110	5/23	9:33	.02	0.0	0.1	20.5	79.4	4	
217									
A-13	5/23	9:44	-.02	0.0	0.0	16.6	83.4	2	
B-30	5/23	9:46	-.01	0.0	0.1	14.3	85.6	2	
218R									
A-11	5/23	1:03	-.07	0.0	16.9	0.8	82.4	2	
B-26.5	5/23	1:05	-.03	0.0	0.8	20.9	78.3	2	
B-30	5/23	1:07	-10.00	0.0	0.1	20.9	79.0	2	
219									
A-13	5/23	10:03	-.03	0.0	0.1	19.3	80.5	2	
B-64	5/23	10:06	-.07	0.0	0.1	20.5	79.4	2	
C-115	5/23	10:12	-.03	0.1	0.2	17.7	81.9	3	
D-166	5/23	10:17	-.05	0.0	0.1	18.9	81.3	4	
E-217	5/23	10:22	-.05	0.0	0.2	19.9	79.9	4	

SCS SIGNATURE: _____

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SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
225									
A-13	5/31/23	13:38	0.0	0.7	5.3	20.6	73.4	2	
B-72	5/31/23	9:24	-3.54	0	4.9	15.1	80.0	2	
C-1131	5/31/23	13:45	-4.40	0.2	2.5	18.2	79.1	3	
D-190	5/31/23	9:33	-6.87	0	0.1	21.0	79.0	4	
E-244	5/31/23	9:36	-7.58	0	0.1	20.9	79.0	4	
226	5.23.23								
A-13	5.23.23	9:48	-.08	0	0.1	20.8	79.1	2	
B-64	5.23.23	9:52	-8.19	0	0.1	20.9	79.0	2	
C-114	5.23.23	9:56	-8.35	0	0.1	20.9	79.0	3	
D-164	5.23.23	10:00	-9.08	0	0.1	21.0	78.9	4	
E-208	5.23.23	10:07	-10.30	0	0.4	20.6	79.1	4	
227	5.23.23								
A-13	5.23.23	10:14	-.10	0	1.9	15.5	82.6	2	
B-48.7	5.23.23	10:17	1.52	0.9	6.9	0.5	91.7	2	
C-84.4	5.23.23	10:20	.61	0.1	6.2	3.5	90.2	3	
D-114	5.23.23	10:26	.56	0	4.2	0.6	95.2	4	
E-115.7	5.23.23	10:31	.47	0	5.0	0.8	94.2	4	
228	5.23.23								
A-13	5.23.23	10:39	-0.8	0	3.9	15.2	80.9	2	
B-63	5.23.23	10:42	.68	0	2.9	17.1	79.9	2	
C-113	5.23.23	10:45	.25	0.7	7.2	0.4	91.8	3	
D-163	5.23.23	10:49	.13	0	4.3	5.0	90.7	4	
E-213	5.23.23	10:53	.48	0	4.7	0.9	94.3	4	
229	5.23.23								
A-13	5.23.23	11:11	-.52	0	0.7	19.5	79.8	2	
B-48.7	5.23.23	11:16	-5.95	0	0.1	20.9	79.0	2	
C-84.4	5.23.23	11:20	-8.41	0	0.8	19.1	80.1	3	
D-114	5.23.23	11:25	-16.60	0	0.7	19.2	80.0	4	
E-155.7	5.23.23	11:30	-21.67	0	0.1	20.9	79.0	4	
230									
A-16								2	REMOVED DUE TO CONSTRUCTION
B-33								2	REMOVED DUE TO CONSTRUCTION
C-50								3	REMOVED DUE TO CONSTRUCTION
231									
A-13								2	REMOVED DUE TO CONSTRUCTION
B-26								2	REMOVED DUE TO CONSTRUCTION
C-39								3	REMOVED DUE TO CONSTRUCTION
D-51								4	REMOVED DUE TO CONSTRUCTION
E-66								4	REMOVED DUE TO CONSTRUCTION

SCS SIGNATURE: _____



LEA SIGNATURE: _____

SUNSHINE CANYON CITY PERIMETER PROBE MONITORING DATA

[illegible]

SCS SIGNATURE: _____

LEA SIGNATURE: _____

SUNSHINE CANYON COUNTY PERIMETER PROBE MONITORING DATA

TECHNICIAN: <u>AMANDO MARTINEZ</u>			TEMPERATURE: <u>69°F</u>		BARO. PRESSURE: <u>29.92"</u>				
GEM SERIAL # <u>G503346</u>			WEATHER CONDITIONS: <u>SUNNY</u>						
PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
202									
A-10								2	REMOVED DUE TO CONSTRUCTION
B-25								2	REMOVED DUE TO CONSTRUCTION
C-38								3	REMOVED DUE TO CONSTRUCTION
203									
A-10	6/22/23	9:59	-0.19	0	3.3	17.1	79.6	2	
B-25	6/22/23	10:01	-0.16	0	4.1	14.2	81.7	2	
C-40	6/22/23	10:05	-0.18	0	2.1	16.2	81.7	3	
206									
A-10	6/22/23	11:37	-0.17	0	10.1	12.2	77.7	2	
B-25	6/22/23	11:35	-0.13	0	14.9	9.0	76.0	2	
C-40	6/22/23	11:39	-0.09	0	23.0	5.6	71.4	3	
207									
A-10	6/22/23	11:02	-0.56	0	1.6	19.3	79.1	2	
B-25	6/22/23	11:05	-0.09	0	0.5	20.2	79.3	2	
C-40	6/22/23	11:08	-0.14	0	0.1	20.4	79.5	3	
208									
A-9.1	6/22/23	10:43	+0.14	0	8.7	14.9	76.4	2	
B-25	6/22/23	10:45	-0.05	0	10.6	13.4	76.0	2	
C-40	6/22/23	10:48	-0.08	0	0.8	20.7	78.5	3	
210									
A-10	6/22/23	9:53	0.0	0	0.7	20.1	79.2	2	
B-25	6/22/23	9:55	-0.23	0	0.8	19.9	79.3	2	
C-39	6/22/23	9:58	-0.19	0	0.8	19.8	79.4	3	
242									
C-42	6/22/23	10:05	-0.03	0	1.8	17.1	80.5	3	
D-60	6/22/23	10:09	+0.01	0	7.1	7.0	85.9	4	
E-78	6/22/23	10:13	-0.02	0	3.9	14.1	82.0	4	
243									
A-11	6/22/23	8:30	-0.22	0.9	12.5	4.0	82.6	2	
B-20	6/22/23	8:34	-0.09	0	8.0	9.8	82.2	2	
C-33	6/22/23	8:38	-0.10	0	8.2	9.9	81.9	3	

SCS SIGNATURE: AMANDO MARTINEZ
Ryan Martinez

LEA SIGNATURE _____

SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

[illegible]

SCS SINGNATURE: AMANDO MARTINEZ

LEA SIGNATURE: _____

Ryan Martinez

SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

[illegible]

SCS SIGNATURE: AMANDO MARTINEZ
Ryan Martinez

LEA SIGNATURE: _____

[illegible]

LEA SIGNATURE _____

SUNSHINE CANYON CITY PERIMETER PROBE MONITORING DATA

TECHNICIAN: MARCOS M.			TEMPERATURE: 76°		BARO. PRESSURE: 28.18				
GEM SERIAL #: 506081			WEATHER CONDITIONS: CLEAR						
PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
213									
A-13	6/20	8:20	-0.03	0	0.2	20.9	78.9	2	
B-29	6/20	8:24	-0.01	0	0.2	20.2	79.6	2	
C-45	6/20	8:28	-0.01	0	0.2	20.8	79.0	3	
D-61	6/20	8:32	-0.08	0	0.2	20.7	79.0	4	
E-77	6/20	8:37	-0.05	0	0.2	20.7	79.0	4	
214									
A-13	6/20	8:40	-0.04	0.1	0.2	19.8	80.0	2	
B-30	6/20	8:43	-0.04	0	0.2	20.6	79.1	2	
C-48	6/20	8:46	-0.04	0.1	0.2	18.9	80.9	3	
215									
A-13	6/20	8:50	-0.07	0	0.2	20.5	79.3	2	
B-30	6/20	8:54	-0.06	0.1	0.1	15.5	84.3	2	
C-47	6/20	8:58	-0.07	0	0.2	20.4	79.4	3	
D-64	6/20	9:05	-0.01	0	0.1	20.7	79.1	4	
E-81	6/20	9:10	-0.08	0.1	0.1	12.3	87.5	4	
216									
A-14	6/20	9:16	-0.07	0.1	0.1	20.8	78.9	2	
B-43	6/20	9:19	-0.01	0	0.1	18.8	81.1	2	
C-62	6/20	9:23	-0.01	0	0.2	20.8	79.0	3	
D-86	6/20	9:29	-0.01	0	0.2	20.8	79.0	4	
E-110	6/20	9:34	-0.01	0	0.2	20.7	79.0	4	
217									
A-13	6/20	9:41	-0.10	0.1	0.2	13.0	86.7	2	
B-30	6/20	9:49	-0.01	0.1	0.2	18.1	81.6	2	
218R									
A-11	6/20	1:20	-0.18	0	16.4	11.8	72.8	2	
B-26.5	6/20	1:22	-1.37	0	16.1	2.5	81.4	2	
B-30	6/20	1:24	-1.45	0	16.2	2.4	81.5	2	
219									
A-13	6/20	10:03	-0.09	0	0.2	20.6	79.2	2	
B-64	6/20	10:06	-0.11	0	0.2	20.3	79.5	2	
C-115	6/20	10:10	-0.13	0	0	17.7	82.2	3	
D-166	6/20	10:15	-0.08	0	0.2	18.3	81.5	4	
E-217	6/20	10:19	-0.12	0	0	14.2	85.7	4	

SCS SIGNATURE: _____

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SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
220									
A-14	6/20/23	8:04	-0.14	0	2.3	18.3	79.4	2	
B-40	6/20/23	8:13	-0.19	0	0.5	20.5	79.0	2	
C-87	6/20/23	8:18	-0.23	0	1.0	19.8	79.2	3	
D-124	6/20/23	8:29	-0.18	0	0.1	20.9	78.8	4	
E-158	6/20/23	8:35	-0.25	0	0.1	21.0	79.0	4	
220B									
A-14	6/20/23	8:54	-0.19	0	3.8	16.8	79.7	2	
B-38	6/20/23	8:59	-0.21	0	1.4	19.7	78.9	2	
C-62	6/20/23	9:03	-0.34	0	5.2	12.6	82.2	3	
D-86	6/20/23	9:07	-0.30	0	4.0	16.1	79.9	4	
E-110	6/20/23	9:12	-0.18	0	4.4	14.9	80.7	4	
221									
A-13	6/20/23	9:25	-0.16	0	3.1	17.0	79.9	2	
B-56	6/20/23	9:29	-0.12	0	3.5	15.5	80.9	2	
C-99	6/20/23	9:33	-0.30	0	2.7	17.0	80.3	3	
D-142	6/20/23	9:38	-0.10	0	0.0	19.6	80.4	4	
E-185	6/20/23	9:42	-0.05	0	0.7	18.6	80.6	4	
222									
A-13	6/20/23	9:52	-0.06	0	3.1	16.2	80.7	2	
B-54.8	6/20/23	9:57	-0.01	0	0.0	19.2	80.7	2	
C-96.5	6/20/23	10:00	0.0	0	1.8	17.6	80.7	3	
D-138.3	6/20/23	10:05	+0.02	0	1.8	16.1	82.1	4	
E-180	6/20/23	10:09	+0.05	0.7	7.9	0.2	91.1	4	
223									
A-13	6/20/23	10:26	-0.06	0	6.4	10.8	82.8	2	
B-37.5	6/20/23	10:29	+0.04	0	5.3	12.3	82.4	2	
C-62	6/20/23	10:32	+0.03	0	3.4	14.9	81.7	3	
D-86.5	6/20/23	10:36	+0.05	0	3.1	15.4	81.5	4	
E-111	6/20/23	10:40	+0.30	0	2.5	16.2	81.3	4	
224									
A-13	6-20-23	8:00	-0.12	0	0.5	20.2	79.2	2	
B-67.5	6-20-23	8:03	-1.36	0	0.4	19.7	79.8	2	
C-122	6-20-23	8:07	-0.94	0	0.1	20.1	79.8	3	
D-177.5	6-20-23	8:11	-11.84	0	0	20.0	80.0	4	
E-232	6-20-26	8:16	-8.82	0	0	19.9	80.1	4	


SCS SIGNATURE: AMANDO MARTINEZ

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SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
225									
A-13	6-20-23	15:33	0.05	0.9	3.4	20.5	75.2	2	
B-72	6-20-23	8:34	-2.04	0	8.7	13.6	80.7	2	
C-1131	6-20-23	15:37	-5.76	0.7	15.7	3.7	79.9	3	
D-190	6-20-23	8:42	-7.15	0	0.1	19.3	80.6	4	
E-244	6-20-23	8:47	-8.18	0	0	19.2	80.8	4	
226									
A-13	6-20-23	9:00	-0.03	0	0	19.2	80.8	2	
B-64	6-20-23	9:03	-9.29	0	0	19.3	80.7	2	
C-114	6-20-23	9:06	-1.80	0	0	19.5	80.5	3	
D-164	6-20-23	9:11	-9.55	0	0	19.8	80.1	4	
E-208	6-20-23	9:15	-6.73	0.1	0	19.8	80.1	4	
227									
A-13	6-20-23	9:25	-0.12	0.1	0	20.2	79.7	2	
B-48.7	6-20-23	15:09	+1.05	0.8	6.5	0	92.6	2	
C-84.4	6-20-23	9:32	-0.21	0.2	5.0	7.7	87.2	3	
D-114	6-20-23	9:36	1.07	0.1	0	20.3	79.6	4	
E-115.7	6-20-23	9:41	-0.09	0.1	4.1	8.9	86.9	4	
228									
A-13	6-20-23	9:50	-0.01	0.1	3.9	16.7	79.2	2	
B-63	6-20-23	9:53	-1.19	0.1	0.1	20.0	79.7	2	
C-113	6-20-23	9:56	-0.27	0.1	0.1	19.7	80.1	3	
D-163	6-20-23	10:01	-1.10	0.1	0.2	19.5	80.2	4	
E-213	6-20-23	10:05	-0.46	0	2.1	17.3	80.6	4	
229									
A-13	6-23-23	14:17	-0.73	0.1	1.0	19.5	79.4	2	
B-48.7								2	
C-84.4	6-23-23	14:23	-8.06	0	0.9	19.6	79.6	3	
D-114	6-23-23	14:28	-16.12	0	0.8	19.8	79.4	4	
E-155.7								4	
230									
A-16								2	REMOVED DUE TO CONSTRUCTION
B-33								2	REMOVED DUE TO CONSTRUCTION
C-50								3	REMOVED DUE TO CONSTRUCTION
231									
A-13								2	REMOVED DUE TO CONSTRUCTION
B-26								2	REMOVED DUE TO CONSTRUCTION
C-39								3	REMOVED DUE TO CONSTRUCTION
D-51								4	REMOVED DUE TO CONSTRUCTION
E-66								4	REMOVED DUE TO CONSTRUCTION

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SUNSHINE CANYON CITY PERIMETER PROBE MONITORING DATA

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SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

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SUNSHINE CANYON COUNTY PERIMETER PROBE MONITORING DATA

TECHNICIAN: <u>STUART/RYAN</u>			TEMPERATURE: <u>86°</u>		BARO. PRESSURE: <u>29.94</u>						
GEM SERIAL #: <u>6505464</u> <u>6505465</u>			WEATHER CONDITIONS: <u>Sunny</u>								
PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS		
202											
A-10								2	REMOVED DUE TO CONSTRUCTION		
B-25								2	REMOVED DUE TO CONSTRUCTION		
C-38								3	REMOVED DUE TO CONSTRUCTION		
203											
A-10	<u>7/20/23</u>	<u>8:33</u>	<u>- .26</u>	<u>0</u>	<u>3.1</u>	<u>17.5</u>	<u>79.4</u>	2			
B-25	<u>7/20/23</u>	<u>8:36</u>	<u>- .25</u>	<u>0</u>	<u>4.5</u>	<u>14.5</u>	<u>14.1</u>	2			
C-40	<u>7/20/23</u>	<u>8:40</u>	<u>- .25</u>	<u>0</u>	<u>2.4</u>	<u>15.3</u>	<u>82.3</u>	3			
206											
A-10	<u>7-20-23</u>	<u>8:47</u>	<u>-0.02</u>	<u>0</u>	<u>12.0</u>	<u>9.4</u>	<u>78.6</u>	2			
B-25	<u>7-20-23</u>	<u>8:50</u>	<u>1.11</u>	<u>0.1</u>	<u>15.1</u>	<u>7.1</u>	<u>77.6</u>	2			
C-40	<u>7-20-23</u>	<u>8:53</u>	<u>-2.94</u>	<u>0.1</u>	<u>25.3</u>	<u>3.8</u>	<u>70.8</u>	3			
207											
A-10	<u>7-20-23</u>	<u>9:03</u>	<u>-0.79</u>	<u>0</u>	<u>2.7</u>	<u>17.6</u>	<u>79.6</u>	2			
B-25	<u>7-20-23</u>	<u>9:05</u>	<u>-2.65</u>	<u>0</u>	<u>0</u>	<u>19.3</u>	<u>80.7</u>	2			
C-40	<u>7-21-23</u>	<u>1:53</u>	<u>0.53</u>	<u>0</u>	<u>0</u>	<u>18.8</u>	<u>81.2</u>	3			
208											
A-9.1	<u>7-20-23</u>	<u>9:36</u>	<u>0.10</u>	<u>0.1</u>	<u>6.9</u>	<u>14.7</u>	<u>78.3</u>	2			
B-25	<u>7-20-23</u>	<u>9:38</u>	<u>-0.22</u>	<u>0.1</u>	<u>11.4</u>	<u>11.4</u>	<u>77.0</u>	2			
C-40	<u>7-20-23</u>	<u>9:42</u>	<u>0.06</u>	<u>0.1</u>	<u>0.7</u>	<u>19.4</u>	<u>79.7</u>	3			
210											
A-10	<u>7-20-23</u>	<u>9:07</u>	<u>-0.14</u>	<u>0.0</u>	<u>0.4</u>	<u>20.0</u>	<u>79.6</u>	2			
B-25	<u>7-20-23</u>	<u>9:09</u>	<u>-0.33</u>	<u>0.0</u>	<u>0.5</u>	<u>20.0</u>	<u>79.6</u>	2			
C-39	<u>7-20-23</u>	<u>9:12</u>	<u>-0.37</u>	<u>0.0</u>	<u>0.5</u>	<u>20.0</u>	<u>79.4</u>	3			
242											
C-42	<u>7-20-23</u>	<u>9:36</u>	<u>-0.11</u>	<u>0</u>	<u>1.6</u>	<u>17.9</u>	<u>80.5</u>	3			
D-60	<u>7-20-23</u>	<u>9:41</u>	<u>-0.36</u>	<u>0</u>	<u>7.0</u>	<u>5.5</u>	<u>87.2</u>	4			
E-78	<u>7-20-23</u>	<u>9:45</u>	<u>-0.05</u>	<u>0</u>	<u>2.9</u>	<u>15.1</u>	<u>82.0</u>	4			
243											
A-11	<u>7/31</u>	<u>9:16</u>	<u>- .10</u>	<u>1.5</u>	<u>18.2</u>	<u>16.9</u>	<u>79.7</u>	2			
B-20	<u>7/31</u>	<u>9:18</u>	<u>- .01</u>	<u>0</u>	<u>8.6</u>	<u>9.6</u>	<u>81.8</u>	2			
C-33	<u>7/31</u>	<u>9:22</u>	<u>.01</u>	<u>0</u>	<u>8.0</u>	<u>10.7</u>	<u>81.3</u>	3			

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SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

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SCS SIGNATURE: AMANDO MARTINEZ

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SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

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SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
225									
A-13	7/18/23	8:52	-2.25	0.1	11.7	7.5	80.7	2	
B-72	7/18/23	8:55	-1.02	0	5.9	13.8	80.3	2	
C-1131	7/18/23	9:02	-7.95	0.1	2.5	18.2	79.3	3	
D-190	7/18/23	9:07	-7.44	0.1	0.0	20.9	79.0	4	
E-244	7/18/23	9:18	-6.85	0	0.0	20.9	79.1	4	
226									
A-13	7/18/23	9:59	-0.09	0	0.0	20.9	79.1	2	
B-64	7/18/23	10:02	-8.78	0	0.0	20.9	79.1	2	
C-114	7/18/23	10:05	-10.05	0	0.0	21.0	79.0	3	
D-164	7/18/23	10:10	-2.83	0	0.0	21.0	79.0	4	
E-208	7/18/23	10:16	-7.68	0	0.0	21.0	79.0	4	
227									
A-13	7/18/23	10:26	-0.07	0	0.0	20.9	79.1	2	
B-48.7	7/18/23	10:29	7.04	0.9	6.0	0.5	92.7	2	
C-84.4	7/18/23	10:33	-0.12	0	2.5	14.5	83.0	3	
D-114	7/18/23	10:38	-0.57	0	0.0	20.5	79.4	4	
E-115.7	7/18/23	10:43	-0.50	0	0.0	16.3	82.3	4	
228									
A-13	7/18/23	10:52	-0.05	0	2.5	17.6	79.9	2	
B-63	7/18/23	10:55	-0.65	0	1.3	17.1	81.6	2	
C-113	7/18/23	10:58	-0.13	0	0.2	20.3	79.5	3	
D-163	7/18/23	11:03	-0.10	0	0.2	20.4	79.4	4	
E-213	7/18/23	11:08	-0.56	0	0.9	19.6	79.4	4	
229									
A-13	7/18/23	8:10	-0.76	0	0.8	18.6	80.6	2	
B-48.7	7/18/23	8:14	-4.58	0	0.0	20.3	79.7	2	
C-84.4	7/18/23	8:28	-8.22	0	0.9	18.1	81.0	3	
D-114	7/18/23	8:33	-17.17	0	0.8	18.4	80.8	4	
E-155.7	7/18/23	8:38	-25.55	0	0.0	20.2	79.8	4	
230									
A-16								2	REMOVED DUE TO CONSTRUCTION
B-33								2	REMOVED DUE TO CONSTRUCTION
C-50								3	REMOVED DUE TO CONSTRUCTION
231									
A-13								2	REMOVED DUE TO CONSTRUCTION
B-26								2	REMOVED DUE TO CONSTRUCTION
C-39								3	REMOVED DUE TO CONSTRUCTION
D-51								4	REMOVED DUE TO CONSTRUCTION
E-66								4	REMOVED DUE TO CONSTRUCTION

SCS SIGNATURE: AMANDO MARTINEZ

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SUNSHINE CANYON CITY PERIMETER PROBE MONITORING DATA

TECHNICIAN: RM			TEMPERATURE: 88°			BARO. PRESSURE: 29.94			
GEM SERIAL #: 6505465			WEATHER CONDITIONS: Sunny						
PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
213									
A-13	7/18	8:13	-0.06	0.0	2.0	16.5	80.9	2	
B-29	7/18	8:16	-1.38	0.0	0.0	14.8	80.2	2	
C-45	7/18	8:22	-0.22	0.0	0.0	20.0	80.0	3	
D-61	7/18	8:26	-0.07	0.0	0.0	19.8	80.1	4	
E-77	7/18	8:30	-2.11	0.0	0.1	19.8	80.1	4	
214									
A-13	7/18	9:09	-0.08	0.0	6.1	14.1	79.8	2	
B-30	7/18	9:11	-0.60	0.0	0.0	20.4	79.6	2	
C-48	7/18	9:15	-0.76	0.0	0.0	20.4	79.6	3	
215									
A-13	7/18	9:21	-0.06	0.0	4.0	11.9	84.1	2	
B-30	7/18	9:24	-0.25	0.0	5.1	9.6	85.4	2	
C-47	7/18	9:27	-0.03	0.0	0.0	20.5	79.4	3	
D-64	7/18	9:32	-0.04	0.0	0.4	19.8	79.9	4	
E-81	7/18	9:37	-0.17	0.0	0.0	20.3	79.7	4	
216									
A-14	7/18	9:48	-0.03	0.1	0.0	20.6	79.4	2	
B-43	7/18	9:51	0.01	0.0	0.0	20.9	79.1	2	
C-62	7/18	9:54	-0.02	0.0	0.0	20.8	79.2	3	
D-86	7/18	9:59	-0.03	0.0	0.0	20.6	79.4	4	
E-110	7/18	10:04	0.05	0.0	0.2	20.3	79.6	4	
217									
A-13	7/18	10:25	0.06	0.0	6.8	10.7	82.4	2	
B-30	7/18	10:28	-0.04	0.0	0.4	16.2	79.8	2	
218R									
A-11	7/18	11:07	0.01	0.0	18.6	1.5	79.9	2	
B-26.5	7/18	11:09	-1.28	0.0	19.9	0.2	79.9	2	
B-30	7/18	11:12	0.06	0.0	0.0	20.9	79.1	2	
219									
A-13	7/18	7:39	-0.20	0.0	1.5	19.5	79.0	2	
B-64	7/18	7:42	-0.21	0.0	0.1	20.0	79.3	2	
C-115	7/18	7:45	-0.19	0.0	2.1	17.3	80.5	3	
D-166	7/18	7:49	-0.32	0.0	0.9	19.1	80.0	4	
E-217	7/18	7:54	-0.22	0.0	6.7	8.8	84.5	4	

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SUNSHINE CANYON CITY PERIMETER PROBE MONITORING DATA

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SUNSHINE CANYON COUNTY PERIMETER PROBE MONITORING DATA

TECHNICIAN: ERICK CHAVEZ			TEMPERATURE: 99°F		BARO. PRESSURE: 29.80"				
GEM SERIAL #: G503346			WEATHER CONDITIONS: SUNNY						
PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
202									
A-10								2	REMOVED DUE TO CONSTRUCTION
B-25								2	REMOVED DUE TO CONSTRUCTION
C-38								3	REMOVED DUE TO CONSTRUCTION
203									
A-10	8-30-23	10:10	+1.42	0	3.9	16.4	79.7	2	
B-25	8-30-23	10:14	-1.17	0	6.1	12.2	81.7	2	
C-40	8-30-23	10:18	-1.20	0	2.5	15.0	82.4	3	
206									
A-10	8-30-23	9:10	-0.43	0.4	13.3	7.5	78.8	2	
B-25	8-30-23	9:12	-0.44	0.4	16.5	7.3	75.8	2	
C-40	8-30-23	9:16	-0.24	0.5	26.4	4.3	68.8	3	
207									
A-10	8-30-23	8:33	-1.78	0	2.6	19.0	78.4	2	
B-25	8-30-23	8:37	2.07	0	2.1	20.6	77.2	2	
C-40	8-30-23	8:57	-0.94	0.4	0	20.4	79.3	3	
208									
A-9.1	8-30-23	9:57	-0.95	0.4	9.5	11.0	79.0	2	
B-25	8-30-23	10:00	-0.25	0.4	14.8	9.0	75.8	2	
C-40	8-30-23	10:03	-0.12	0.4	0.7	20.0	78.8	3	
210									
A-10	8-30-23	13:31	-1.10	0	3.0	18.0	79.0	2	
B-25	8-30-23	13:34	-2.77	0	1.8	18.1	80.1	2	
C-39	8-30-23	13:38	-1.81	0	0.8	16.8	82.4	3	
242									
C-42	8-30-23	10:23	-0.57	0.4	2.3	17.7	79.6	3	
D-60	8-30-23	10:28	0.81	0.5	6.2	6.1	82.2	4	
E-78	8-30-23	10:33	-1.02	0.4	3.7	15.6	80.3	4	
243									
A-11	8-30-23	11:15	-1.36	1.9	19.2	0.0	78.9	2	
B-20	8-30-23	11:18	-1.01	0	8.6	9.2	82.2	2	
C-33	8-30-23	11:22	-5.78	0	8.7	9.0	82.3	3	

SCS SIGNATURE: _____



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SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

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SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

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LEA SIGNATURE:_____

SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
225									
A-13	8/31/23	9:36	-0.26	0.6	0.1	17.7	81.6	2	
B-72	8/31/23	9:39	-0.35	0.6	3.3	19.4	76.7	2	
C-1131	8/31/23	9:44	-4.65	0.2	1.2	18.7	79.9	3	
D-190	8/31/23	9:20	-5.30	0	0.0	20.2	79.8	4	
E-244	8/31/23	9:25	-6.27	0	0.1	20.7	79.2	4	
226									
A-13	8/29/23	9:33	-7.40	0	0.0	20.8	79.1	2	
B-64	8/29/23	9:36	-7.92	0	0.1	20.7	79.2	2	
C-114	8/29/23	9:39	-9.15	0	0.1	20.9	79.0	3	
D-164	8/29/23	9:46	-9.25	0	0.0	20.9	79.0	4	
E-208	8/29/23	9:51	-10.63	0	0.0	20.9	79.5	4	
227									
A-13	8/29/23	10:26	-7.14	0	2.8	11.2	86.0	2	
B-48.7	8/29/23	10:34	-7.12	0.9	6.1	0.5	96.4	2	
C-84.4	8/29/23	10:38	-0.12	0.6	6.2	0.9	92.3	3	
D-114	8/29/23	10:43	-7.17	0	4.2	0.2	95.6	4	
E-115.7	8/29/23	10:48	-7.30	0	3.8	3.2	92.9	4	
228									
A-13	8/29/23	9:59	-0.21	0	2.6	16.3	81.1	2	
B-63	8/29/23	10:02	-0.24	0	6.4	2.3	91.3	2	
C-113	8/29/23	10:07	-0.20	0.5	5.0	5.9	88.6	3	
D-163	8/29/23	10:02	-7.14	0	2.1	14.6	83.3	4	
E-213	8/29/23	10:17	-7.12	0	4.2	1.8	94.1	4	
229									
A-13	8/29/23	8:14	-7.60	0	1.3	17.9	80.8	2	
B-48.7	8/29/23	8:16	-4.79	0	0.0	20.1	79.6	2	
C-84.4	8/29/23	8:23	-7.71	0	1.6	16.8	81.6	3	
D-114	8/29/23	8:28	-15.89	0	0.1	19.7	82.2	4	
E-155.7	8/29/23	8:33	-11.77	0	0.1	19.7	80.2	4	
230									
A-16								2	REMOVED DUE TO CONSTRUCTION
B-33								2	REMOVED DUE TO CONSTRUCTION
C-50								3	REMOVED DUE TO CONSTRUCTION
231									
A-13								2	REMOVED DUE TO CONSTRUCTION
B-26								2	REMOVED DUE TO CONSTRUCTION
C-39								3	REMOVED DUE TO CONSTRUCTION
D-51								4	REMOVED DUE TO CONSTRUCTION
E-66								4	REMOVED DUE TO CONSTRUCTION

SCS SIGNATURE: _____

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SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
220									
A-14	8.29.23	8:23	-0.96	0.1	2.8	18.1	79.0	2	
B-40	8.29.23	8:26	-0.87	0.1	0.0	20.7	79.3	2	
C-87	8.29.23	8:30	-2.38	0.1	1.1	19.7	79.1	3	
D-124	8.29.23	8:35	-0.98	0.1	0.0	20.8	79.2	4	
E-158	8.29.23	8:39	-1.43	0.1	0.0	20.8	79.2	4	
220B									
A-14	8.29.23	8:53	-1.31	0.1	4.4	14.8	80.8	2	
B-38	8.29.23	8:55	-1.03	0.1	4.8	13.4	81.7	2	
C-62	8.29.23	8:59	-0.98	0.1	5.7	12.4	81.8	3	
D-86	8.29.23	9:03	-1.23	0.1	4.9	13.0	82.0	4	
E-110	8.29.23	9:08	-0.99	0.1	4.8	13.6	81.6	4	
221									
A-13	8.29.23	9:29	-0.65	0.1	4.2	15.4	80.3	2	
B-56	8.29.23	9:32	-1.00	0.1	4.1	15.3	80.5	2	
C-99	8.29.23	9:35	-0.52	0.1	4.6	14.8	80.4	3	
D-142	8.29.23	9:40	-0.96	0.1	0.0	20.8	79.1	4	
E-185	8.29.23	9:45	-1.68	0.1	4.1	13.5	82.3	4	
222									
A-13	8.29.23	9:53	-1.04	0.1	5.3	13.9	80.7	2	
B-54.8	8.29.23	9:56	-0.92	0.1	0.0	20.8	79.4	2	
C-96.5	8.29.23	9:59	-0.90	0.1	2.4	18.4	79.1	3	
D-138.3	8.29.23	10:04	-1.02	0.1	4.7	14.8	80.4	4	
E-180	8.29.23	10:09	-0.64	0.9	7.6	0.3	91.1	4	
223									
A-13	8.29.23	10:23	-0.99	0.2	6.0	10.3	83.5	2	
B-37.5	8.29.23	10:26	-1.06	0.2	4.8	12.1	82.9	2	
C-62	8.29.23	10:40	-0.88	0.2	1.1	18.3	80.4	3	
D-86.5	8.29.23	10:44	-0.85	0.2	3.9	14.5	81.4	4	
E-111	8.29.23	10:49	-0.94	0.2	1.5	17.8	80.8	4	
224									
A-13	8.29.23	8:50	-0.34	0	0.9	19.4	79.7	2	
B-67.5	8.29.23	8:53	-0.58	0	0.3	19.8	79.9	2	
C-122	8.29.23	8:56	-1.05	0	0.0	20.5	79.5	3	
D-177.5	8.29.23	9:07	-12.97	0	0.0	20.3	79.7	4	
E-232	8.29.23	9:12	-9.06	0	0.0	20.8	79.2	4	

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SUNSHINE CANYON CITY PERIMETER PROBE MONITORING DATA

TECHNICIAN: MARCOS M			TEMPERATURE: 75		BARO. PRESSURE: 28.26				
GEM SERIAL #: 506081			WEATHER CONDITIONS: CLOUDY						
PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
213									
A-13	8/29	8:13	-0.01	0	0.3	19.5	80.2	2	
B-29	8/29	8:16	-0.09	0	0.3	18.7	81.0	2	
C-45	8/29	8:19	-0.01	0	0.2	19.9	79.9	3	
D-61	8/29	8:24	-0.02	0	0.2	20.3	79.5	4	
E-77	8/29	8:28	-0.01	0	0.3	19.6	80.1	4	
214									
A-13	8/29	8:40	0.01	0	0.0	16.1	83.9	2	
B-30	8/29	8:44	-0.05	0	0.3	19.8	79.9	2	
C-48	8/29	8:48	-0.01	0	0.3	20.8	78.9	3	
215									
A-13	8/29	9:20	-0.03	0	0.3	19.5	80.2	2	
B-30	8/29	9:23	-0.01	0	0.2	15.8	84.0	2	
C-47	8/29	9:26	-0.05	0	0.3	19.9	79.9	3	
D-64	8/29	9:31	-0.05	0	0.2	20.2	79.5	4	
E-81	8/29	9:36	-0.02	0	0	12.4	87.6	4	
216									
A-14	8/29	9:38	-0.02	0	0.3	20.5	79.2	2	
B-43	8/29	9:41	-0.01	0	0.4	20.6	79.0	2	
C-62	8/29	9:45	-0.03	0	0.2	20.7	79.1	3	
D-86	8/29	9:50	-0.03	0	0.3	20.8	79.0	4	
E-110	8/29	9:55	-0.04	0	0.2	18.5	81.2	4	
217									
A-13	8/29	10:02	-0.04	0	0	12.8	87.2	2	
B-30	8/29	10:05	-0.05	0	0.2	16.9	82.9	2	
218R									
A-11	8/18	8:44	-0.01	0	2.7	18.2	79.1	2	
B-26.5	8/18	8:46	-0.02	0	2.2	18.3	79.5	2	
B-30	8/18	9:00	-0.01	0	2.5	18.5	79.0	2	
219									
A-13	8/18	8:24	-0.01	0	2.0	17.9	80.1	2	
B-64	8/18	8:26	-0.01	0	2.3	17.7	80	2	
C-115	8/18	8:29	-0.02	0	3.3	15.7	81	3	
D-166	8/18	8:34	-0.01	0	0.1	19.6	80.3	4	
E-217	—	—	—	—	—	—	—	4	

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SUNSHINE CANYON CITY PERIMETER PROBE MONITORING DATA

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SUNSHINE CANYON COUNTY PERIMETER PROBE MONITORING DATA

TECHNICIAN: <u>PM</u>			TEMPERATURE: <u>88'</u>		BARO. PRESSURE: <u>29.89</u>				
GEM SERIAL #: <u>G502765</u>			WEATHER CONDITIONS: <u>Sunny</u>						
PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
202									
A-10								2	REMOVED DUE TO CONSTRUCTION
B-25								2	REMOVED DUE TO CONSTRUCTION
C-38								3	REMOVED DUE TO CONSTRUCTION
203									
A-10	<u>9/21</u>	<u>9:02</u>	<u>-11</u>	<u>0</u>	<u>4.2</u>	<u>17.6</u>	<u>75.2</u>	2	
B-25	<u>9/21</u>	<u>9:05</u>	<u>-09</u>	<u>0</u>	<u>4.7</u>	<u>15.6</u>	<u>79.7</u>	2	
C-40	<u>9/21</u>	<u>9:09</u>	<u>-13</u>	<u>0</u>	<u>2.9</u>	<u>15.9</u>	<u>81.1</u>	3	
206									
A-10	<u>9/21</u>	<u>11:29</u>	<u>0.04</u>	<u>0.5</u>	<u>12.9</u>	<u>9.6</u>	<u>77.0</u>	2	
B-25	<u>9/21</u>	<u>11:32</u>	<u>0.02</u>	<u>0.5</u>	<u>15.8</u>	<u>7.3</u>	<u>76.4</u>	2	
C-40	<u>9/21</u>	<u>11:36</u>	<u>-0.08</u>	<u>0.5</u>	<u>23.9</u>	<u>4.3</u>	<u>71.3</u>	3	
207									
A-10	<u>9/21</u>	<u>11:04</u>	<u>-0.80</u>	<u>0.5</u>	<u>2.4</u>	<u>18.2</u>	<u>78.9</u>	2	
B-25	<u>9/21</u>	<u>11:07</u>	<u>0.09</u>	<u>0.4</u>	<u>2.1</u>	<u>18.2</u>	<u>79.2</u>	2	
C-40	<u>9/21</u>	<u>11:10</u>	<u>0.04</u>	<u>0.5</u>	<u>0.1</u>	<u>20.0</u>	<u>79.3</u>	3	
208									
A-9.1	<u>9/21</u>	<u>10:44</u>	<u>0.05</u>	<u>0.5</u>	<u>8.9</u>	<u>13.3</u>	<u>77.2</u>	2	
B-25	<u>9/21</u>	<u>10:47</u>	<u>0.05</u>	<u>0.5</u>	<u>14.0</u>	<u>10.1</u>	<u>75.4</u>	2	
C-40	<u>9/21</u>	<u>10:50</u>	<u>-3.42</u>	<u>0.6</u>	<u>0.5</u>	<u>20.3</u>	<u>78.6</u>	3	
210									
A-10	<u>9/21</u>	<u>9:49</u>	<u>-0.01</u>	<u>0.5</u>	<u>0.8</u>	<u>19.8</u>	<u>78.8</u>	2	
B-25	<u>9/21</u>	<u>9:52</u>	<u>-0.25</u>	<u>0.6</u>	<u>1.1</u>	<u>19.6</u>	<u>78.7</u>	2	
C-39	<u>9/21</u>	<u>9:57</u>	<u>-17.93</u>	<u>0.6</u>	<u>0.8</u>	<u>18.4</u>	<u>80.2</u>	3	
242									
C-42	<u>9/21</u>	<u>10:09</u>	<u>0.07</u>	<u>0.6</u>	<u>3.2</u>	<u>16.5</u>	<u>79.8</u>	3	
D-60	<u>9/21</u>	<u>10:15</u>	<u>-0.39</u>	<u>0.6</u>	<u>7.2</u>	<u>6.3</u>	<u>86.0</u>	4	
E-78	<u>9/21</u>	<u>10:19</u>	<u>0.07</u>	<u>0.6</u>	<u>6.3</u>	<u>11.0</u>	<u>82.1</u>	4	
243									
A-11	<u>9/21</u>	<u>10:42</u>	<u>-12</u>	<u>1.9</u>	<u>19.7</u>	<u>0</u>	<u>78.9</u>	2	
B-20	<u>9/21</u>	<u>10:45</u>	<u>+09</u>	<u>0</u>	<u>9.6</u>	<u>7.7</u>	<u>82.7</u>	2	
C-33	<u>9/21</u>	<u>10:49</u>	<u>-03</u>	<u>0</u>	<u>9.6</u>	<u>7.7</u>	<u>82.7</u>	3	

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SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

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SCS SIGNATURE: Amando Martinez

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SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
220									
A-14	9/19	9:00	-0.40	0.0	1.1	19.4	79.5	2	
B-40	9/19	9:02	-0.38	0.0	0.1	20.3	79.6	2	
C-87	9/19	9:06	-0.34	0.0	0.9	19.4	79.6	3	
D-124	9/19	9:10	-0.38	0.0	0.1	20.4	79.5	4	
E-158	9/19	9:14	-0.34	0.0	0.1	20.4	79.4	4	
220B									
A-14	9/19	9:20	-0.30	0.1	3.4	16.7	79.9	2	
B-38	9/19	9:23	-0.12	0.1	3.1	15.6	81.2	2	
C-62	9/19	9:26	-0.31	0.1	3.9	15.2	80.8	3	
D-86	9/19	9:30	-0.32	0.1	4.9	14.6	80.4	4	
E-110	9/19	9:35	-0.27	0.1	5.2	13.9	80.9	4	
221									
A-13	9/19	9:39	-0.28	0.1	4.4	14.1	81.3	2	
B-56	9/19	9:44	-0.32	0.1	7.0	6.8	86.2	2	
C-99	9/19	9:47	-0.34	0.1	5.0	14.4	80.5	3	
D-142	9/19	9:51	-0.34	0.0	0.1	20.5	79.3	4	
E-185	9/19	9:55	-0.55	0.1	5.7	8.1	86.2	4	
222									
A-13	9/19	11:06	-0.18	0.0	11.5	7.6	81.0	2	
B-54.8	9/19	11:09	-0.23	0.1	6.5	19.3	80.2	2	
C-96.5	9/19	11:12	-0.27	0.3	3.0	16.5	80.0	3	
D-138.3	9/19	11:17	-0.29	0.0	3.2	16.3	81.0	4	
E-180	9/19	11:24	-0.13	0.8	5.6	14.6	79.0	4	
223									
A-13	9/19	11:40	-0.13	0.0	8.0	9.6	82.4	2	
B-37.5	9/19	11:44	-0.17	0.1	10.9	4.6	84.5	2	
C-62	9/19	11:47	-0.36	0.1	11.2	1.6	87.1	3	
D-86.5	9/19	11:51	-0.08	0.0	4.8	14.4	80.8	4	
E-111	9/19	11:56	-0.06	0.0	3.4	16.0	80.5	4	
224									
A-13	9/19	1:33	1.60	0	1.6	17.9	80.4	2	
B-67.5	9/19	1:36	1.65	0	0.3	20.1	79.6	2	
C-122	9/19	1:40	1.37	0	0	20.8	79.2	3	
D-177.5	9/19	1:44	-8.74	0	0	21.0	79.0	4	
E-232	9/19	1:50	-5.51	0	0	21.0	79.6	4	

SCS SINGNATURE:

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SUNSHINE CANYON CITY PERIMETER PROBE MONITORING DATA

TECHNICIAN: <u>MARCOS M</u>			TEMPERATURE: <u>70°</u>		BARO. PRESSURE: <u>28.49</u>				
GEM SERIAL #: <u>506081</u>			WEATHER CONDITIONS: <u>SUNNY</u>						
PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
213									
A-13	<u>9/18</u>	<u>7:35</u>	<u>-01</u>	<u>0.0</u>	<u>0.2</u>	<u>19.6</u>	<u>80.2</u>	<u>2</u>	
B-29	<u>9/19</u>	<u>7:39</u>	<u>-05</u>	<u>0</u>	<u>0.2</u>	<u>20.4</u>	<u>79.4</u>	<u>2</u>	
C-45	<u>9/19</u>	<u>7:42</u>	<u>-22</u>	<u>0</u>	<u>0.2</u>	<u>18.7</u>	<u>81.1</u>	<u>3</u>	
D-61	<u>9/19</u>	<u>7:47</u>	<u>-01</u>	<u>0</u>	<u>0.3</u>	<u>20.3</u>	<u>79.5</u>	<u>4</u>	
E-77	<u>9/19</u>	<u>7:53</u>	<u>-07</u>	<u>0</u>	<u>0.3</u>	<u>19.0</u>	<u>80.7</u>	<u>4</u>	
214									
A-13	<u>9/19</u>	<u>7:59</u>	<u>-08</u>	<u>0</u>	<u>0.2</u>	<u>17.1</u>	<u>82.7</u>	<u>2</u>	
B-30	<u>9/19</u>	<u>8:01</u>	<u>-07</u>	<u>0</u>	<u>0.3</u>	<u>19.9</u>	<u>79.8</u>	<u>2</u>	
C-48	<u>9/19</u>	<u>8:05</u>	<u>-10</u>	<u>0</u>	<u>0.3</u>	<u>20.2</u>	<u>79.5</u>	<u>3</u>	
215									
A-13	<u>9/19</u>	<u>8:08</u>	<u>-09</u>	<u>0</u>	<u>0.3</u>	<u>20.1</u>	<u>79.6</u>	<u>2</u>	
B-30	<u>9/19</u>	<u>8:11</u>	<u>-12</u>	<u>0</u>	<u>0.0</u>	<u>15.6</u>	<u>84.3</u>	<u>2</u>	
C-47	<u>9/19</u>	<u>8:15</u>	<u>-13</u>	<u>0</u>	<u>0.3</u>	<u>20.0</u>	<u>79.7</u>	<u>3</u>	
D-64	<u>9/19</u>	<u>8:20</u>	<u>-09</u>	<u>0</u>	<u>0.3</u>	<u>20.1</u>	<u>79.6</u>	<u>4</u>	
E-81	<u>9/19</u>	<u>8:24</u>	<u>-10</u>	<u>0</u>	<u>0</u>	<u>13.4</u>	<u>86.6</u>	<u>4</u>	
216									
A-14	<u>9/19</u>	<u>8:28</u>	<u>-12</u>	<u>0</u>	<u>0.2</u>	<u>20.1</u>	<u>79.7</u>	<u>2</u>	
B-43	<u>9/19</u>	<u>8:30</u>	<u>-15</u>	<u>0</u>	<u>0.2</u>	<u>20.2</u>	<u>79.6</u>	<u>2</u>	
C-62	<u>9/19</u>	<u>8:33</u>	<u>-10</u>	<u>0</u>	<u>0.2</u>	<u>20.9</u>	<u>78.9</u>	<u>3</u>	
D-86	<u>9/19</u>	<u>8:37</u>	<u>-14</u>	<u>0</u>	<u>0.2</u>	<u>20.9</u>	<u>78.8</u>	<u>4</u>	
E-110	<u>9/19</u>	<u>8:42</u>	<u>-11</u>	<u>0</u>	<u>0.2</u>	<u>18.6</u>	<u>81.1</u>	<u>4</u>	
217									
A-13	<u>9/19</u>	<u>8:54</u>	<u>-14</u>	<u>0</u>	<u>0.1</u>	<u>19.5</u>	<u>80.4</u>	<u>2</u>	
B-30	<u>9/19</u>	<u>8:56</u>	<u>-16</u>	<u>0</u>	<u>0</u>	<u>13.3</u>	<u>86.7</u>	<u>2</u>	
218R									
A-11	<u>9/19</u>	<u>9:22</u>	<u>-17</u>	<u>0.1</u>	<u>1.2</u>	<u>20.5</u>	<u>78.3</u>	<u>2</u>	
B-26.5	<u>9/19</u>	<u>9:24</u>	<u>-17</u>	<u>0.1</u>	<u>1.0</u>	<u>20.5</u>	<u>78.4</u>	<u>2</u>	
B-30	<u>9/19</u>	<u>9:26</u>	<u>-18</u>	<u>0</u>	<u>0.1</u>	<u>21.0</u>	<u>78.9</u>	<u>2</u>	
219									
A-13	9/19	9:36	-18	0	0	16.3	83.7	<u>2</u>	<u>Missing</u>
B-64	<u>9/19</u>	<u>9:36</u>	<u>-18</u>	<u>0</u>	<u>0</u>	<u>16.3</u>	<u>83.7</u>	<u>2</u>	
C-115	<u>9/19</u>	<u>9:38</u>	<u>-19</u>	<u>0</u>	<u>0</u>	<u>14.1</u>	<u>85.9</u>	<u>3</u>	
D-166	<u>9/19</u>	<u>9:44</u>	<u>-15</u>	<u>0</u>	<u>0.1</u>	<u>20.2</u>	<u>79.7</u>	<u>4</u>	
E-217	<u>9/19</u>	<u>3:07</u>	<u>-07</u>	<u>0.1</u>	<u>0.1</u>	<u>14.4</u>	<u>85.4</u>	<u>4</u>	

SCS SIGNATURE: _____

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SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
225									
A-13	9-26-23	14:07	-0.06	0.2	0.2	13.4	86.2	2	
B-72	9-26-23	14:11	-0.52	0.2	0.7	17.9	81.3	2	
C-1131	9-26-23	14:15	-0.14	0.1	0.1	18.4	81.4	3	
D-190	9-26-23	14:19	-4.14	0.1	0.1	18.2	81.7	4	
E-244	9-26-23	14:24	-3.09	0.0	0.0	17.9	82.0	4	
226									
A-13	9-19-23	9:00	-0.01	0.0	0.1	19.9	80.0	2	
B-64	9-19-23	9:03	-6.67	0.0	0.1	19.9	80.0	2	
C-114	9-19-23	9:07	-7.56	0.0	0.1	20.0	80.0	3	
D-164	9-19-23	9:12	-7.51	0.0	0.0	20.0	79.9	4	
E-208	9-19-23	9:24	-8.77	0.0	0.1	20.0	79.9	4	
227									
A-13	9-19-23	11:50	1.73	0.0	2.5	13.0	84.4	2	
B-48.7	9-19-23	11:53	2.51	0.5	6.3	0.2	73.1	2	
C-84.4	9-19-23	11:57	1.69	0.0	5.7	3.4	90.9	3	
D-114	9-19-23	12:45	2.01	0.0	4.2	1.2	94.6	4	
E-115.7	9-19-23	12:53	1.60	0.0	2.7	8.6	88.7	4	
228	9-19-23								
A-13	9-19-23	12:59	1.69	0.0	2.7	16.5	80.9	2	
B-63	9-19-23	1:02	1.97	0.0	5.8	4.7	89.5	2	
C-113	9-19-23	1:06	1.84	0.2	5.3	3.8	90.7	3	
D-163	9-19-23	1:11	1.63	0.0	1.6	14.6	83.8	4	
E-213	9-19-23	1:16	1.85	0.0	3.6	3.9	92.4	4	
229									
A-13	9-19-23							2	
B-48.7	9-19-23	7:53	-3.81	0.0	0.1	20.3	79.5	2	
C-84.4	9-19-23	7:57	-5.59	0.0	1.5	17.1	81.3	3	
D-114	9-19-23	8:01	-13.17	0.0	1.7	17.0	81.4	4	
E-155.7	9-19-23	8:06	-8.34	0.0	0.1	19.9	80.0	4	
230									
A-16								2	REMOVED DUE TO CONSTRUCTION
B-33								2	REMOVED DUE TO CONSTRUCTION
C-50								3	REMOVED DUE TO CONSTRUCTION
231									
A-13								2	REMOVED DUE TO CONSTRUCTION
B-26								2	REMOVED DUE TO CONSTRUCTION
C-39								3	REMOVED DUE TO CONSTRUCTION
D-51								4	REMOVED DUE TO CONSTRUCTION
E-66								4	REMOVED DUE TO CONSTRUCTION

SCS SIGNATURE:



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SUNSHINE CANYON CITY PERIMETER PROBE MONITORING DATA

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SUNSHINE CANYON COUNTY PERIMETER PROBE MONITORING DATA

TECHNICIAN: <u>EM</u>		TEMPERATURE: <u>69</u>		BARO. PRESSURE: <u>29.72</u>					
GEM SERIAL #: <u>6505465</u>		WEATHER CONDITIONS: <u>Sunny</u>							
PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
202									
A-10								2	REMOVED DUE TO CONSTRUCTION
B-25								2	REMOVED DUE TO CONSTRUCTION
C-38								3	REMOVED DUE TO CONSTRUCTION
203									
A-10	10/19/23	13:43	-0.11	0	3.6	18.1	18.3	2	
B-25	10/19/23	13:46	-0.05	0	4.6	15.9	80.0	2	
C-40	10/19/23	13:49	-0.03	0	2.3	16.6	81.1	3	
206									
A-10	10/19	10:51	0.11	0.0	0.5	20.6	78.4	2	
B-25	10/19	10:54	0.11	0.0	3.6	18.4	78.0	2	
C-40	10/19	10:56	0.13	0.0	0.0	20.6	79.4	3	
207									
A-10	10/19	11:09	0.17	0.0	11.6	18.4	78.1	2	
B-25	10/19	11:11	0.13	0.0	15.0	7.8	77.2	2	
C-40	10/19	11:14	0.07	0.0	19.4	6.8	73.8	3	
208									
A-9.1	10/19	10:38	0.35	0.0	2.8	18.2	79.0	2	
B-25	10/19	10:40	0.09	0.0	5.6	16.2	78.2	2	
C-40	10/19	10:43	-3.61	0.0	0.4	20.7	78.9	3	
210									
A-10	10/19	9:43	-0.09	0.0	0.1	20.6	79.4	2	
B-25	10/19	9:47	-0.09	0.0	0.0	20.7	79.3	2	
C-39	10/19	9:50	-0.01	0.0	0.0	20.6	79.4	3	
242									
C-42	10/19	10:05	-0.07	0.0	0.0	20.4	79.6	3	
D-60	10/19	10:10	-0.04	0.0	6.7	6.2	87.1	4	
E-78	10/19	10:14	0.13	0.0	2.7	16.1	81.2	4	
243									
A-11	10/19/23	8:06	-0.28	1.8	18.4	0.0	79.8	2	
B-20	10/19/23	8:12	-0.21	0	8.0	8.8	83.2	2	
C-33	10/19/23	8:16	-0.10	0	7.9	9.2	82.9	3	

SCS SIGNATURE: _____

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SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
244									
A-11	10/19	10:26	0.14	0.0	0.0	20.8	79.2	2	
B-21	10/19	10:29	0.08	0.0	0.0	20.4	79.1	2	
C-36	10/19	10:32	-1.14	0.0	9.8	11.5	78.7	3	
245									
A-11	10/19/23	9:11	-0.13	0	15.4	4.3	80.3	2	
B-20	10/19/23	9:14	-0.17	3.4	25.9	1.1	69.6	2	
C-35	10/19/23	9:19	-0.09	0.7	21.2	2.1	75.9	3	
D-50	10/19/23	9:25	-0.09	0.7	16.2	0.3	82.8	4	
E-64	10/19/23	9:31	-0.02	0	2.0	17.5	80.5	4	
246									
A-9								2	REMOVED DUE TO CONSTRUCTION
B-16								2	REMOVED DUE TO CONSTRUCTION
205R									
A-11	10/19/23	10:10	-0.02	0	9.4	9.2	81.3	2	
B-20	10/19/23	10:25	-0.49	0	16.2	3.9	79.8	2	
C-33	10/19/23	10:32	-0.01	2.7	49.3	0.0	48.0	3	
D-48	10/19/23	10:38	-0.03	4.1	50.7	0.1	45.1	4	
E-62	10/19/23	10:45	-11.60	0	19.0	0.9	80.1	4	
239									
A-11	10/19	9:20	-0.12	0.0	26.0	7.2	66.8	2	
B-20	10/19	9:23	-0.07	0.0	0.0	21.0	79.0	2	
C-35	10/19	9:26	-0.11	0.0	0.0	21.0	79.0	3	
D-50	10/19	9:31	-0.11	0.0	0.0	20.8	79.1	4	
E-64	10/19	9:36	-0.09	0.0	0.0	20.7	79.3	4	
240									
A-11	10/19	8:57	-0.19	0.0	0.2	20.7	79.1	2	
B-20	10/19	9:01	-0.21	0.0	0.6	20.4	78.4	2	
C-33	10/19	9:04	-0.20	0.1	0.1	20.8	79.1	3	
D-49	10/19	9:08	-0.34	0.0	0.2	20.7	79.1	4	
E-61	10/19	9:13	-0.15	0.0	0.1	20.9	79.1	4	

SCS SIGNATURE:



LEA SIGNATURE:

SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

[illegible]

SCS SIGNATURE: AMANDO MARTINEZ

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SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
220									
A-14	10.17.23	7:51	-0.90	0.0	2.8	18.9	78.3	2	
B-40	10.17.23	7:54	-0.85	0.0	0.0	20.8	79.2	2	
C-87	10.17.23	7:57	-1.08	0.0	1.9	19.6	78.5	3	
D-124	10.17.23	8:04	-1.01	0.0	0.0	20.3	79.6	4	
E-158	10.17.23	8:13	-0.99	0.0	2.3	20.8	76.8	4	
220B									
A-14	10.17.23	8:22	-0.42	0.0	4.5	16.5	79.0	2	
B-38	10.17.23	8:29	-1.27	0.0	9.0	5.3	85.7	2	
C-62	10.17.23	8:33	-0.96	0.1	10.7	1.8	87.4	3	
D-86	10.17.23	8:38	-1.21	0.1	6.2	10.8	82.9	4	
E-110	10.17.23	8:43	-0.95	0.1	4.7	15.6	79.8	4	
221									
A-13	10.17.23	8:50	-0.77	0.1	3.6	16.9	79.4	2	
B-56	10.17.23	8:52	-0.94	0.1	5.9	9.2	84.7	2	
C-99	10.17.23	8:56	-1.07	0.0	4.2	15.9	79.9	3	
D-142	10.17.23	9:01	-0.11	0.0	0.0	20.8	79.1	4	
E-185	10.17.23	9:06	-0.96	0.1	3.5	15.2	81.3	4	
222									
A-13	10.17.23	9:14	-0.86	0.0	7.5	12.4	80.1	2	
B-54.8	10.17.23	9:16	-0.89	0.1	0.0	20.5	79.5	2	
C-96.5	10.17.23	9:20	-0.96	0.1	2.8	18.7	78.4	3	
D-138.3	10.17.23	9:24	-0.77	0.1	2.9	11.7	80.4	4	
E-180	10.17.23	9:29	-0.95	0.1	0.0	20.7	79.2	4	
223									
A-13	10.17.23	9:42	-0.17	0.1	8.0	10.5	81.3	2	
B-37.5	10.17.23	9:45	-0.90	0.1	10.7	5.3	83.9	2	
C-62	10.17.23	9:48	-0.92	0.1	9.1	6.2	84.5	3	
D-86.5	10.17.23	9:52	-0.78	0.1	4.7	15.1	80.2	4	
E-111	10.17.23	9:57	-0.96	0.1	4.0	15.8	80.1	4	
224									
A-13	10.17.23	10:02	-0.55	0.4	0.6	20.1	78.5	2	
B-67.5	10.17.23	10:06	-0.32	0.4	0.2	20.4	79.0	2	
C-122	10.17.23	10:10	-0.79	0.5	0.0	20.5	78.8	3	
D-177.5	10.17.23	10:15	-12.26	0.5	0.0	20.9	78.7	4	
E-232	10.17.23	10:21	-83.05	0.5	0.0	21.0	78.5	4	

SCS SIGNATURE:



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SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
225									
A-13	10-17-23	9:36	-0.00	0.5	10.0	9.3	80.2	2	
B-72	10-17-23	9:39	-0.99	0.5	4.2	15.5	79.8	2	
C-1131	10-17-23	9:43	-94.16	0.6	15.4	4.5	79.5	3	
D-190	10-17-23	9:49	-7.23	0.5	0.0	20.4	79.1	4	
E-244	10-17-23	9:54	-8.52	0.5	0.0	20.5	79.1	4	
226									
A-13	8-17-23	9:09	0.04	0.6	0.0	20.0	79.4	2	
B-64	8-17-23	9:12	-7.12	0.6	0.1	20.0	79.4	2	
C-114	8-17-23	9:16	-8.34	0.6	0.1	20.1	79.2	3	
D-164	8-17-23	9:21	-8.39	0.6	0.0	20.3	79.1	4	
E-208	8-17-23	9:26	-9.55	0.5	0.1	20.3	79.1	4	
227									
A-13	8-17-23	8:44	0.03	0.8	0.1	21.0	78.2	2	
B-48.7	8-17-23	8:47	0.06	0.7	6.3	0.5	92.5	2	
C-84.4	8-17-23	8:51	-0.27	0.7	2.0	14.7	82.6	3	
D-114	8-17-23	8:56	-0.48	0.7	0.0	20.3	79.0	4	
E-115.7	8-17-23	9:01	-0.36	0.6	0.7	18.9	79.8	4	
228									
A-13	10-17-23	8:18	0.12	0.7	2.6	17.9	78.9	2	
B-63	10-17-23	8:21	-0.01	0.7	1.3	19.6	78.4	2	
C-113	10-17-23	8:25	-0.07	0.7	0.7	18.5	80.2	3	
D-163	10-17-23	8:30	-0.04	0.7	0.5	20.4	78.4	4	
E-213	10-17-23	8:36	-0.27	0.7	1.7	17.8	79.8	4	
229									
A-13	10-17-23	7:48	-0.35	0.7	1.4	18.4	79.5	2	
B-48.7	10-17-23	7:51	-3.90	0.7	0.0	20.8	78.5	2	
C-84.4	10-17-23	7:56	-6.10	0.7	1.4	18.2	79.6	3	
D-114	10-17-23	8:01	-13.52	0.7	1.5	18.2	79.6	4	
E-155.7	10-17-23	8:06	-7.17	0.7	0.0	20.7	78.5	4	
230									
A-16								2	REMOVED DUE TO CONSTRUCTION
B-33								2	REMOVED DUE TO CONSTRUCTION
C-50								3	REMOVED DUE TO CONSTRUCTION
231									
A-13								2	REMOVED DUE TO CONSTRUCTION
B-26								2	REMOVED DUE TO CONSTRUCTION
C-39								3	REMOVED DUE TO CONSTRUCTION
D-51								4	REMOVED DUE TO CONSTRUCTION
E-66								4	REMOVED DUE TO CONSTRUCTION

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SUNSHINE CANYON CITY PERIMETER PROBE MONITORING DATA

TECHNICIAN: RM			TEMPERATURE: 63		BARO. PRESSURE: 29.72				
GEM SERIAL #: 6505466			WEATHER CONDITIONS: Sunny						
PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
213									
A-13	10/17	7:45	-0.72	0.0	2.4	18.1	79.5	2	
B-29		8:05	-0.18	0.0	0.1	21.0	79.0	2	
C-45		8:10	-0.65	0.0	0.0	21.0	79.0	3	
D-61		8:15	-1.39	0.0	0.1	20.8	79.2	4	
E-77		8:20	-0.20	0.0	0.0	20.9	79.1	4	
214									
A-13	10/17	8:30	-0.09	0.0	0.1	20.6	79.2	2	
B-30		8:32	-8.23	0.0	0.0	20.9	79.1	2	
C-48		8:36	-0.02	0.0	0.9	20.1	79.0	3	
215									
A-13	10/17	8:41	-0.01	0.0	0.1	20.8	79.1	2	
B-30		8:44	-0.05	0.0	8.0	5.7	86.2	2	
C-47		8:47	-0.07	0.0	0.0	20.8	79.2	3	
D-64		8:51	0.18	0.0	0.0	20.8	79.2	4	
E-81		8:55	0.00	0.0	5.5	10.4	89.1	4	
216									
A-14	10/17	9:03	0.00	0.0	0.0	20.6	79.4	2	
B-43		9:07	-0.07	0.0	2.7	16.4	81.0	2	
C-62		9:10	0.04	0.0	0.6	19.5	79.9	3	
D-86		9:14	-0.13	0.0	0.0	20.6	79.3	4	
E-110		9:18	0.04	0.0	1.6	17.8	80.6	4	
217									
A-13	10/17	9:36	0.07	0.0	7.1	12.3	80.6	2	
B-30		9:39	0.03	0.0	6.6	14.2	79.2	2	
218R									
A-11	10/18	11:50	0.11	0.1	0.0	20.9	78.9	2	
B-26.5	10/19	11:52	0.08	0.0	0.2	21.0	78.8	2	
B-30	10/19	11:56	-0.74	0.0	0.0	20.0	79.3	2	
219									
A-13								2	Abandoned
B-64								2	Abandoned
C-115	10/19	1:37	0.10	0.1	0.0	20.8	79.1	3	
D-166	10/19	1:42	0.13	0.0	0.0	20.5	79.5	4	
E-217	10/19	1:48	0.15	0.0	0.0	20.1	79.9	4	

SCS SIGNATURE: 

LEA SIGNATURE _____



1. *Journal of the American Medical Association*, 1997; 277: 1039-1043.

TECHNICIAN: Eric E. Under TEMPERATURE: 39°F GAS O₂ PRESSURE: 29.94
 GEM SERIAL #: 4503346 WEATHER CONDITIONS: Raining

PROBE NUMBER	DATE	TIME	PRESSURE (PSI)	% CH ₄	% CO ₂	% O ₂	% BAL	PURGE TIME (MIN)	COMMENTS
202								2	REMOVED DUE TO CONSTRUCTION
A-10								2	REMOVED DUE TO CONSTRUCTION
B-25								3	REMOVED DUE TO CONSTRUCTION
C-38									
203									
A-10	11-15-23	9:08	-1.6	0	2.7	18.3	79.0	2	
B-25	11-15-23	9:11	-2.2	0	3.8	16.2	80.0	2	
C-40	11-15-23	9:15	-1.9	0	2.5	16.2	81.3	3	
206									
A-10	11-15-23	10:06	0.13	0.0	11.4	11.1	77.5	2	
B-25	11-15-23	10:08	0.17	0.0	17.1	7.2	75.7	2	
C-40	11-15-23	10:12	-0.48	0.0	24.6	2.2	73.2	3	
207									
A-10	11/15/23	9:56	-0.51	0.0	2.5	18.5	79.0	2	
B-25	11/15/23	9:58	-19.53	0.0	0.3	20.2	79.5	2	
C-40	11/15/23	10:02	-90.75	0.0	0.5	20.1	79.5	3	
208									
A-9.1	11-15-23	10:16	0.18	0.0	6.0	15.7	78.3	2	
B-25	11-15-23	10:19	0.31	0.0	19.2	5.9	74.9	2	
C-40	11-15-23	10:23	-0.89	0.0	0.2	20.1	79.7	3	
210									
A-10	11-15-23	10:38	-0.04	0.0	0.3	20.5	79.2	2	
B-25	11-15-23	10:41	-4.36	0.1	0.3	20.6	79.1	2	
C-39	11-15-23	10:45	-6.27	0.0	0.2	20.5	79.3	3	
242									
C-42	11-15-23	10:56	0.20	0.0	2.3	17.6	80.1	3	
D-60	11-15-23	10:58	-0.18	0.0	7.5	6.7	85.8	4	
E-78	11-15-23	11:02	0.19	0.0	4.9	12.6	82.5	4	
243									
A-11	11-15-23	7:38	-2.25	1.7	17.7	0.1	80.6	2	
B-20	11-15-23	7:42	-1.10	0	8.0	7.2	84.8	2	
C-33	11-15-23	7:46	-2.25	0	7.6	8.8	83.6	3	

SCS SIGNATURE: [Signature]

LEA SIGNATURE: _____

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LEAD SIGNATURE: _____

[illegible]

LEA SIGNATURE _____

SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

[illegible]

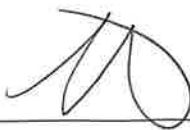
SIGNATURE Gregorio M. Muroz

SIGNATURE _____

SUNSHINE CANYON CITY PERIMETER PROBE MONITORING DATA

TECHNICIAN: <u>RM</u>		TEMPERATURE: <u>71°</u>		BARO. PRESSURE: <u>28.28</u>					
GEM SERIAL #: <u>G505465</u>		WEATHER CONDITIONS: <u>Sunny</u>							
PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
213									
A-13	11/14	9:06	-0.04	0.0	2.1	19.2	78.7	2	
B-29	11/14	9:11	-0.02	0.0	0.0	20.9	79.1	2	
C-45	11/14	9:14	-0.44	0.0	0.0	20.8	79.2	3	
D-61	11/14	9:19	-0.01	0.0	3.2	13.3	83.5	4	
E-77	11/14	9:24	-0.01	0.2	0.2	20.2	79.3	4	
214									
A-13	11/14	9:31	-0.02	0.0	9.1	12.4	78.5	2	
B-30	11/14	9:35	0.02	0.0	0.0	20.9	79.1	2	
C-48	11/14	9:39	-0.02	0.0	1.8	19.0	79.2	3	
215									
A-13	11/14	9:44	0.01	0.0	0.2	20.7	79.0	2	
B-30	11/14	9:48	0.00	0.0	6.0	9.7	84.2	2	
C-47	11/14	9:52	0.00	0.0	0.1	21.0	78.9	3	
D-64	11/14	9:57	0.00	0.0	4.2	13.1	82.7	4	
E-81	11/14	10:02	0.00	0.0	0.0	20.9	79.1	4	
216									
A-14	11/14	10:10	-0.03	0.0	0.0	20.8	79.2	2	
B-43	11/14	10:13	-0.09	0.4	1.5	18.2	79.9	2	
C-62	11/14	10:16	-0.03	0.0	4.6	12.4	83.0	3	
D-86	11/14	10:21	0.04	0.0	0.2	20.5	79.4	4	
E-110	11/14	10:26	0.05	0.9	1.9	16.9	80.3	4	
217									
A-13	11/14	10:44	0.04	0.0	12.5	7.8	79.7	2	
B-30	11/14	10:52	0.04	0.0	5.6	15.6	78.8	2	
218R									
A-11	11-27-23	9:44	-1.01	0.1	10.7	12.0	77.2	2	
B-26.5	11-27-23	9:48	-3.78	0.5	0.2	20.7	78.5	2	
B-30	11-27-23	9:52	-3.27	0.0	0.1	20.9	79.0	2	
219									
A-13	11/14	11:31	-0.01	0	0	20.2	79.8	2	
B-64	11/14	11:33	-0.04	0	0	20.6	79.4	2	
C-115	11/14	11:37	-0.05	0	4.1	3.6	92.3	3	
D-166	11/14	11:41	-0.02	0	0	20.5	79.4	4	
E-217	n/a							4	Abandoned

SCS SIGNATURE: _____



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SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
220									
A-14	11/14	9:15	.07	0	.2	17.8	82.0	2	
B-40	11/14	9:17	.11	0	0.2	20.4	79.4	2	
C-87	11/14	9:22	.05	0	0.1	20.7	79.2	3	
D-124	11/14	9:26	.02	0	0.2	20.6	79.2	4	
E-158	11/14	9:31	.06	0	0.2	20.7	79.1	4	
220B									
A-14	11/14	9:53	.02	0	0	14.7	84.3	2	
B-38	11/14	9:56	.01	0	0	12.9	87.1	2	
C-62	11/14	10:01	.06	0	0	13.7	86.6	3	
D-86	11/14	10:08	.06	0	0	15.6	84.4	4	
E-110	11/14	10:13	.03	0	0	14.5	85.5	4	
221									
A-13	11/14	10:38	-.01	0	1.6	19.8	78.7	2	
B-56	11/14	10:40	0	0	2.1	19.3	78.6	2	
C-99	11/14	10:44	-.0.5	0.2	0.7	20.7	78.6	3	
D-142	11/14	10:49	0	0	0	20.9	79.1	4	
E-185	11/14	10:54	-.04	0	1.4	19.0	79.6	4	
222									
A-13	11/14	10:56	-.0.2	0	0	16.5	83.5	2	
B-54.8	11/14	10:58	-.01	0	0.1	20.5	79.5	2	
C-96.5	11/14	11:02	-.03	0	0	17.2	82.8	3	
D-138.3	11/14	11:07	.07	0	0	13.4	86.5	4	
E-180	11/14	11:12	-.02	0	0.1	20.6	79.3	4	
223									
A-13	11/14	11:14	0	0	0	11.8	88.2	2	
B-37.5	11/14	11:17	-.02	0	0	13.3	86.7	2	
C-62	11/14	11:20	-.04	0	0.1	18.2	81.8	3	
D-86.5	11/14	11:25	.01	0	0	15.6	84.4	4	
E-111	11/14	11:29	-.02	0	0.1	16.1	83.8	4	
224									
A-13	11/14	1203	-.02	0	1.1	18.6	80.3	2	
B-67.5	11/14	1205	-.04	0	.3	19.6	80.1	2	
C-122	11/14	1212	-.10	0	.2	20.3	79.6	3	
D-177.5	11/14	1218	-.448	0	.1	20.8	79.1	4	
E-232	11-27-23	11:08	-8.10	0.0	0.0	20.5	79.4	4	

SCS SINGNATURE:

LEA SIGNATURE: _____

SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
225									
A-13	11-14-23	12:33	0.01	0	5.9	14.8	79.2	2	
B-72	11-14-23	12:37	-7.94	0	2.3	18.6	79.1	2	
C-1131	11-14-23	12:43	-7.13	0.1	7.5	13.6	78.8	3	
D-190	11-27-23	10:53	-6.87	0.1	0.1	20.5	79.4	4	
E-244	11-27-23	10:58	-7.66	0.0	0.0	20.6	79.4	4	
226									
A-13	11-27-23	10:12	0.17	0.0	0.0	20.9	79.1	2	
B-64	11-27-23	10:15	-8.26	0.0	0.1	20.9	79.1	2	
C-114	11-27-23	10:22	-9.77	0.0	0.1	20.9	79.1	3	
D-164	11-27-23	10:27	-9.67	0.0	0.0	21.0	79.6	4	
E-208	11-27-23	10:42	-8.92	0.0	0.1	20.8	79.1	4	
227									
A-13	11-14-23	1:45	0.02	0	1.0	18.0	81.0	2	
B-48.7	11-14-23	1:49	1.83	0.6	6.6	0.3	92.6	2	
C-84.4	11-14-23	1:54	0.22	0	5.2	3.17	91.1	3	
D-114	11-14-23	2:01	0.26	0	2.0	14.1	83.9	4	
E-115.7	11-14-23	2:06	0.15	0	1.0	17.5	81.5	4	
228									
A-13	11-14-23	2:24	0.02	0	2.2	18.3	79.6	2	
B-63	11-14-23	2:27	0.69	0	1.1	19.0	79.9	2	
C-113	11-14-23	2:32	0.33	0	5.0	4.7	90.3	3	
D-163	11-14-23	2:38	0.01	0	0.5	19.7	79.8	4	
E-213	11-14-23	2:44	0.47	0	1.5	17.3	81.2	4	
229									
A-13	11-14-23	10:16	0	0.1	0.8	18.9	80.3	2	
B-48.7	11-14-23	10:38	0.01	0	0	20.8	79.2	2	
C-84.4	11-14-23	10:43	-7.60	0	0.9	19.1	80.1	3	
D-114	11-14-23	10:50	0.33	0	0.1	20.8	79.2	4	
E-155.7	11-14-23	10:56	4.16	0	0	20.9	79.0	4	
230									
A-16								2	REMOVED DUE TO CONSTRUCTION
B-33								2	REMOVED DUE TO CONSTRUCTION
C-50								3	REMOVED DUE TO CONSTRUCTION
231									
A-13								2	REMOVED DUE TO CONSTRUCTION
B-26								2	REMOVED DUE TO CONSTRUCTION
C-39								3	REMOVED DUE TO CONSTRUCTION
D-51								4	REMOVED DUE TO CONSTRUCTION
E-66								4	REMOVED DUE TO CONSTRUCTION

SCS SIGNATURE: _____

LEA SIGNATURE: _____

SUNSHINE CANYON CITY PERIMETER PROBE MONITORING DATA

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SCS SIGNATURE: _____

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SUNSHINE CANYON CITY PERIMETER PROBE MONITORING DATA

TECHNICIAN: <u>MARCOS W</u>			TEMPERATURE: <u>76°</u>		BARO. PRESSURE: <u>28.20</u>				
GEM SERIAL #:			WEATHER CONDITIONS: <u>CLOUDY</u>						
PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
213									
A-13	12/19	3:02	-0.02	0	1.2	19.1	79.7	2	
B-29	12/19	3:05	-0.14	0	0.1	20.4	79.0	2	
C-45	12/19	3:09	-0.02	0	0.9	20.6	78.5	3	
D-61	12/19	3:13	0.0	0	1.6	20.7	77.7	4	
E-77	12/19	3:24	-0.03	0	0.3	20.7	79.0	4	
214									
A-13	12/20	2:31	0.02	0	8.2	12.7	79.1	2	
B-30	12/20	2:34	-0.06	0	0.1	20.8	79.1	2	
C-48	12/20	2:37	-0.62	0	0.1	20.9	79.0	3	
215									
A-13	12/20	2:45	-0.05	0	4.6	11.8	83.6	2	
B-30	12/20	2:48	-0.17	0	3.0	14.9	82.1	2	
C-47	12/20	2:52	-0.36	0	0.4	20.6	79.0	3	
D-64	12/20	2:57	-2.08	0	0.4	20.7	78.9	4	
E-81	12/20	3:02	-2.28	0	0.4	20.7	78.7	4	
216									
A-14	12/26	2:42	-0.01	0.0	0.1	20.3	79.6	2	
B-43	12/26	2:45	-1.29	0.0	0.1	20.4	79.5	2	
C-62	12/26	2:49	-0.01	0.0	0.1	20.5	79.4	3	
D-86	12/26	2:54	0.02	0.0	0.1	20.7	79.3	4	
E-110	12/26	2:59	0.05	0.0	1.6	18.6	79.7	4	
217									
A-13	12/26	2:26	0.21	0.0	9.4	11.7	78.9	2	
B-30	12/26	2:29	-0.01	0.2	2.8	17.9	79.0	2	
218R									
A-11	12/15	10:56	-0.05	0	1.9	19.4	78.7	2	
B-26.5	12/15	10:59	-0.10	0	0.0	20.9	79.1	2	
B-30	12/15	11:02	-0.05	0	0.0	21.0	79.0	2	
219									
A-13	12/15	9:49	-0.01	0	0	16.5	83.5	2	
B-64	12/15	9:52	-0.03	0.1	0.1	20.3	79.5	2	
C-115	12/15	9:56	0.01	0.1	0	11.9	88.0	3	
D-166	12/15	10:00	-0.02	0	0.1	20.9	79.0	4	
E-217	12/15	10:05	0.02	0	0.1	20.1	79.8	4	

SCS SIGNATURE: _____

LEA SIGNATURE _____

SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
225									
A-13	12/21	8:05	-0.31	0	0.1	21.0	78.9	2	
B-72	12/21	8:12	-1.7	0	0.1	20.1	79.8	2	
C-1131	12/21	8:16	-8.64	0	0.1	20.1	79.8	3	
D-190	12/21	8:21	-7.85	0	0.1	20.1	79.8	4	
E-244	12/21	8:26	-8.29	0	0.1	20.0	79.9	4	
226									
A-13	12-20-23	14:34	-0.16	0.0	0.4	20.9	79.4	2	
B-64	12-20-23	14:37	-6.65	0.0	0.1	20.6	79.2	2	
C-114	12-20-23	14:40	-7.64	0.0	0.1	20.7	79.2	3	
D-164	12-20-23	14:45	-7.98	0.0	0.1	20.9	79.0	4	
E-208	12-20-23	14:50	-8.77	0.0	0.1	21.0	78.9	4	
227									
A-13	12-20-23	15:25	-0.08	0.1	4.0	6.0	89.9	2	
B-48.7	12-20-23	15:28	2.63	0.6	6.6	0.0	92.8	2	
C-84.4	12-20-23	15:32	1.36	0.5	6.2	0.0	93.3	3	
D-114	12-20-23	15:36	1.72	0.1	4.7	0.0	95.2	4	
E-115.7	12-20-23	15:41	1.06	0.3	5.1	0.0	94.6	4	
228									
A-13	12-20-23	15:59	-0.43	0.0	2.0	20.7	79.3	2	
B-63	12-20-23	15:02	1.31	0.0	7.5	2.4	90.1	2	
C-113	12-20-23	15:06	-1.81	0.8	7.7	0.0	91.6	3	
D-163	12-20-23	15:11	-0.18	0.3	4.5	0.1	95.1	4	
E-213	12-20-23	15:16	1.55	0.1	4.8	0.0	95.1	4	
229									
A-13	12-19-23	14:55	0.01	0.0	0.1	21.0	78.9	2	
B-48.7	12-19-23	15:02	-2.83	0.0	0.1	21.0	79.0	2	
C-84.4	12-19-23	15:09	-4.87	0.0	0.1	21.0	78.9	3	
D-114	12-19-23	15:14	-13.53	0.0	0.1	20.9	79.0	4	
E-155.7	12-19-23	15:24	-2.42	0.0	0.1	20.9	79.0	4	
230									
A-16								2	REMOVED DUE TO CONSTRUCTION
B-33								2	REMOVED DUE TO CONSTRUCTION
C-50								3	REMOVED DUE TO CONSTRUCTION
231									
A-13								2	REMOVED DUE TO CONSTRUCTION
B-26								2	REMOVED DUE TO CONSTRUCTION
C-39								3	REMOVED DUE TO CONSTRUCTION
D-51								4	REMOVED DUE TO CONSTRUCTION
E-66								4	REMOVED DUE TO CONSTRUCTION

SCS SIGNATURE: 

LEA SIGNATURE: _____

SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
220									
A-14	12/15	7:49	.12	0	0.1	18.6	81.3	2	
B-40	12/15	7:52	.14	0	0.2	19.9	79.8	2	
C-87	12/15	7:58	.11	0	0.2	20.3	79.5	3	
D-124	12/15	8:02	.08	0	0.2	20.3	79.5	4	
E-158	12/15	8:07	.11	0	0.2	20.2	79.5	4	
220B									
A-14	12/15	8:13	.06	0.2	0.1	16.1	83.6	2	
B-38	12/15	8:17	.13	0	0	13.0	87.0	2	
C-62	12/15	8:21	.03	0	0.1	13.1	86.9	3	
D-86	12/15	8:25	.07	0	0.1	16.1	83.8	4	
E-110	12/15	8:31	.06	0.1	0	14.0	85.8	4	
221									
A-13	12/15	8:31	.06	0.1	0	14.0	85.8	2	
B-56	12/15	8:37	.02	0	0.1	20.3	79.6	2	
C-99	12/15	8:40	.04	0	0.1	18.9	81.0	3	
D-142	12/15	8:43	.03	0	0.1	16.4	83.5	4	
E-185	12/15	8:48	.01	0	0.1	20.5	79.4	4	
222									
A-13	12/15	8:57	.02	0	0.1	17.9	82.0	2	
B-54.8	12/15	9:00	-.01	0	0.1	20.6	79.3	2	
C-96.5	12/15	9:03	-.01	0	0.1	17.2	82.7	3	
D-138.3	12/15	9:08	-.01	0	0	14.2	85.8	4	
E-180	12/15	9:13	-.03	0.1	0	20.3	79.6	4	
223									
A-13	12/15	9:16	-.02	0.1	0	12.2	87.7	2	
B-37.5	12/15	9:19	-.01	0	0	14.2	85.7	2	
C-62	12/15	9:23	.01	0	0.1	17.6	82.3	3	
D-86.5	12/15	9:27	.01	0.1	0.1	16.2	83.7	4	
E-111	12/15	9:31	-.02	0.1	0.1	15.2	84.7	4	
224									
A-13	12/21	7:36	-0.32	0	0.1	19.9	80.0	2	
B-67.5	12/21	7:38	-0.91	0	0.2	21.0	78.8	2	
C-122	12/21	7:44	-3.65	0	0.1	20.9	79.0	3	
D-177.5	12/21	7:49	-13.35	0	0.1	21.0	78.9	4	
E-232	12/21	7:57	-47.88	0	0.1	20.9	79.0	4	

SCS SIGNATURE: _____

LEA SIGNATURE: _____

SUNSHINE CANYON COUNTY PERIMETER PROBE MONITORING DATA

TECHNICIAN: <u>AMANDO MARTINEZ</u>		TEMPERATURE: <u>59°F</u>		BARO. PRESSURE: <u>29.94</u>					
GEM SERIAL: <u>6503346</u>		WEATHER CONDITIONS: <u>cloudy</u>							
PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
202									
A-10								2	REMOVED DUE TO CONSTRUCTION
B-25								2	REMOVED DUE TO CONSTRUCTION
C-38								3	REMOVED DUE TO CONSTRUCTION
203									
A-10	12/19/23	9:42	+0.02	0	2.0	19.3	78.7	2	
B-25	12/19/23	9:45	+0.03	0	3.4	17.3	79.3	2	
C-40	12/19/23	9:48	+0.01	0	1.5	18.7	79.9	3	
206									
A-10	12/19/23	7:53	-0.11	0	10.0	11.9	78.1	2	
B-25	12/19/23	7:56	-0.12	0	12.9	10.1	77.0	2	
C-40	12/19/23	7:59	-0.11	0	18.0	7.9	74.1	3	
207									
A-10	12/19/23	7:30	-0.25	0	0.1	20.5	79.4	2	
B-25	12/19/23	7:33	-0.17	0	6.3	17.2	76.5	2	
C-40	12/19/23	7:39	-0.13	0	0.1	20.6	79.3	3	
208									
A-9.1	12/19/23	8:05	-0.09	0	3.1	18.2	78.6	2	
B-25	12/19/23	8:08	-0.20	0	7.5	15.2	77.3	2	
C-40	12/19/23	8:11	-0.09	0	0.4	20.7	78.9	3	
210									
A-10	12/15/23	13:58	3.71	0.1	0.6	20.6	78.5	2	
B-25	12/15/23	14:03	-9.07	0.3	0.6	20.3	78.8	2	
C-39	12/15/23	14:06	0.43	0.5	0.6	20.3	79.0	3	
242									
C-42	12/19/23	8:31	-0.11	0.1	0.2	21.0	78.8	3	
D-60	12/19/23	8:36	-0.11	0	0.1	20.6	79.3	4	
E-78	12/19/23	8:46	-0.11	0	0.2	20.7	79.1	4	
243									
A-11	12/19/23	8:44	0.0	1.5	16.1	0.1	81.3	2	
B-20	12/19/23	8:47	+0.04	0	7.5	8.7	83.7	2	
C-33	12/19/23	8:51	-0.28	0	7.6	8.6	83.9	3	

SCS SIGNATURE:

AMANDO MARTINEZ

LEA SIGNATURE

SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
244									
A-11	12/19/23	8:17	-0.11	0	2.2	20.4	77.5	2	
B-21	12/19/23	8:20	-0.11	0	0.2	20.9	78.9	2	
C-36	12/19/23	8:24	-0.14	0	0.6	20.8	78.6	3	
245									
A-11	12/19/23	8:08	+0.16	0	14.7	5.4	79.9	2	
B-20	12/19/23	8:14	-0.02	3.9	27.6	0.0	68.5	2	
C-35	12/19/23	8:19	+0.03	0	0.2	20.9	78.9	3	
D-50	12/19/23	8:23	-0.04	0.7	16.6	0.1	82.6	4	
E-64	12/19/23	8:27	0.0	0	2.7	17.0	80.3	4	
246									
A-9								2	REMOVED DUE TO CONSTRUCTION
B-16								2	REMOVED DUE TO CONSTRUCTION
205R									
A-11	12/19/23	7:20	+0.01	0	7.8	13.6	78.6	2	
B-20	12/19/23	7:25	-0.58	0	18.9	1.5	79.5	2	
C-33	12/19/23	7:30	-0.96	2.0	45.6	0.0	52.4	3	
D-48	12/19/23	7:38	-0.01	3.7	47.6	0.0	48.7	4	
E-62	12/19/23	7:44	-5.50	0.1	19.6	0.6	79.7	4	
239	12/15/23								
A-11	12/15/23	2:14	0.02	0.1	25.4	8.1	66.4	2	
B-20	12/15/23	2:17	-1.18	0.0	19.5	11.7	68.8	2	
C-35	12/15/23	2:20	-0.81	0.0	1.8	19.9	78.2	3	
D-50	12/15/23	2:25	0.04	0.0	0.7	20.9	78.4	4	
E-64	12/15/23	2:34	-5.44	0.0	0.2	20.6	79.1	4	
240									
A-11	12/15/23	14:18	0.05	0.0	16.5	4.3	79.2	2	
B-20	12/15/23	14:21	-21.30	0.0	0.7	20.4	78.9	2	
C-33	12/15/23	14:27	-0.21	0.4	0.2	20.7	78.7	3	
D-49	12/15/23	14:32	-0.63	0.0	0.7	20.4	78.9	4	
E-61	12/15/23	14:38	-0.22	0.0	0.5	20.6	78.9	4	

SCS SINGNATURE: AMANDO MARTINEZ

LEA SIGNATURE: _____

SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

[illegible]

SCS SIGNATURE: AMANDO MARTINEZ

LEA SIGNATURE: _____

[illegible]

LEA SIGNATURE _____

ATTACHMENT D

**BOARD OF PUBLIC WORKS
MEMBERS**

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ROBERT POTTER
ALEXANDER E. HELOU
ASSISTANT DIRECTORS**

**TIMEYIN DAFETA
HYPERION EXECUTIVE PLANT MANAGER**

**INDUSTRIAL WASTE
MANAGEMENT DIVISION
2714 MEDIA CENTER DRIVE
LOS ANGELES, CA 90065
OFFICE: (323) 342-6200
FAX: (323) 342-6111
WWW.LACITYSAN.ORG**

September 01, 2023

SUNSHINE CANYON LANDFILL
14747 San Fernando Road
Sylmar, CA 91342

In Reply Refer to: IU128862.prm/jnc

Attn: Paul Koster, Environmental Manager

**RENEWAL OF INDUSTRIAL WASTEWATER PERMIT FOR IU128862
PERMIT: W-535428**

The LA Sanitation and Environment (LASAN) has completed a review of SUNSHINE CANYON LANDFILL's application to discharge industrial wastewater to the City of Los Angeles sewer system. Pursuant to the LASAN's audit, it has been determined that this facility is subject to the requirements as a Non-Categorical Significant Industrial User, and other applicable Federal, State and Local wastewater discharge requirements. Therefore, in accordance with provisions of the Los Angeles Municipal Code (L.A.M.C.) Section 64.30, this Industrial Wastewater Permit is being issued to include comprehensive permit conditions which identify the requirements that are applicable to SUNSHINE CANYON LANDFILL. All discharges from this facility and actions and reports relating thereto shall be in accordance with the terms and conditions of this permit.

This permit shall become effective at midnight on **September 01, 2023** and shall expire at midnight on **August 31, 2026**. During the term of this permit, the permittee shall immediately notify the LA Sanitation and Environment of any changes to the facility, process, production, or pretreatment system that may change the characteristics which causes it to be different from that expressly allowed under this permit.

If there are any questions regarding these permit conditions, please contact JOCELYN CARRILLO of my staff at (323) 342-6082.

Sincerely,

Barbara Romero, Director and General Manager
LA Sanitation and Environment

By *Michael Simpson*

Michael Simpson, Division Manager
Industrial Waste Management Division

c: **SIU Permitting Section**
Bhupendra Patel, Chief Environmental Compliance Inspector II
SIU Permitting Section

**INDUSTRIAL USER
PERMIT REQUIREMENTS AND CONDITIONS**

**Legal Name: Browning-Ferris Industries of California, Inc.
Dba Name: SUNSHINE CANYON LANDFILL
Industrial User No: IU128862**

**INDUSTRIAL WASTEWATER PERMIT NO.
W-535428**

2015-2016

CITY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS
LA Sanitation and Environment



INDUSTRIAL WASTE MANAGEMENT DIVISION
2714 MEDIA CENTER DRIVE
LOS ANGELES, CA 90065
(323) 342-6200

INDUSTRIAL WASTEWATER PERMIT

INDUSTRIAL USER NO: IU128862
PERMIT NO: W-535428
EFFECTIVE DATE: 09/01/2023
AMENDED DATE: NA
EXPIRATION DATE: 08/31/2026

LEGAL BUSINESS NAME: BROWNING-FERRIS INDUSTRIES OF CALIFORNIA, INC.
DOING BUSINESS AS: SUNSHINE CANYON LANDFILL
MAILING ADDRESS: 14747 SAN FERNANDO ROAD
SYLMAR, CA 91342
LOCATION ADDRESS: 14747 SAN FERNANDO ROAD
SYLMAR, CA 91342
CATEGORY: NON-CATEGORICAL SIU
POINT OF DISCHARGE: PUBLIC SEWER

In accordance with the provisions of the Los Angeles Municipal Code (L.A.M.C.) Section 64.30, the above identified industrial user is hereby authorized to discharge industrial wastewater through the approved point of discharge identified herein in accordance with the discharge limitations, conditions, and requirements set forth in this permit and the L.A.M.C. Compliance with this permit does not relieve the industrial user of its obligation to comply with all pretreatment regulations, standards or requirements under local, State and Federal laws, including any such laws, regulations, standards or requirements that may become effective during the term of this permit.

The industrial user must comply with the provisions of L.A.M.C. Section 64.30 and all terms and conditions of this permit. Noncompliance with the terms and conditions of this permit shall constitute a violation of the L.A.M.C. Section 64.30 and may subject the industrial user to administrative actions or other legal proceedings. This permit becomes void upon any change of ownership or location whatsoever.

Barbara Romero, Director and General Manager
LA Sanitation and Environment

BY: Michael Simpson

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PART 1 - SAMPLE POINT DESCRIPTION AND FACILITY FLOW INFORMATION**A. Sample Point**

The industrial user is authorized to discharge industrial wastewater to the City of Los Angeles sewer system from the sample point(s) listed below.

INDUSTRIAL WASTEWATER PERMIT	SAMPLE POINT	FLOW PER OPERATIONAL DAY (GPD)		DESCRIPTION
		TOTAL	PROCESS	
W-535428	01	300,000	300,000	Secured Sampling Facility is located at Magnetic Flow meter Vault.

B. Industrial User Flow

Facility Flow Information ¹	Total (GPD)	Process (GPD)
	300,000	300,000

Footnotes to Sample Point Description and Industrial User Flow Information

- ¹ Sunshine Canyon Landfill shall not discharge greater than 300,000 gpd of leachate to the City sewer system. Refer to Part 5. C – Special Conditions.

PART 2 - DISCHARGE LIMITATIONS

The discharge from the designated sample points shall not exceed the following discharge limitations:

A. Industrial Wastewater Permit W-535428**1. Sample Point 01– Significant Non-Categorical Industrial User**

DISCHARGE LIMITATIONS		
Constituent	Local Instantaneous Maximum	
Arsenic (Total)	3.00	mg/l
Cadmium (Total)	15.00	mg/l
Chromium (Total)	10.00	mg/l
Copper (Total)	15.00	mg/l
Cyanide (Free) ¹	2.00	mg/l
Cyanide (Total)	10.00	mg/l
Dissolved Sulfides	0.10	mg/l
Lead (Total)	5.00	mg/l
Nickel (Total)	12.00	mg/l
Oil & Grease (Total)	600.00	mg/l
pH (Standard Units)	5.50 – 11.00	SU
Silver (Total)	5.00	mg/l
Zinc (Total)	25.00	mg/l

Footnotes to Discharge Limitations

¹Cyanide (Free) shall mean cyanide amenable to chlorination as defined by 40 CFR 136.

PART 3 – MONITORING REQUIREMENTS

The industrial user shall monitor the designated sample point, for the following constituents, at the indicated frequency and by the indicated sample type.

A. Industrial Wastewater Permit W-535428**1. Sample Point 01**

MONITORING REQUIREMENTS FOR REGULATED PARAMETERS		
Constituent	Measurement Frequency	Sample Type
Daily Flow	Continuous	Not Applicable
Arsenic (Total)	Semi-Annual	Grab
Cadmium (Total)	Semi-Annual	Grab
Chloride ¹	Semi-Annual	Grab
Chromium (Total)	Semi-Annual	Grab
Copper (Total)	Semi-Annual	Grab
Cyanide (Free)	Semi-Annual	Grab
Cyanide (Total)	Semi-Annual	Grab
Dissolved Sulfides	Semi-Annual	Grab
Lead (Total)	Semi-Annual	Grab
Nickel (Total)	Semi-Annual	Grab
Oil & Grease (Total)	Semi-Annual	Grab
pH ²	Semi-Annual	Grab
Silver (Total)	Semi-Annual	Grab
Zinc (Total)	Semi-Annual	Grab

B. Representative Monitoring and Sampling

1. Monitoring and sampling shall be carried out during a period of normal operations.
2. All handling and preservation of collected samples and laboratory analyses of samples shall be performed in accordance with 40 CFR Part 136 and amendments thereto unless specified otherwise in the monitoring conditions of this permit. The handling, storage and analyses of all samples taken for the determination of the wastewater characteristics discharged shall be performed by laboratories certified by the State of California or approved by the Director of the LA Sanitation and Environment.
3. The detection limits employed for wastewater analysis shall be lower than the permit limits established for a given parameter.
4. The industrial user is responsible for maintaining and cleaning the designated sample point(s) to prevent any build-up of oil and grease, sediment or sludge. Failure to do so does not invalidate sampling test results. Analytical results from samples taken from designated sample points according to accepted sampling procedure shall be accepted as binding.
5. Sample Points identified in the Industrial Wastewater Permit shall not be changed without notification and approval by the Director.

FOOTNOTES TO MONITORING REQUIREMENTS

¹The City of Los Angeles is establishing a database for chlorides.

²Refer to Part 5A– Special Conditions.

PART 4 – REPORTING REQUIREMENTS**A. Self-Monitoring**

1. The industrial user shall implement a self-monitoring program for the designated Industrial Wastewater Permit. Monitoring results obtained shall be summarized and reported on the enclosed report form entitled "Periodic Compliance Report" and submitted with a US Post Office postmark date by the 15th day of the month following the monitoring period. Facsimiles (faxes) of self-monitoring reports shall not be accepted. Reports with original signatures must be submitted by the due date.

The first self-monitoring report for the monitoring period of **July 1 – December 31, 2023** shall be submitted by **January 15, 2024**. Subsequent reports shall be submitted in accordance with the following schedule:

SELF-MONITORING REPORT SCHEDULE			
Industrial Wastewater Permit	Type of Report	Monitoring Period	Report Due Date
W-535428 Sample Point 01	Local Limits Periodic Compliance Report	Jan 1 - Jun 30 Jul 1 - Dec 31	Jul 15 Jan 15

2. All portions of the Periodic Compliance Report form must be completed or the report may not be accepted.
3. The report shall indicate the nature and concentration of all pollutants in the effluent for which sampling and analyses were performed including measured or estimated maximum and average daily flows. The report shall be based upon data obtained through appropriate sampling and analyses performed which represents the conditions occurring during the period covered by the report.
4. Copies of all laboratory results shall be submitted with each report.
5. The LA Sanitation and Environment will not accept reports where monitoring was conducted outside the monitoring period specified in this permit.

B. Self-Monitoring Report Submittal

All self-monitoring reports required by this permit shall be submitted to the Director at the following address:

City of Los Angeles
LA Sanitation and Environment
Industrial Waste Management Division
2714 Media Center Drive
Los Angeles, CA 90065

Attn: Information Systems Support Squad

C. Additional Monitoring

If the industrial user monitors any pollutant at the designated sample point more frequently than required by this permit, using test procedures prescribed in 40 CFR 136 or amendments thereto or otherwise approved by EPA or specified in this permit, the results of such monitoring shall be reported in the compliance report and submitted to the Director.

D. Automatic Resampling

If the results of the industrial user's wastewater analysis indicate a violation has occurred, the industrial user must comply with the following:

1. Inform the Director of the violation within 24 hours by contacting the LA Sanitation and Environment Industrial Waste Management Division SIU Inspection Group at (323) 342-6200; and
2. Repeat the sampling and pollutant analysis and submit, in writing, the results of this second analysis within 30 days after becoming aware of the violation.

Additionally, if the results of LASAN's wastewater analysis indicate a violation has occurred, the industrial user must repeat the sampling and pollutant analysis and submit, in writing, the results of this second analysis within 30 days after becoming aware of the violation.

E. Pre-notification of Monitoring and Sampling

The industrial user shall notify the SIU Inspection Group by telephone at (323) 342-6200 at least 48 hours in advance of any monitoring or sampling to be performed. Notification shall include the date, time and location of proposed monitoring or sampling. Monitoring and sampling shall be carried out during a period of normal operations. Prior to the commencement of any sampling or monitoring, the Director may request that the industrial user furnish to the Director a split sample and all supporting data (i.e., methodology, flow measuring data, strip chart recordings and other pertinent information). The Director reserves the right to refuse any data developed from the monitoring or sampling activity if the industrial user fails to comply with the pre-notification procedure or other requirements of sampling and analysis.

PART 5 – SPECIAL CONDITIONS**A. pH MONITORING AND RECORDING SYSTEM**

The pH of the wastewater discharge to the sewer system shall be monitored and recorded continuously using a pH meter and recording device. To ensure the proper operation and continued accuracy of the pH meter, Sunshine Canyon Landfill shall clean, maintain, and calibrate the device periodically in accordance with the manufacturer's requirements. A logbook for pH calibration must be kept. The pH chart must be initialed daily by an operator at the facility to validate the proper operation of the pH monitoring and recording system.

B. FLOW METER MAINTENANCE AND CALIBRATION

To ensure proper operation and continued accuracy of the industrial wastewater flow measurement device, Sunshine Canyon Landfill shall clean, maintain, and calibrate the device periodically in accordance with the manufacturer's requirements. If there are no stated requirements, the flow meter shall be calibrated annually at a minimum. A maintenance record shall be available at all times for LA Sanitation and Environment review.

C. DISCHARGE REQUIREMENTS

Sunshine Canyon Landfill is allowed to discharge a total of 300,000 gpd (208.33 gpm) of landfill leachate at a maximum flow rate of 250 gpm, not exceeding 300,000 gallons per day through the sewer connection located at 14747 N. San Fernando Road, Sylmar into the City of Los Angeles sewer system.

PART 6 – STANDARD CONDITIONS**A. Prohibitions****1. General Prohibitive Standards**

The Industrial User shall comply with all the general prohibitive discharge standards in the General Pretreatment Regulations, 40 CFR 403, and the L.A.M.C. Section 64.30. Except as expressly allowed in an Industrial Wastewater Permit, no Industrial User shall introduce or cause to be introduced into the POTW any of the following:

- a) Gasoline, mercury, total identifiable chlorinated hydrocarbons, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides, solvents, pesticides or jet fuel;
- b) Liquids, solids or gases which by reason of their nature or quantity are flammable, reactive, explosive, corrosive, or radioactive, or by interaction with other materials could result in fire, explosion or injury. Pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, wastewater with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40CFR261;
- c) Solid or viscous materials which could cause obstruction to the flow or operation of the POTW;
- d) Toxic pollutants in sufficient quantity to injure or interfere with any wastewater treatment process, including private pretreatment systems, to constitute a hazard or cause injury to human, animal, plant or fish life, or to exceed any limitation set forth in this Permit;
- e) Noxious or malodorous liquids, gases, or solids in sufficient quantity either singly or by interaction with other materials to create a public nuisance, hazard to life, or to prevent entry of any person to the POTW;
- f) Pollutants which result in the presence of toxic gases, vapors or fumes within the POTW in a quantity that may cause acute worker health and safety problems;
- g) Material of sufficient quantity to interfere with any POTW treatment plant process or to render any product thereof unsuitable for reclamation and reuse;
- h) Material in sufficient quantity to cause the POTW to be in noncompliance with biosolids use or disposal criteria, guidelines or regulations in conjunction with Section 405 of the Act, the Solid Waste Disposal Act (SWDA), the Clean Air Act, the Toxic Substances Control Act, the Marine Protection Research and Sanctuaries Act, or State criteria (including those contained in any state sludge management plan prepared pursuant to Title II of SWDA) applicable to the biosolids management method being used;
- i) Material which will cause the POTW to violate its NPDES Permit, applicable Federal and State statutes, rules or regulations;
- j) Wastewater containing pigment which is not removed in the ordinary POTW treatment process and which creates a visual contrast with the material appearance of the POTW discharge observable at the point of POTW discharge;
- k) Wastewater having a heat content in such quantities that the temperature of the wastewater at the introduction into the POTW Collection system exceeds 140 degrees Fahrenheit, or at the introduction into the POTW treatment plant exceeds 104 degrees Fahrenheit;
- l) Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;

- m) Pollutants, including oxygen demanding pollutants, released at a flow rate or pollutant concentration which will cause or contribute to interference;
- n) Storm water collected and discharged to the POTW;
- o) Single pass cooling water in excess of 200 gallons per day discharged to the POTW;
- p) Wastewater which constitutes a hazard or causes injury to human; animal, plant or fish life or creates a public nuisance;
- q) Recognizable portions of the human or animal anatomy;
- r) Floatable material which is readily removable;
- s) Radioactive wastes or isotopes;
- t) Grinder food wastes from commercial kitchens, markets, or food plants;
- u) Trucked or hauled pollutants, except at discharge points designated by the City;
- v) Human or animal blood suspected or known to contain bloodborne pathogen(s);
- w) Pharmaceutical wastes;
- x) Medical wastes; or
- y) Sharps.

B. Permit Provisions

1. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

2. Duty to Comply

The Industrial User must comply with the provisions of L.A.M.C. 64.30 and all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for administrative action or enforcement proceedings, including civil or criminal penalties, injunctive relief and summary abatements.

3. Duty to Mitigate

The Industrial User shall take all reasonable steps to minimize or correct any adverse impact to the public treatment plant or the environment resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

4. Modification or Revision of the Permit

This permit may be modified, revoked and reissued or terminated for good causes including, but not limited to, the following:

- a) The incorporation of any new or revised Federal, State or Local pretreatment standards or requirements;
- b) Material or significant alterations or additions to the Industrial User's operational processes or discharge volume or character which were not covered in the effective permit;

- c) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge;
- d) Information indicating that the permitted discharge poses a threat to the City of Los Angeles' collection and treatment systems, POTW personnel or the receiving waters;
- e) A violation of any terms or conditions of this permit;
- f) Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
- g) A revision of or a grant of variance from such categorical standards pursuant to 40 CFR 403.13.
- h) A request of the Industrial User, provided such request does not create a violation of any existing applicable requirements, standards, laws or rules and regulations; or
- i) A correction of typographical or other errors in the permit.

5. Property Rights

The issuance of this permit does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor does it authorize any violation of Federal, State or Local laws or regulations.

6. Limitation of Permit Transfer

An Industrial Wastewater Permit shall not be transferable by operation of law or otherwise, either from one location to another or from one person to another. Statutory mergers or name changes shall not constitute a transfer or a change in ownership.

7. Duty to Reapply

To continue an activity regulated by this permit after the expiration date, the Industrial User must file an application for permit renewal at least 90 days before the expiration date of this permit.

8. Dilution

The Industrial User shall not increase the use of potable or process water or, in any way, attempt to dilute an effluent as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

9. Compliance with Applicable Pretreatment Standards and Requirements

The Industrial User shall comply at all times with any and all applicable Local, State and Federal pretreatment standards and requirements including Best Management Practices and any such standards or requirements that may become effective during the term of this permit. In addition, the Industrial User may be required to prepare a pollution prevention plan.

10. Confidentiality

- a) Any information, except for discharge and effluent data, submitted to the City pursuant to this Permit may be claimed by the Industrial User to be confidential. Any such claim must be asserted at the time of submission of the information or data to the City. The claim may be asserted by stamping the words "Confidential Business Information" on each page containing such information or by other means; however, if no claim is asserted at the time of submission, the City may make the information available to the public without further notice. If such a claim is asserted, the information will be treated in accordance with the procedures set forth in 40 CFR Part 2 (Public Information).
- b) Information and data provided to the City which is effluent data shall be available to the public without restriction.

C. Operation and Maintenance of Pollution Controls**1. Proper Operation and Maintenance**

The Industrial User shall at all times properly operate and maintain all facilities and systems for treatment and control (and related appurtenances) which are installed or used by the Industrial User to achieve compliance with the conditions of this permit. Proper operation and maintenance includes but is not limited to effective performance, adequate funding, adequate operator staffing and training and adequate laboratory and process controls including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

2. Duty to Halt or Reduce Activity

Upon reduction of efficiency of operation or loss or failure of all or part of the pretreatment facility, the Industrial User shall, to the extent necessary to maintain compliance with its permit, control its production or discharge (or both) until operation of the pretreatment facility is restored or an alternative method of pretreatment is provided. This requirement applies, for example, when the primary source of power of the pretreatment facility fails or is reduced. It shall not be a defense for an Industrial User in an enforcement action to state that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Removed Substances

Solids, sludge, filter backwash or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in accordance with section 405 of the Clean Water Act and Subtitles C and D of the Resource Conservation and Recovery Act.

4. Bypass of Treatment Facilities

- a) Bypass is prohibited unless it is unavoidable to prevent loss of life, personal injury or severe property damage or no feasible alternatives exist.
- b) The Industrial User may allow bypass to occur which does not cause effluent limitations to be exceeded, but only if it is also for essential maintenance to assure efficient operation.
- c) Notification of bypass:
 - (1) Anticipated bypass. If the Industrial User knows in advance of the need for a bypass, written notice shall be submitted to the Director at least ten days prior to the anticipated date of bypass.
 - (2) Unanticipated bypass. The Industrial User shall provide oral notice of an unanticipated bypass that exceeds applicable Pretreatment Standards to the Director at (323) 342-6200 within 24 hours from the time the Industrial User becomes aware of the bypass. A written notice shall also be provided within 5 days of the time the Industrial User becomes aware of the bypass. The written notice shall contain the following:
 - (i) A description of the bypass including its cause and duration;
 - (ii) Whether the bypass has been corrected; and
 - (iii) The steps taken or to be taken to reduce, eliminate and prevent reoccurrence of bypassing.

D. Monitoring and Records**1. Flow Measurements**

If flow measurement is required by this permit, the appropriate flow measurement devices and methods consistent with approved scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharge. The devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a

maximum deviation of less than 5 percent from true discharge rates throughout the range of expected discharge volumes.

2. Monitoring Waiver from a Categorical Pretreatment Standard

The Industrial User subject to a Categorical Pretreatment Standard may seek a waiver from the Director to forego sampling of a pollutant regulated by a Categorical Pretreatment Standard if the Industrial User has demonstrated through sampling and other technical factors that the pollutant is neither present nor expected to be present in the discharge, or is present only at background levels from intake water and without any increase in the pollutant due to activities of the Industrial User. To qualify for the waiver, the Industrial User shall:

- a) Request for a monitoring waiver signed by an authorized or duly authorized representative of the Industrial User and include the following certification statement: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations";
- b) Provide data from at least one sampling of the facility's process wastewater prior to any treatment present at the facility that is representative of all wastewater from all processes; and
- c) Submit a new request for the waiver before the waiver can be granted for each subsequent individual wastewater discharge permit.

3. Inspection and Entry

The Industrial User shall allow the Director or an authorized representative, upon the presentation of credentials and other documents, entry to and inspection of the premises. The applicant, by accepting any permit issued pursuant to L.A.M.C. Section 64.30, does hereby consent and agree to the entry upon the premises, described in the permit, by Department personnel for the following purposes as required by this permit or L.A.M.C Section 64.30 or other applicable laws. The City shall be afforded access at all reasonable times:

- a) for the purposes of inspection, sampling, flow measurement, examination of records in the performance of other authorized duties;
- b) to set up on the Industrial User's property such devices as are necessary to conduct sampling inspections, compliance monitoring, flow measuring or metering operations;
- c) to inspect and copy any records, reports, test results or other information required to carry out the provisions of L.A.M.C. Section 64.30, the industrial wastewater permit, or other applicable laws; and
- d) to photograph any waste, waste container, vehicle, waste treatment process, discharge location, or violation discovered during an inspection.

The applicant, by accepting any permit issued, does hereby consent and agree to entry upon the premises as described herein. Any person violating this authority shall be guilty of a misdemeanor.

4. Retention of Records

- a) The Industrial User shall retain records of all monitoring information, including documentation associated with Best Management Practices and all calibration and maintenance records, all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report or application. This period may be extended by request of the City of Los Angeles at any time.

- b) All records that pertain to matters that are the subject of special orders or any other enforcement or litigation activities brought by the City of Los Angeles shall be retained and preserved by the Industrial User until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.

5. Record Contents

Records of sampling and analyses shall include the following:

- a) the date, exact place, time and methods of sampling or measurement, and sample preservation techniques or procedures;
- b) Who performed the sampling or measurements;
- c) The date(s) analyses were performed;
- d) Who performed the analyses;
- e) The analytical techniques or methods used; and
- f) The results of such analyses.

6. Falsifying Information

No person shall knowingly make any false statement, representation or certification in any application, record, report, plan or other document filed with the City of Los Angeles. In addition, no person shall tamper with or knowingly render inaccurate any monitoring device required under this permit.

The reports and other documents required to be submitted or maintained under this Industrial Wastewater Permit shall be subject to:

- a) The provisions of 18 U.S.C. Section 1001 relating to fraud and false statements;
- b) The provisions of Section 309 (c) (4) of the Clean Water Act (CWA), as amended, governing false statements, representation or certification; and
- c) The provisions of Section 309 (c) (6) of the Clean Water Act (CWA), as amended, regarding responsible corporate officers.

E. Additional Reporting Requirements

1. Notification of Planned Changes

The Industrial User shall immediately notify the Director in advance of any significant change to the Industrial User's operations or system which might alter the nature, quality, or volume of its wastewater including the listed or characteristic hazardous wastes for which the Industrial User had submitted initial notification under 40 CFR 403.12(p). The Director may require that a new Industrial Wastewater Permit application be filed and a new permit obtained before any planned changes take place.

2. Duty to Provide Information

The Industrial User shall furnish to the Director any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing or terminating this permit. The Industrial User shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

3. Notification of a Slug or Potential Slug Discharge

The Industrial User shall notify the Director immediately upon the occurrence of a slug discharge or any changes at its facility affecting the potential for a slug discharge of substance(s) prohibited by L.A.M.C.

Section 64.30 that may enter the public sewer. The Director shall be notified by telephone at (323) 342-6200. The notification of a slug discharge shall include location of discharge, date and time thereof, type of waste, including concentration and volume, and corrective action taken. The Industrial User's notification of accidental cases in accordance with this permit does not relieve it of other reporting requirements that arise under Local, State or Federal laws.

Within five (5) days following an accidental discharge, the Industrial User shall submit to the Director a detailed written report. The report shall contain the following:

- a) A description and cause of the slug or accidental discharge, the cause(s) thereof and the impact on the Industrial User's compliance status. The description should also include the location of discharge and the type, concentration and volume of waste.
- b) The duration of noncompliance, including exact dates and times of noncompliance, and if the noncompliance continues, the time by which compliance is reasonably expected to occur.
- c) All steps taken or to be taken to reduce, eliminate and prevent recurrence of such a slug discharge, accidental discharge or any other conditions of noncompliance.

4. Operating Upsets

Any Industrial User that experiences an upset in operations that places the Industrial User in a temporary state of noncompliance with the provisions of either this permit or with L.A.M.C. Section 64.30 shall notify the Director within 24 hours of becoming aware of the upset at (323) 342-6200. The notification shall include the location of discharge, type of material, concentration and volume, and corrective actions taken.

A written follow-up report of the upset shall be filed by the Industrial User with the Director within five (5) days. The report shall contain the following information:

- a) A description of the upset, the cause(s) thereof and the upset's impact on the Industrial User's compliance status;
- b) The duration of noncompliance, including exact dates and times of noncompliance, and if the noncompliance continues, the time by which compliance is reasonably expected to occur; and
- c) All steps taken or to be taken to reduce, eliminate and prevent recurrence of such an upset or other conditions of noncompliance.

The report must also demonstrate that the treatment facility was being operated in a prudent and workmanlike manner.

A documented and verified operating upset shall be an affirmative defense to any enforcement action brought against the Industrial User for violations attributable to the upset event.

5. Slug Discharge Control Plan

Upon request by the LA Sanitation and Environment, the Industrial User is required to submit a Slug Discharge Control Plan to address how the Industrial User will respond to spills, bypass, and any accidental discharges that could violate any permit limits or conditions or impact the City sewer system. The plan shall contain detailed procedures to be followed by the Industrial User in the event a slug discharge occurs. The Slug Discharge Control Plan must contain, at a minimum, the following:

- a) Description of sewer discharge practices, including non-routine batch discharges;
- b) Description of stored chemicals including type and characteristic, volume, and chemical hazard classification;
- c) Procedures for promptly notifying the City of slug discharges, including any discharges that would violate a prohibition under 40 CFR 403.5(b), with procedures for follow-up written notification within five days;

- d) Any necessary procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operation, control of plant site run-off and worker training;
- e) Any necessary measures for building any containment structures or equipment;
- f) Any necessary measures for controlling toxic organics (including solvents); and/or
- g) Measures and equipment for emergency response.

6. Notification of Hazardous Waste Discharged into POTW

An Industrial User not exempt from the requirements under 40 CFR 403.12(p) shall notify the City of Los Angeles, LA Sanitation and Environment; the EPA Region 9, Hazardous Waste Management Division; and the California Environmental Protection Agency, Department of Toxic Substances Control in writing of any discharge into the City of Los Angeles sewer system of a substance, which, if otherwise disposed of, would be a hazardous waste under 40 CFR part 261. The written notification shall be submitted to the City of Los Angeles LA Sanitation and Environment, the EPA Region 9 and the California Environmental Protection Agency.

7. Signatory Requirements

All applications, reports or information submitted by the Industrial User to the Director must contain the following certification statement and be signed by an authorized representative indicated below:

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

An authorized representative shall mean the following:

- (a) a president, secretary, treasurer, or vice-president in charge of a principal business function, or any other person who performs similar policy or decision-making functions, if the Industrial User is a corporation;
- (b) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to (1) make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiate and direct other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; (2) ensure that the necessary systems are established or actions taken to gather complete and accurate information for control mechanism requirements; and (3) sign documents in accordance with corporate procedures;
- (c) a general partner or proprietor if the Industrial User is a partnership or proprietorship, respectively;
- (d) a principal executive officer or director having responsibility for the overall operation of the discharging facility or a ranking elected official if the Industrial User is a governmental entity, charitable organization or other such unincorporated entity; or
- (e) a representative authorized in writing by any individual designated above, if the authorization is submitted to the Director and specifies an individual or a position having responsibility for the overall operation of the facility. This includes the position of plant manager, a position of equivalent responsibility, or an individual having overall responsibility for environmental matters for the company. If an authorization under Paragraph (e) is no longer accurate because a different individual or position has the responsibility for the overall operation of the facility, or overall responsibility for environmental matters of the company, a new authorization satisfying the requirements of Paragraph (e) of this Permit must be submitted to the Director prior to, or together with, any reports to be signed by an authorized representative.

8. Annual Publication of Significant Noncompliance

The Industrial User in noncompliance with applicable Federal Pretreatment Standards, Best Management Practices or other Pretreatment Requirements during the twelve (12) previous months may lead to an enforcement action resulting in publication of its name in a newspaper(s) of general circulation that provides meaningful public notice within the jurisdiction(s) served by the POTW. For purposes of this provision, significant noncompliance is defined under 40 CFR 403.8 (f)(2)(viii) and L.A.M.C. Section 64.30.E.8.

9. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the Industrial User from civil and/or criminal penalties for noncompliance under L.A.M.C. Section 64.30 or State or Federal laws and regulations.

10. Penalties for Violations of Permit Conditions

The L.A.M.C. Section 64.30 provides that any person who violates a permit condition is subject to a civil penalty in the maximum sum provided by law for each day in which such violation occurs. Any person who willfully or negligently violates permit conditions is subject to criminal penalties of up to \$1000.00 per violation per day and/or by imprisonment in the County Jail for a period of not more than six (6) months. The Industrial User may also be subject to sanctions under State and/or Federal law.

11. Liability For Costs Incurred From Unlawful Discharge

Whenever any Industrial User introduces or causes to be introduced wastewater in violation of this permit or the L.A.M.C. and such discharge, either singly or by interaction with other discharges, results in damage to or is otherwise detrimental to or adversely affects the P.O.T.W., the storm drain system, or any Waters of the State, said Industrial User shall be liable to the City for reasonable costs necessary to correct that discharge, detriment or adverse effect, including, but not limited to labor, material, inspection, transportation, overhead, and incidental expenses associated with the corrective action. The Industrial User shall additionally be liable to the City for the reasonable costs of investigation by the City arising from the unlawful discharge.

12. Civil Liability

Violation of any pretreatment standards or requirements or any term or condition or applicable compliance schedule of this permit, the Industrial User shall be civilly liable to the City in a sum of not to exceed twenty-five thousand dollars (\$25,000) a day for each violation.

13. Resource Conservation Recovery Act Notification and California Hazardous Waste Control Law

It is the responsibility of the Industrial User to ensure that the operations performed at their site comply with federal hazardous waste management regulations under subtitles C & D of the Resource Conservation and Recovery Act (RCRA) and California hazardous waste management regulations under the Hazardous Waste Control Law (Chap. 6.5, HSC, Sec. 25100 et. seq.) and California Code of Regulations (CCR), Titles 8 and 22. For information on federal and state hazardous waste regulations, contact the California Environmental Protection Agency, Department of Toxic Substances Control.

F. Definitions

1. Best Management Practices (BMP) - Activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce pollutants in discharges. BMP also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage.
2. Bi-Monthly - Once every other month.
3. Bypass - The intentional diversion of wastestreams from any portion of an Industrial User's treatment facility.

4. Categorical Pretreatment Standards - Limitations on pollutant discharges to POTWs, promulgated by EPA in accordance with Section 307 of the Clean Water Act, that apply to specified process wastewaters of particular industrial categories.
5. Commercial Establishment – A private establishment such as a restaurant, hotel, laundry, store, filling station, or recreational facility. A nonprofit private or government entity such as a church, school, hospital, military facility, correctional institution recreational facility or a facility owned or operated by a charitable organization is considered a commercial establishment.
6. Commingled Load – A load of septage which includes septage generated both within and outside the City's boundaries.
7. Composite Sample - A sample that is collected over time, formed either by continuous sampling or by mixing discrete samples. The sample may be composited either as a flow proportional composite sample (collected either as a constant sample volume at time intervals proportional to stream flow or collected by increasing the volume of each aliquot as the flow increases while maintaining a constant time interval between the aliquot) or as a time composite sample (composed of discrete sample aliquot collected in one container at constant time intervals providing representative samples irrespective of stream flow).
8. Cooling Water
 - a) Uncontaminated - Water used only for cooling purposes which has no direct contact with any raw material, intermediate or final product and which does not contain a level of contaminants detectably higher than that of the intake water.
 - b) Contaminated - Water used only for cooling purposes which may become contaminated either through the use of water treatment chemicals used for corrosion inhibitors or biocides or by direct contact with process materials and/or wastewater.
9. Daily Maximum - The maximum allowable discharge of a pollutant during a calendar day. Where daily maximum limitations are expressed in units of mass, the daily discharge is the total mass discharged over the course of the day. Where daily maximum limitations are expressed in terms of a concentration, the daily discharge is the arithmetic average measurement of the pollutant concentration derived from all measurements taken that day.
10. Director - The Director of the LA Sanitation and Environment of the Department of Public Works of the City of Los Angeles or the duly authorized representative thereof.
11. Domestic Septage – The liquid or solid material removed from a private sewage disposal system (PSDS), portable toilet or other holding device that receives only domestic sewage.
12. Domestic Wastewater (Domestic Sewage) – Sanitary wastewater and wastewater generated from household type operations.
13. Establishment - An economic unit, generally at a single physical location, where business is conducted or where services or industrial operations are performed.
14. Facility - All buildings, equipment, structures, and other stationary items which are located on a single site or on contiguous or adjacent sites and which are owned or operated by the same person (or by any person which controls, is controlled by, or under common control with such person) and is authorized by the City of Los Angeles to discharge industrial wastewater to the POTW. A facility may contain more than one establishment.
15. Food Service Establishment - A facility engaged in preparing food for consumption by the public such as, but not limited to, a restaurant, bakery, commercial kitchen, caterer, hotel, school, hospital, prison, correctional facility, or care institution.
16. Four (4) - Day Average – The average of daily values for four consecutive monitoring days.

17. Grab Sample - An individual sample collected in less than 15 minutes, without regard for flow.
18. Gravity Grease Interceptor (GGI) - An approved device with a minimum total volume of 300 gallons that is specifically designed to separate, trap, and hold nonpetroleum fats, oil, and grease (FOG) from an industrial wastewater discharge, and which shall be remotely located from where food is handled, and is identified by the following: volume, a minimum retention time of 30 minutes, baffle(s), a minimum of two compartments, and gravity separation.
19. Hydromechanical Grease Interceptor (HGI) - An approved device that is installed in an industrial wastewater drainage system to separate, trap, and hold nonpetroleum fats, oil, and grease (FOG) from a wastewater discharge and is identified by flow rate, retention time, and separation efficiency. HGI design incorporates, in combination or separately, air entrainment, hydromechanical separation, interior baffling, and internal barriers.
20. Industrial User - A person that has been authorized to discharge industrial wastewater into the City of Los Angeles POTW.
21. Industrial Wastewater - Liquid and any water - carried waste other than domestic sewage. Wastewater generated from household type operations, including, but not limited to dishwashing, laundry, and car washing, performed at commercial establishments for or to support commercial purposes is considered industrial wastewater.
22. Instantaneous Maximum - The allowable maximum concentration determined from the analysis of any discrete or composited sample collected, independent of the industrial flow rate and the duration of the sampling event.
23. Interference - A discharge which alone or in conjunction with a discharge or discharges from other sources both:
 - a) Inhibits or disrupts the POTW, its treatment processes or operations or its sludge processes, use or disposal; and
 - b) Causes a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or prevents the use of disposal of sewage sludge. The following statutory provisions and regulations or permits issued thereunder apply (or more stringent State or Local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA) and including State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act and the Marine Protection, Research and Sanctuaries Act.
24. Monthly Average - The maximum allowable value for the average of all observations obtained during one calendar month. Compliance with the monthly average discharge limit is required regardless of the number of samples analyzed and averaged. Therefore, if only one sample is taken during the calendar month, results of the one analysis will be used to determine compliance with the monthly average.
25. Non-Domestic Septage - The liquid or solid material removed from a private sewage disposal system (PSDS) or other sanitation holding device that receives industrial wastewater or a combination of domestic and industrial wastewater.
26. Pass Through - A discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, cause a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).
27. Person - Any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity or any other legal entity, or their legal representatives, agents or assigns. The masculine gender shall include the feminine, the singular shall include the plural where indicated by the context.

28. Portable Toilet – Any portable or permanently installed sanitation apparatus or system which includes a tank for toilet waste retention. Portable Toilet includes sanitation holding devices from airplanes, trains, boats with type III marine sanitation devices, buses, movie dressing room trailers, recreational vehicles, or other similar transport vehicles.
29. Private Septage Disposal Facility (PSDF) – A disposal site, other than a City designated discharge location, with a direct connection to the City sewer, which accommodates the discharge of hauled septage.
30. Publicly Owned Treatment Works (POTW) - A treatment works as defined by Section 212 of the Clean Water Act which is owned by the State or municipality. This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW treatment plant.
31. Resource Conservation and Recovery Act (RCRA) - A Federal statute regulating the management of hazardous waste from its generation through ultimate disposal. The Act contains requirements for waste generators, transporters and owners and operators of treatment, storage and disposal facilities.
32. Sanitary Wastewater – Wastewater of human origin derived from toilets, urinals, showers, baths and restroom sinks.
33. Septage – The liquid or solid material removed from a private sewage disposal system (PSDS), portable toilet or other sanitation holding device that receives wastewater.
34. Septage Hauler – A person or an owner/operator of a business that holds Septage Disposal Permit(s) issued by the Director to discharge septage to the City's P.O.T.W.
35. Slug Discharge - Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge, which has a reasonable potential to cause Interference or Pass Through, or in any other way violate the POTW's regulations, local limits or permit conditions.
36. Total Toxic Organics (TTO) - The sum of the masses or concentrations greater than 0.01 mg/l of the specific toxic organic compounds regulated by specific categorical pretreatment regulations which is found in the discharge at specific quantifiable concentrations.
37. Type III Marine Sanitation Device – A device that is designed to prevent the overboard discharge of treated or untreated domestic sewage.
38. Upset - An exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Industrial User, excluding such factors as operational error, improperly designed or inadequate treatment facilities or improper operation and maintenance or lack thereof.
39. Wastewater - Liquid and water - carried industrial and/or domestic wastes and sewage from facilities including, but not limited to, dwellings, commercial buildings, industrial facilities, agricultural activities, hospitals, medical facilities and other institutions, together with other wastes which may be present, whether treated or untreated, which enter the POTW.

APPENDIX A

Fact Sheet

FACT SHEET
Renewal Date: 09/01/2023

A. INDUSTRIAL USER INFORMATION

SUNSHINE CANYON LANDFILL
14747 San Fernando Road
Sylmar, CA 91342

IU128862
W-535428

Paul Koster , Environmental Manager
(818) 362-2258

B. DESCRIPTION OF FACILITY OPERATIONS

Sunshine Canyon Landfill is primarily engaged in receiving and processing municipal waste (SIC 4953). The landfill generates various liquid streams at the site including mildly contaminated seep water, leachate, gas system condensate, and gas well liquids. The seep water consists of three different streams which include cutoff wall water, mildly contaminated seep water impacted by the landfill, and subdrain water.

The different liquid streams generated at the landfill are presented below:

1. **Gas Well Liquids:** Gas well liquids are liquids pumped from the gas extraction wells in order to allow for removal of landfill gas (LFG) from the landfill. The gas condensate is collected at the low points in the gas collection system throughout the site and at the flare stations. The gas well liquids are stored in frac tank storage area and are pumped to the sewer lift station for direct sewer discharge.

2. **Condensate:** Gas condensate is produced due to the temperature drop that takes place as the LFG is conveyed from the gas extraction wells to the flare stations for combustion. Condensate is pumped to the frac tank storage area and then pumped to the sewer lift station for direct sewer discharge.

3. **Seep Water:** Spring (Seep) and underdrain water emerges and is collected throughout the landfill area. Seep water contains trace levels of VOCs. Seep Water sources may be treated in the on-site water reuse treatment systems or may be directly discharged. There are three types of Seep Water, each treated separately, as described below.

- **City Seep Water:** collected from gravity drains under the old city portion of the landfill.
- **Cutoff Wall Water:** subsurface water (groundwater) pumped from area near the front entrance of the site. This stream is similar in characteristics to the Seep Water.
- **Subdrain Water:** spring water collected underneath the County landfill, and conveyed by gravity to the front entrance area of the landfill.

4. **Leachate:** The leachate is collected at the bottom of the lined disposal areas. Extraction pumps convey leachate streams to the treatment systems for on-site water reuse or directly to the direct sewer discharge.

Operation at the facility began in 1958. Sunshine Canyon Landfill operates six days per week and employs 60 personnel.

C. SAMPLE POINT DESCRIPTION/FACILITY FLOW INFORMATION

INDUSTRIAL WASTEWATER PERMIT	SAMPLE POINT	FLOW PER OPERATIONAL DAY (GPD)		DESCRIPTION
		TOTAL	PROCESS	
W-535428	01	300,000	300,00	Secured Sampling Facility is located at the Magnetic Flow meter Vault.
TOTAL		300,00	300,00	-----

D. PROCESS UNIT OPERATION/FLOW INFORMATION

PERMIT NUMBER	SAMPLE POINT	PROCESS UNIT OPERATION CODE	PROCESS DESCRIPTION
W-535428	01	LWDB000	Landfill Leachate Collection

E. DILUTION/AUXILIARY OPERATION/FLOW INFORMATION

Sunshine Canyon Landfill does not generate any dilution wastestream that combines with a process wastestream prior to Sample Point 01.

F. FLOW MEASURING DEVICE

Sunshine Canyon Landfill has installed a flow measuring device to monitor the wastewater discharge to the City Sewer.

G. PRETREATMENT UNIT OPERATION(S)

Process wastewater generated from Gas Well Liquids, Condensate, Seep Water and Leachate flows through an on-site treatment system. Site liquids (deep leachate and gas condensate) are sent to the Tank Farm consists of sixteen (16) rectangular (frac) tanks, each with a capacity of 20,000 gallons. Condensate from the Trans. Line currently flows into Tank 1 and 2 while influent from the sumps, which is a mixture of condensate and leachate, flows into Tanks 3 & 4. Tanks 5 & 6 receive influent from deep leachate while liquids from lysimeter go into Tank 9. Some of the tanks are connected to one another by secondary piping units allowing transfer of liquids between tanks when needed (for example Tanks 6 & 7 and Tanks 2, 11 & 12). Each of the 16 tanks can be isolated via existing isolation butterfly valves.

Site liquids are then transferred into a lift station prior to discharge via booster pumps. Operation of the booster pumps are dictated by the liquid levels present in the tanks. Chemical treatment of the site liquids from the tanks to reduce dissolved sulfides (DS) a hydrogen peroxide (H_2O_2) is added in pipe downgradient of Tanks 1-6. Chemical addition of H_2O_2 is employed using a chemical feed system that consists of two metering pumps that draws H_2O_2 solution from H_2O_2 totes. The chemical feed flowrate can be manually adjusted depending on site conditions.

Treatment also includes a filtration system consisting of Basket strainers for additional large solids particles removal from the leachate. Baskets are cleaned periodically.

An ORP probe (ORP1) is installed in-pipe downgradient of Tanks 1-11 to monitor the Oxidation-Reduction Potential (ORP) of the combined site liquids coming from those tanks. A second H_2O_2 dosing point located downgradient of the leachate booster pumps. Subsequently, a second ORP probe (ORP2) is also installed after the second dosing point prior to the discharge lift station to ensure that the ORP remains within -5 mv to +5 mv range and that sufficient H_2O_2 has been added to achieve minimal to below detection effluent sulfide concentration. A third H_2O_2 injection point can be found on the effluent magnetic flowmeter piping unit downgradient of the lift station. Additional H_2O_2 can be added to the discharge to counter any ORP drop that may arise from any production of DS due to extended storage time/retention time in the piping units prior to discharge. An ORP3 probe is also located in the discharge line to measure the final ORP of effluent discharge. Underdrain water, do not undergo any pre-treatment combined with the treated effluent prior to discharging to the City Sewer through Sample Point 01.

INDUSTRIAL WASTEWATER PERMIT W-535428

PRETREATMENT UNIT OPERATION CODE	PRETREATMENT UNIT OPERATION DESCRIPTION
CX0010	CHEMICAL OXIDATION - DISSOLVED SULFIDE OXIDATION

H. POLLUTION PREVENTION

SUNSHINE CANYON LANDFILL has implemented the following pollution prevention practice(s).

POLLUTION PREVENTION PRACTICE CODE	POLLUTION PREVENTION PRACTICE DESCRIPTION
OPM60	Employee training
OPM70	Housekeeping

I. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

See permit, PART 2 - DISCHARGE LIMITATIONS.
See permit, PART 3 - MONITORING REQUIREMENTS

J. REPORTING REQUIREMENTS

See permit, PART 4 - REPORTING REQUIREMENTS.

K. SPECIAL CONDITIONS

See permit, PART 5 - SPECIAL CONDITIONS.

L. STANDARD CONDITIONS

See permit, PART 6 - STANDARD CONDITIONS.

M. RATIONALE FOR EFFLUENT LIMITATIONS

Sunshine Canyon Landfill does not perform any of the operations covered under the Federal Pretreatment Categorical Standards. However, the Federal definition of Significant Industrial User applies to this facility because the process wastewater generated and discharged is greater than 25,000 gpd. As a result, Sunshine Canyon Landfill is required to comply with 40 CFR 403.12.

Since the total process wastewater from this facility is greater than 25,000 gallons per day, this facility is classified as a Significant Industrial User.

Sample Point 01 is the last point of discharge to the sewer system and the Local Limit applies at this point. One set of limits apply to the discharges from this facility to the City of Los Angeles sewer system: the Local Limits. Therefore, Sunshine Canyon Landfill is required to self-monitor for Local Limits semi-annually.

Sunshine Canyon Landfill has chosen to measure the average daily flow to sewer as stated in 40CFR 403.12. (e)(1).

Prepared By: Jocelyn Carrillo

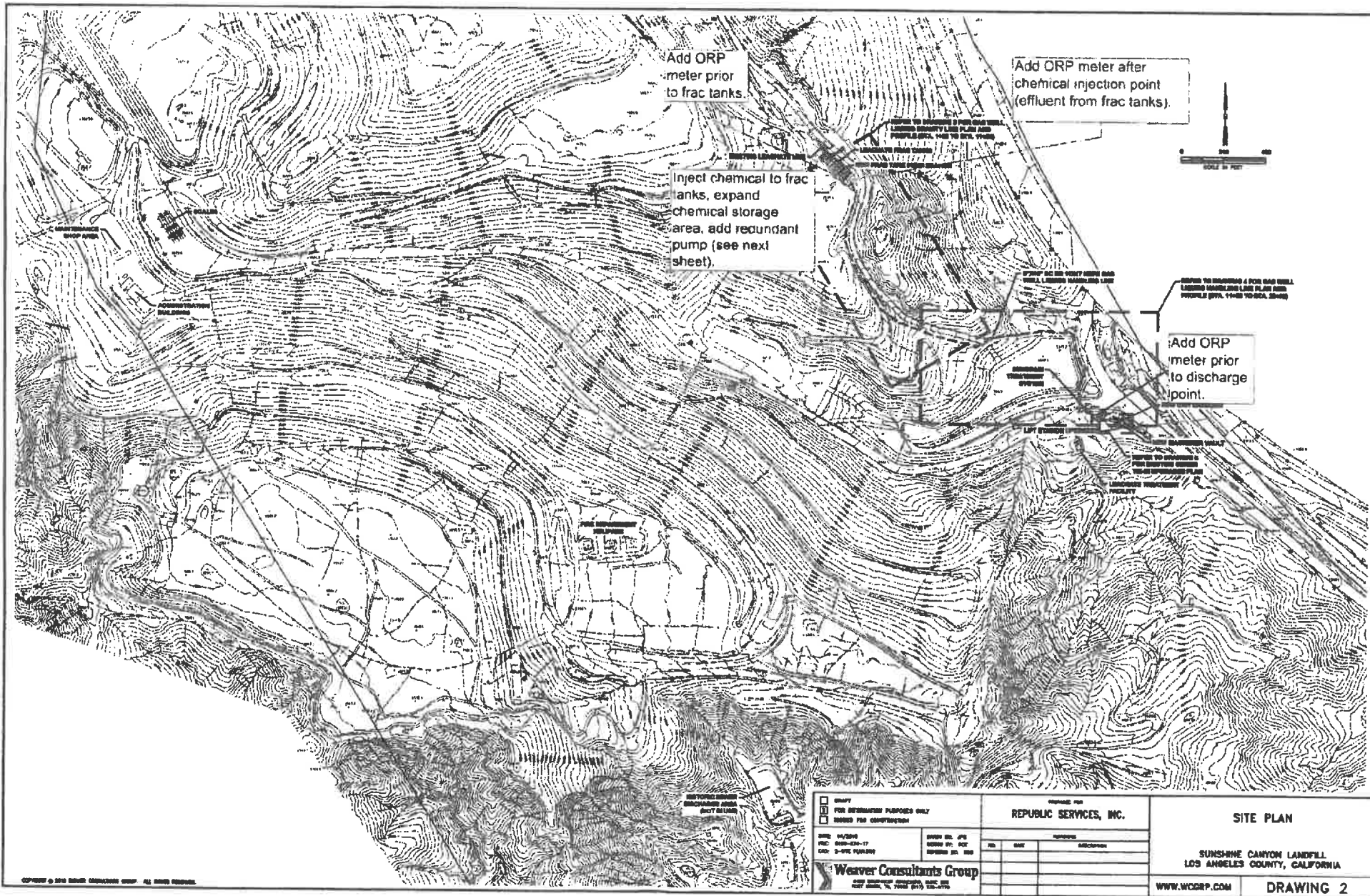
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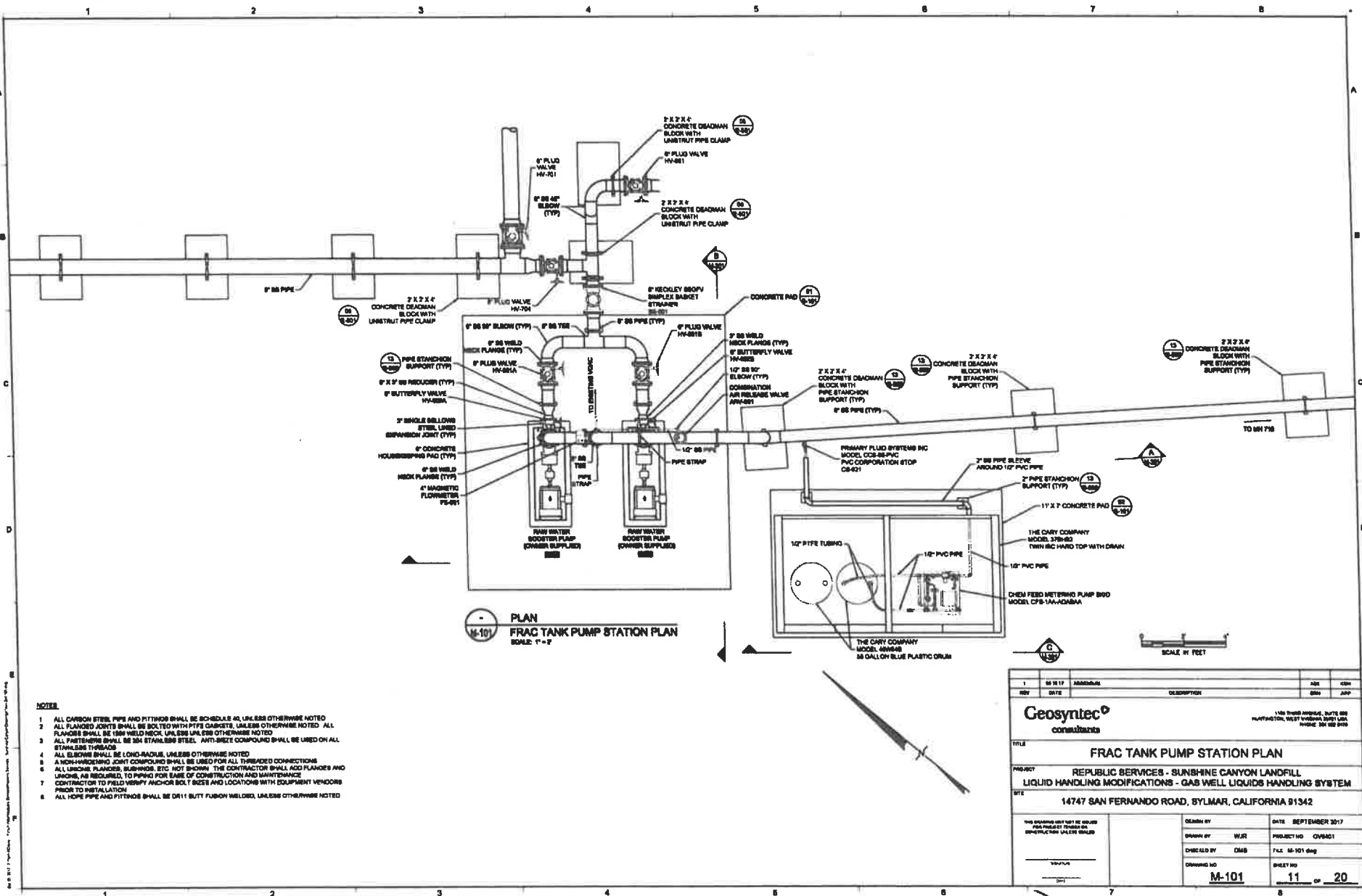
Reviewed By: Nataly Dakak
IU128862.fst/jnc

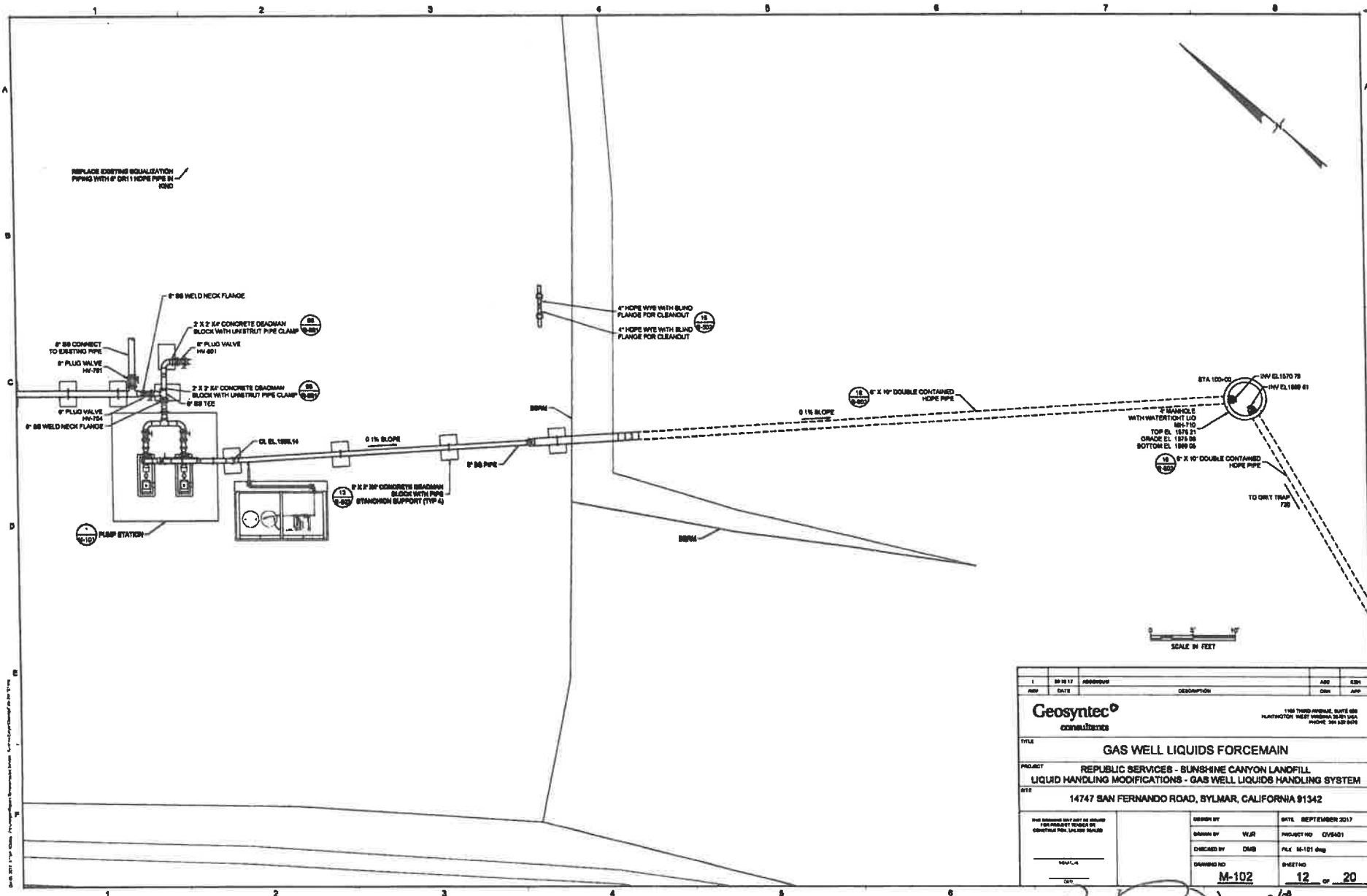
Date: 08/22/2023

APPENDIX B

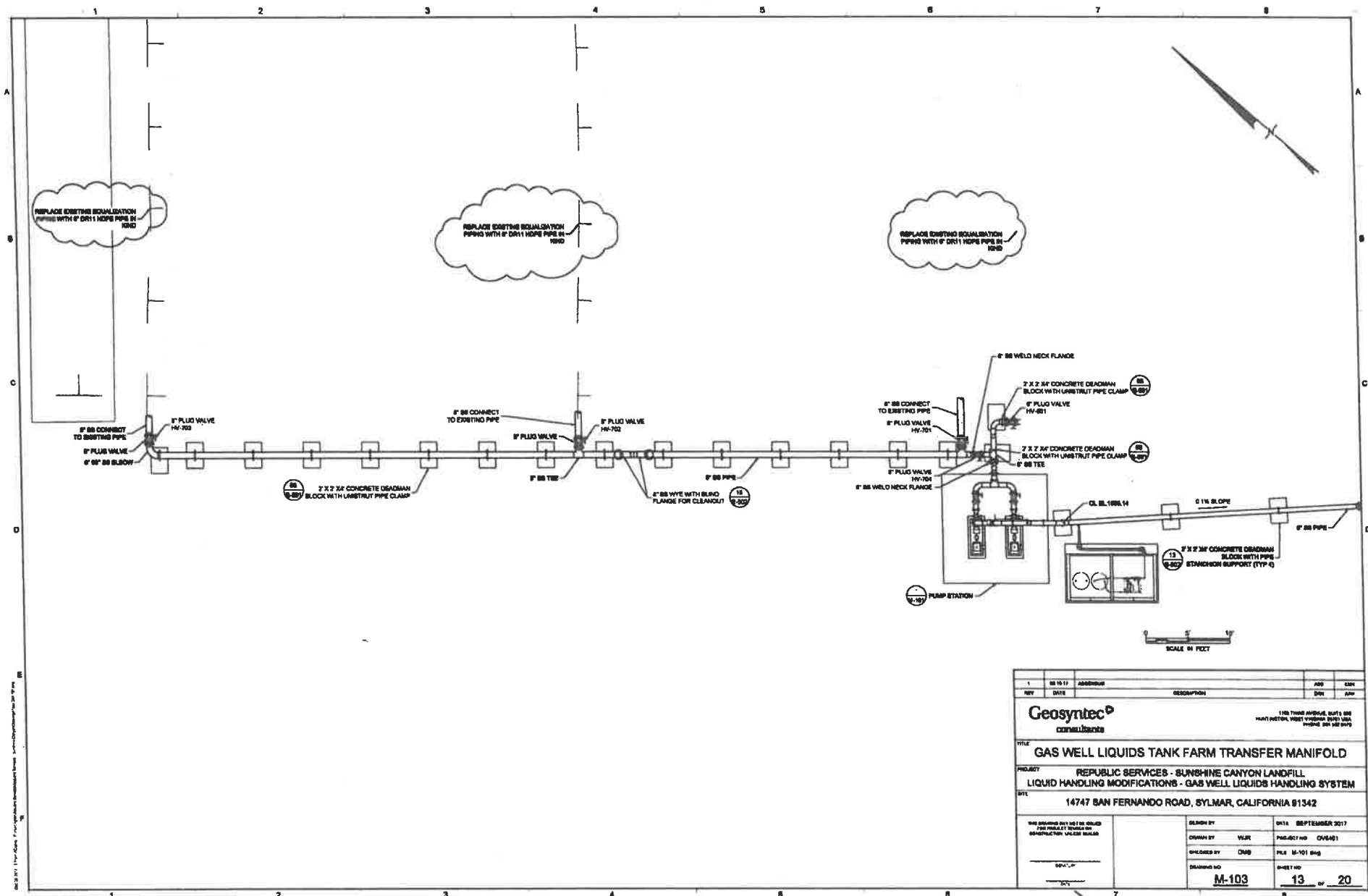
Attachments





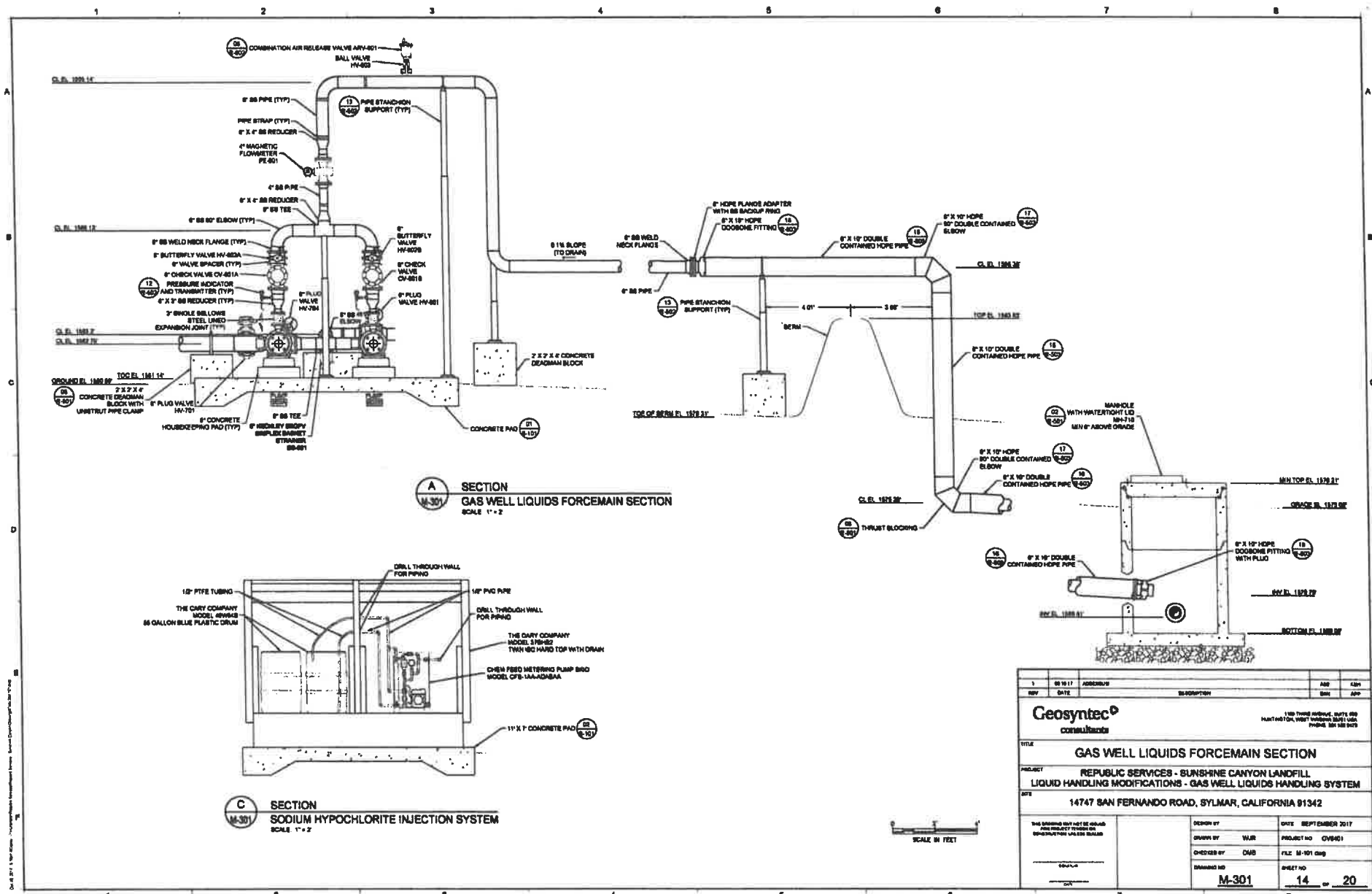


1	09 10 17	ADDENDUM		ADD	CSH
REV	DATE	DESCRIPTION		DRN	APP
Geosyntec <small>CONSULTANTS</small>					
TITLE GAS WELL LIQUIDS FORCEMAIN					
PROJECT REPUBLIC SERVICES - SUNSHINE CANYON LANDFILL LIQUID HANDLING MODIFICATIONS - GAS WELL LIQUIDS HANDLING SYSTEM					
SITE 14747 SAN FERNANDO ROAD, SYLMAR, CALIFORNIA 91342					
THIS DRAWING IS THE PROPERTY OF GEOSYNTEC. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREON. NO PART OF THIS DRAWING IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF GEOSYNTEC.			DESIGN BY: DATE: SEPTEMBER 2017 DRAWN BY: WJR PROJECT NO: CIV5401 CHECKED BY: DMB FILE: M-101.dwg DRAWING NO: M-102 SHEET NO: 12 OF 20		



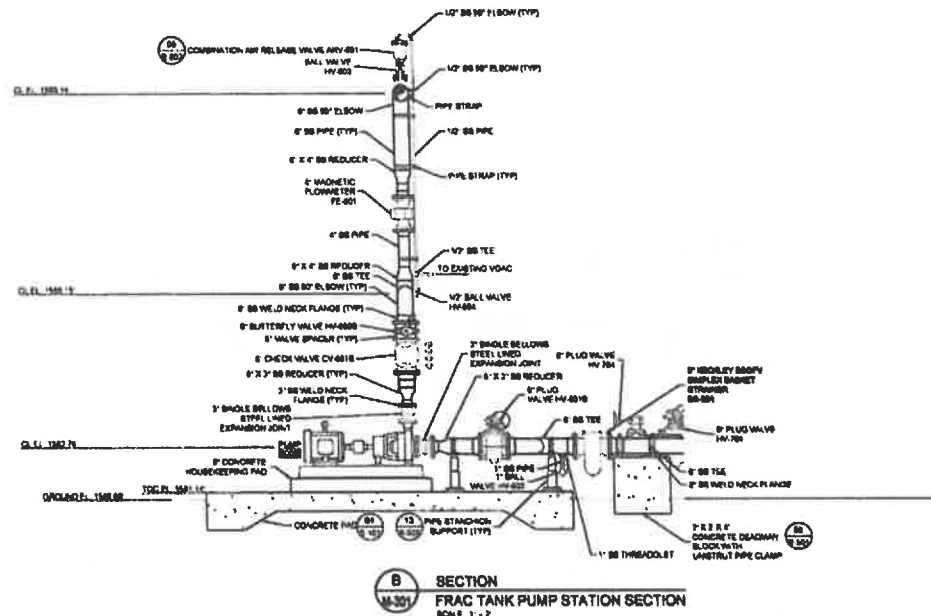
REV	DATE	DESCRIPTION	APP	CHK
1	08/15/17	ADDITION		
Geosyntec CONSULTANTS				
1100 THIRD AVENUE, SUITE 500 HOUSTON, TEXAS 77002-1000 PHONE: 281.768.0400				
TITLE GAS WELL LIQUIDS TANK FARM TRANSFER MANIFOLD				
PROJECT REPUBLIC SERVICES - SUNSHINE CANYON LANDFILL LIQUID HANDLING MODIFICATIONS - GAS WELL LIQUIDS HANDLING SYSTEM				
SITE 14747 SAN FERNANDO ROAD, SYLMAR, CALIFORNIA 91342				
THIS DRAWING HAS BEEN REVIEWED FOR PROJECT REQUIREMENTS AND CONSTRUCTION VALUE ADDED		DESIGNED BY	DATE	SEPTEMBER 2017
DRAWN BY		YLR	PROJECT NO.	006401
CHECKED BY		CHB	FILE	M-101 SHG
DRAWING NO.		M-103	SHEET NO.	13 OF 20

ROD V. JH
7/14/23



1	08/10/17	ADDENDUM		ADD	ADD
REV	DATE	DESCRIPTION		BY	APP
Geosyntec consultants					
TITLE GAS WELL LIQUIDS FORCEMAIN SECTION					
PROJECT REPUBLIC SERVICES - SUNSHINE CANYON LANDFILL LIQUID HANDLING MODIFICATIONS - GAS WELL LIQUIDS HANDLING SYSTEM					
DATE 14747 SAN FERNANDO ROAD, SYLMAR, CALIFORNIA 91342					
THE DRAWING MAY NOT BE COPIED OR REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF GEOSYNTEC			DESIGNED BY DATE CHECKED BY DATE DRAWN BY DATE	DATE SEPTEMBER 2017 PROJECT NO CWS-101 FILE M-101.dwg SHEET NO 14 OF 20	SCALE 1" = 2'

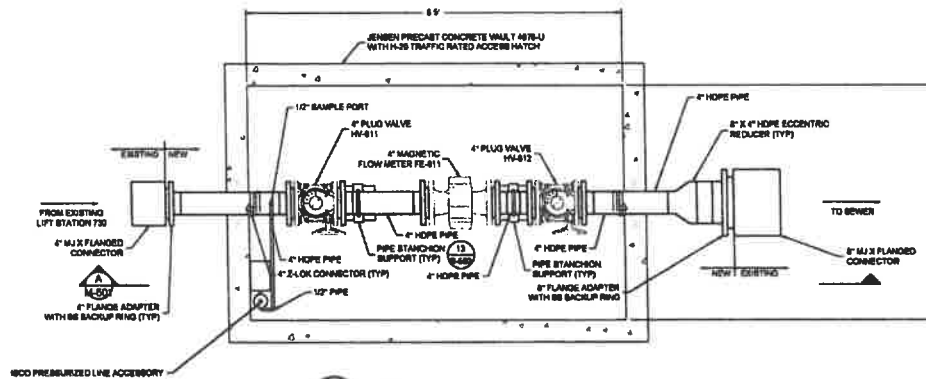
ROCK
7/4/23



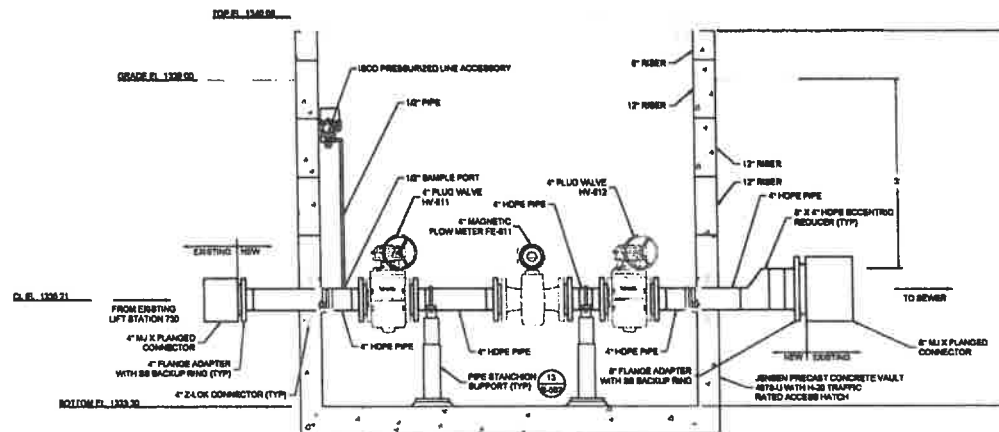
SCALE IN FEET

1	09/13/17	APPROVED	DATE	BY	DATE	BY
Geosyntec [®]			CONSULTANTS			
PROJECT: FRAC TANK PUMP STATION SECTION						
SUBJECT: REPUBLIC SERVICES - SUNSHINE CANYON LANDFILL						
DESCRIPTION: LIQUID HANDLING MODIFICATIONS - GAS WELL LIQUIDS HANDLING SYSTEM						
LOCATION: 14747 SAN FERNANDO ROAD, SYLMAR, CALIFORNIA 91342						
DRAWN BY: WJR			CHECKED BY: QMS		DATE: SEPTEMBER 2017	
DESIGNED BY: QMS			PROJECT NO: 015451		SHEET NO: 015451-001	
DRAWING NO: M-302			SHEET NO: 15		OF 20	

Rodolfo
 7/14/23



01 DETAIL
M-501
MAGNETIC FLOW METER VAULT
SCALE 1" = 1'



A SECTION
M-501
MAGNETIC FLOW METER VAULT
SCALE 1" = 1'



1	00 10 17	ADDENDUM		ADD	DATE
REV	DATE	DESCRIPTION		DATE	APP
Geosyntec consultants					
TITLE MAGMETER VAULT SECTION DETAIL					
PROJECT REPUBLIC SERVICES - SUNSHINE CANYON LANDFILL LIQUID HANDLING MODIFICATIONS - GAS WELL LIQUIDS HANDLING SYSTEM					
14747 SAN FERNANDO ROAD, SYLMAR, CALIFORNIA 91342					
<small>THIS DRAWING MAY NOT BE USED FOR PROJECT PURPOSES OR CONSTRUCTION UNLESS ORDERED</small>					
DESIGN BY WLR		DATE SEPTEMBER 2017		PROJECT NO. 040401	
CHECKED BY DMS		FILE W-101.dwg		SHEET NO. 18 OF 20	
DRAWING NO. M-501					

ROD V
7/14/23



**SEWER FACILITIES CHARGE (SFC)
BONDED AND SPECIAL SEWER CONNECTION CERTIFICATE**



City of Los Angeles
Department of Public Works
Bureau of Engineering

JOB ADDRESS: 14747 N SAN FERNANDO ROAD
Applicant Name: REPUBLIC SERVICES, INC
Address: 18500 N ALLIED WAY
City: PHOENIX State: AZ Zip Code: 85054
Phone No.: 818.382.2151

Date Issued: 05/24/2017
Engineering District: Valley
Issued By: Lee Guilbeaux, VALLEY DISTRICT
Tract No.: TR 10422
Lot No.: 119
APN: 2601011012
Previous Certificate
Issued: 2014811132 2015810613
Sewer Map No. 225-135-2,228-133-4,228-133-2
Sewer Permit No.: S2014810129
Remarks: SUNSHINE CANYON LANDFILL
INDUSTRIAL WASTE PERMIT W-535428

SEWER FACILITIES CHARGE CREDIT FLOW AFTER JULY 1, 1994

ID	FACILITY DESCRIPTION	RATE	UNIT	QUANTITY	AMOUNT
				Subtotal SFC Credited = \$0.00	

ID	FACILITY DESCRIPTION	RATE	UNIT	QUANTITY	AMOUNT
159708	INDUSTRIAL DISCHARGE	386.00	GPD	182,000.00	\$702,520.00
				Subtotal SFC Fee = \$702,520.00	

Total SFC Amount Due = \$702,520.00 - \$0.00 = \$702,520.00

BONDED SEWER FEES:

Bonded Sewer Fee = \$74.00 x = \$0.00
Bonded Lateral Fee = \$84.00 x = \$0.00
7% Surcharge for Bonded Lateral Fee = \$0.00
Total Bonded Amount Due = \$0.00

X _____ Date: _____

The following Sewerage Facilities Charges have been paid for the above described property by the above signed in behalf of the owner and succeeding owners in accordance with Sections 64.11.2, 64.11.3, 64.16.1, of the I. A. M. C..

CERTIFICATE NO.: C-2017810921

The following Sewer Fees (SPECIAL FEE)(BONDED) House Connection Sewer in accordance with Section 64.15 (B)/64.18 have been paid for (all) (a portion) of the property described above by the above signed in behalf of the owner and succeeding owners.

CERTIFICATE NO.: D-

Appendix B: Attachment 3 of 6 Page 1 of 1

DBA: SUNSHINE CANYON LANDFILL IU 128862

Permit(s) W- 535428

City of Los Angeles
Bureau of Engineering

Sewer Capacity Availability Request (SCAR)

To: Bureau of Sanitation

The following request is submitted to you on behalf of the applicant requesting to connect to the public sewer system. Please verify that the capacity exists at the requested location for the proposed developments shown below. The results are good for 180 days from the date the sewer capacity approval from the Bureau of Sanitation.

Job Address:	14747 SAN FERNANDO RD	Sanitation Scar ID:	60-3563-0317
Date Submitted	03/10/2017	Request Will Serve Letter?	No
BOE District:	Valley District		
Applicant:	GEO-LOGIC ASSOCIATES, INC		
Address:	2777 E GUASTI RD STE 1	City :	ONTARIO
State:	CA	Zip:	91761
Phone:	530-632-1215	Fax:	
Email:	CBARRETT@GEO-LOGIC.COM	BPA No.	14042-20000-05291
S-Map:	350	Wye Map:	228-137-3

SIMM Map - Maintenance Hole Locations

No.	Street Name	U/S MH	D/S MH	Diam. (In)	Approved Flow %	Notes
1	SAN FERNANDO RD	35001001	35001002	18	100.00	

Proposed Facility Description

No.	Proposed Use Description	Sewage Generation (GPD)	Unit	Qty	GPD
1	DEWATERING	1	GPD	300,000	300,000
Proposed Total Flow (gpd):					300,000

Remarks 1] Approved for the maximum allowable capacity of 300,000 GPD.(208.33 gpm). 2] Maximum allowable flow rate will be 250 gpm, not exceeding 300,000 gallons per day. 3] IWP is required.

Note: Results are good for 180 days from the date of approval by the Bureau of Sanitation

Date Processed: 03/13/2017

Expires On:

Processed by:

Bureau of Sanitation
Phone: 323-342-6207
Sanitation Status: SAN Review Completed
Reviewed by: Ricardo Avendano
on 03/13/2017

Submitted by:

IRENE CHIA
Bureau of Engineering

Phone:

Fees Collected

Yes

SCAR FEE (W:37 / QC:707) \$2,568.50

Date Collected

03/10/2017

SCAR Status:

SAN Review Completed

Appendix B: Attachment 4 of 6 Page 1 of 1

DBA: SUNSHINE CANYON LANDFILL

IU 128862

Permit(s) W- 535428



Wastewater Engineering Services Division
Bureau of Sanitation
City of Los Angeles



Thomas Bros Map Data reproduced with permission granted by THOMAS BROS MAP

Figure 1
14747 SAN FERNANDO RD.
Sewer Map



0 3,000 6,000 12,000 18,000 24,000
Feet

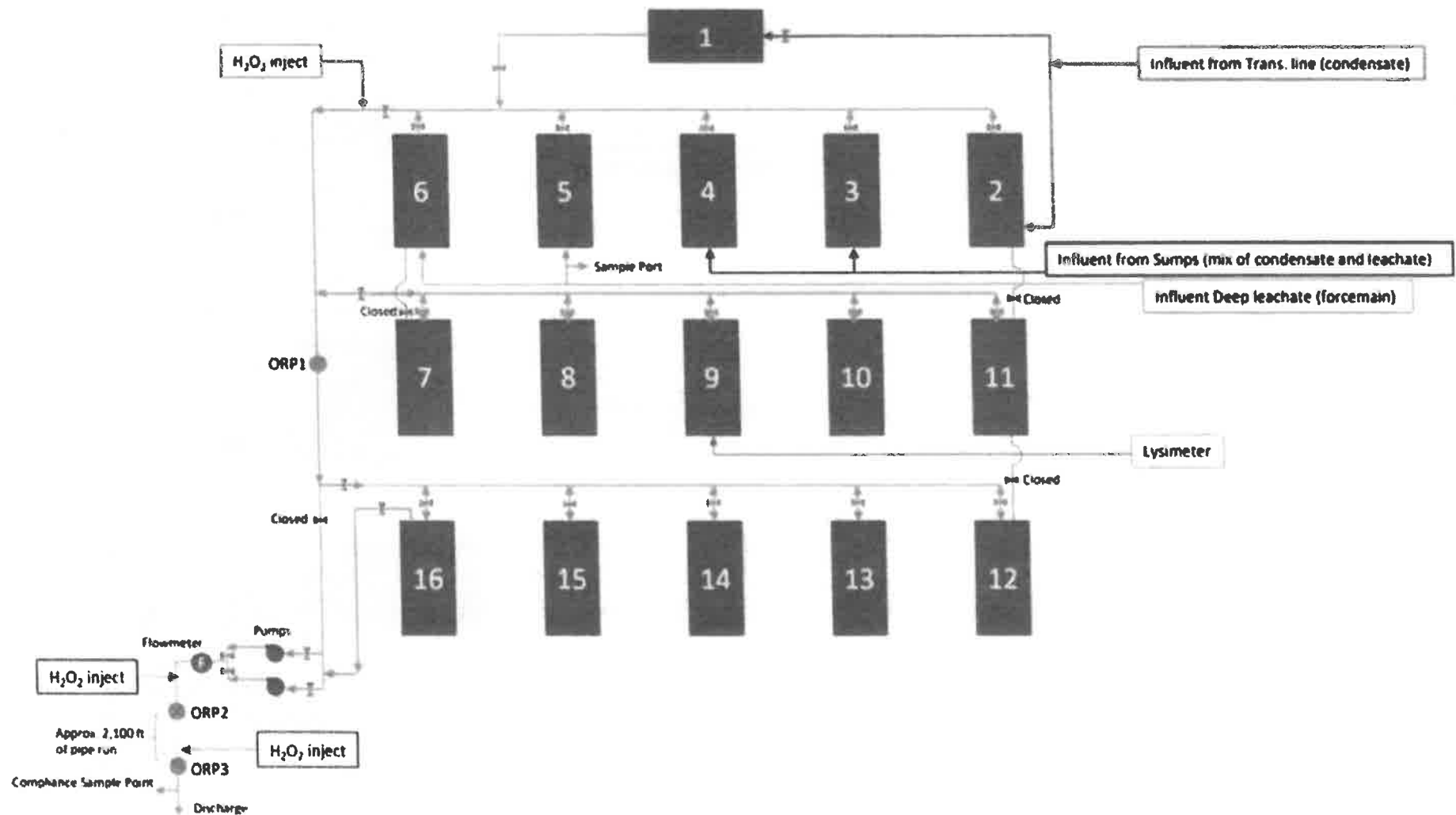

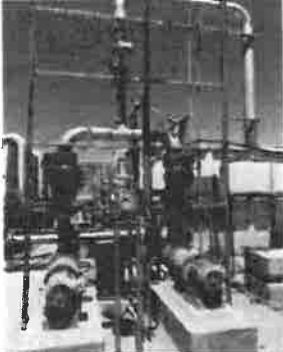

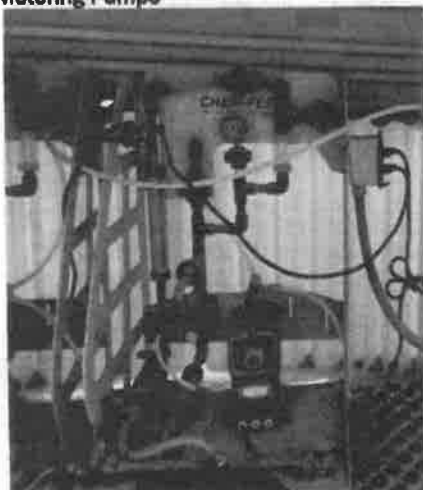


Figure II-2. Process Block Diagram of the Leachate Treatment System

Below are a few images of the various components of the treatment facility:

TREATMENT AREA	DESCRIPTION/PURPOSE
<p>Tank Farm</p> 	<ul style="list-style-type: none">• 16 rectangular frac tanks• Provides storage and equalization for different site liquids (leachate, condensate)
<p>Leachate Pumps</p> 	<ul style="list-style-type: none">• Transfer site liquid from frac tanks to the discharge sump• Operation controlled by PLC based on tank levels
<p>Basket strainers</p> 	<ul style="list-style-type: none">• Filter and remove large solids particles from the leachate• Needs to be cleaned periodically

Chemical Metering Pumps

- Pumps used to control dosing of H_2O_2 to chemically treat and remove dissolved sulfides (DS) from the leachate
- Operator manually adjusts dosing flowrate

Hydrogen Peroxide Storage Tank & Chemical Totes

- The tank is used to store bulk H_2O_2 while the tote is used for temporary storage of the oxidant



- Totes need to be stored in shaded area to prevent degradation of chemicals that could make it less effective in treating DS

ORP Analyzers

- Measure and display ORP readings from ORP probes
- Indicates whether sufficient H_2O_2 dosage is added to minimize sulfide levels

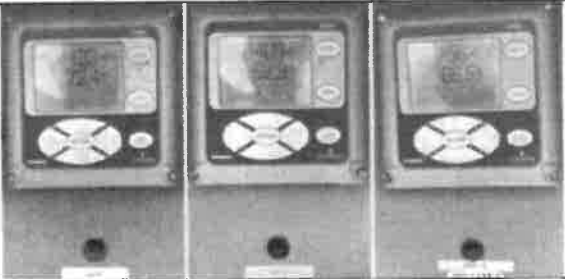

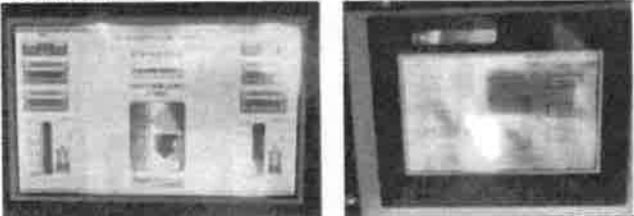

	
Control panel 	<ul style="list-style-type: none">• Controls functioning of the treatment system
HMI Screens 	<ul style="list-style-type: none">• Displays current operation conditions of different treatment system components
Lift Station Sewer Line 	<ul style="list-style-type: none">• Lift Station Sewer Line that includes different instrumentation for monitoring

Table II-1 shows a list of the equipment and instrumentation included in the current leachate treatment system.

APPENDIX C

Self-Monitoring Report Form and Instructions

CITY OF LOS ANGELES
LA SANITATION AND ENVIRONMENT

INDUSTRIAL WASTE MANAGEMENT DIVISION
PERIODIC COMPLIANCE REPORT

SEND REPORT TO:

CITY OF LOS ANGELES
INDUSTRIAL WASTE MANAGEMENT DIVISION
2714 MEDIA CENTER DR. LOS ANGELES, CA 90065

PERMIT W - 535428

IU- 128862

PH. # (818) 362-2258

DBA: SUNSHINE CANYON LANDFILL

SAMPLE POINT NO.: 01-001

ADDRESS: 14747 San Fernando Road Sylmar, CA 91342

SAMPLE DESC: Secured Sampling Facility is located at
Magnetic Flow meter Vault – Normal Operations

FLOW INFORMATION

DAILY FLOWRATES:

1) SAMPLE DAY FLOW: _____

GPD, []M []E []C

2) AVE. FLOW FOR THE
MONITORING PERIOD: _____

GPD, []M []E []C

3) MAX. FLOW FOR THE
MONITORING PERIOD: _____

GPD, []M []E []C

AUXILIARY FLOW ON DAY OF SAMPLING:

1) BOILER BLOWDOWN: _____

GPD, []M []E []C

2) NON-CONTACT COOLING: _____

GPD, []M []E []C

3) DEMINERALIZATION/BACKWASH: _____

GPD, []M []E []C

4) COOLING TOWER BLEEDOFF: _____

GPD, []M []E []C

5) OTHERS,():

GPD, []M []E []C

BATCH DISCHARGE ONLY:

1) NO. OF OPERATIONAL DAYS:

_____ DAYS

2) NO. OF DAYS FOR ACCUM:

_____ DAYS

3) DISCHARGE VOLUME:

_____ GALLONS

SAMPLING INFORMATION

SAMPLE TYPE	DATE		TIME		SPLIT SAMPLE (Y/N)	* PRE- NOTIFICATION DATE	SAMPLED BY	LABORATORY NAME	LABORATORY CERT. #
	START	END	START	END					
COMP									
GRAB									

DCC-Discharge Case Condition; TTO-Total Toxic Organic; CN-Cyanide
MO-Monthly; BM-BiMonthly; QT-Quarterly; SA-SemiAnnual; AN-Annual;
GPD-Gallons Per Day; M-Measured; E-Estimated; C-Calculated; COMP-Compostie;
G-Grab;
Mg/l-Milligrams Per Liter; PPD-Pounds Per Day

NOTE: *TO PRE-NOTIFY CALL (323) 342-6200.

1. Report must be submitted with U.S. Post Office postmark date by the 15th day of the month following the monitoring period.
2. Facsimiles (faxes) of these reports shall not be accepted.

FOR OFFICIAL USE ONLY:

POSTMARK DATE: _____

SMR DATA INPUT BY: _____

REVIEWED BY: _____

RECEIVED DATE: _____

INPUT DATE: _____

REVIEW DATE: _____

SAMPLE POINT NO.: 01-001 IU- 128862 PERMIT W- 535428	INDUSTRIAL WASTE MANAGEMENT DIVISION PERIODIC COMPLIANCE REPORT	CITY OF LOS ANGELES LA SANITATION AND ENVIRONMENT
--	--	--

SAMPLE DESC: End-of-pipe -- Normal Operations
--

GRAB DATE:	GRAB TIME:	COMP. START DATE	END DATE:	COMP. START TIME	END TIME
------------	------------	------------------	-----------	------------------	----------

LABORATORY RESULTS

ANALYTE	SAMPLE TYPE		LABORATORY RESULTS		*VIOLATION	
	COMP	GRAB	CONCENTRATION	UNITS	YES	NO
Arsenic, Total						
Cadmium, Total						
Chromium, Total						
Copper, Total						
Lead, Total						
Nickel, Total						
Silver, Total						
Zinc, Total						
Chloride						
Cyanide (Free)						
Cyanide (Total)						
Oil & Grease (Total)						
Dissolved Sulfides						
pH						

* SEE PERMIT FOR THE DISCHARGE LIMITS. IF IN VIOLATION, ATTACH A STATEMENT OF REASON FOR VIOLATION AND CORRECTIVE ACTION TAKEN.

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION. THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

 AUTH. REPRESENTATIVE SIGNATURE

 PRINT NAME

 TITLE

 DATE

SELF-MONITORING REPORT FORM INSTRUCTIONS

SECTION I :

FLOW INFORMATION

Report all flows in terms of Gallons Per Day (GPD) unless noted otherwise and check (✓) if the reported flow was (M) Measured, (E) Estimated, or (C) Calculated.

A. DAILY FLOWRATES

A.1 SAMPLE DAY FLOW - Enter the discharge flow *during the sampling period (the day/s the sample was collected)*.

A.2 AVERAGE FLOW FOR THE MONITORING PERIOD - Enter the average daily discharge flow *throughout the monitoring period*. For example, if the report was submitted for the 1st Bi-Monthly monitoring period, the flow should be the average daily flow during the months of January thru February.

A.3 MAXIMUM FLOW FOR THE MONITORING PERIOD - Enter the maximum discharge flow *for a single day throughout the monitoring period*.

B. AUXILLARY FLOW ON DAY OF SAMPLING - Provide a breakdown of the sources of auxillary flows *during the sampling period*. Possible sources are: B.1) Boiler Blowdown; B.2) Non-Contact Cooling; B.3) Demineralizer\ Backwash; B.4) Cooling Tower Bleedoff; and, B.5) Others (specify).

C. BATCH DISCHARGER ONLY - Applies to industrial users that discharge wastewater on a batch basis.

C.1 NO. OF OPERATIONAL DAYS - Enter the number of days that manufacturing has been performed since last batch discharge.

C.2 NO. OF DAYS FOR ACCUMULATION - Enter the number of days the wastewater has been accumulated since last batch discharge.

C.3 DISCHARGE VOLUME - Enter the total volume of wastewater discharged per batch in gallons.

SECTION II :

SAMPLING INFORMATION

A. SAMPLING DATES (COMPOSITE) - Enter the start date and end date for the duration of the composite sampling.

B. SAMPLING TIME (COMPOSITE) - Enter the start time and end time for the duration of the composite sampling.

C. SAMPLING DATE/TIME (GRAB) - Enter the date and time the grab sample was collected.

D. SPLIT SAMPLE (Y/N) - Enter "Y=Yes" if the sample collected is a City split sample. Enter "N=No" if not.

E. PRE-NOTIFICATION DATE - Enter the date the City was pre-notified prior to planned sampling.

F. SAMPLED BY - Enter the name of the person who collected the sample.

G. LABORATORY NAME - Enter the name of the laboratory who performed the analysis.

H. LABORATORY CERT. NO. - Enter the State Certificate Number of the laboratory who performed the analysis.

SECTION III :

LABORATORY TEST RESULTS

A. GRAB SAMPLE DATE/TIME - Enter the same information reported in Section II.C of instruction above.

B. COMPOSITE DATE/TIME - Enter the same information reported in Section II.A and II.B of instruction above.

C. SAMPLE TYPE - Check (✓) whether a composite sample or grab sample was used to analyze the analyte.

D. LABORATORY RESULTS - Enter the result (concentration) of the laboratory analysis and their corresponding units (e.g., mg/l, ppm). **The laboratory report must be submitted along with the self-monitoring report.**

E. VIOLATION - Check (✓) if any of the analytes exceeded the discharge limit. Refer to the discharge limits in Section IV of these instructions or the permit for the analyte of concern.

F. SIGNATURE OF AUTHORIZED REPRESENTATIVE, ETC... - Self Explanatory

SECTION IV :

FEDERAL AND LOCAL DISCHARGE LIMITS

A list of the federal and local discharge limits are attached as a guide for the industrial user to determine discharge violations as noted in Section III.E of instruction above. These pages need not be submitted.

SECTION V :

CERTIFICATES/PRODUCTION DATA

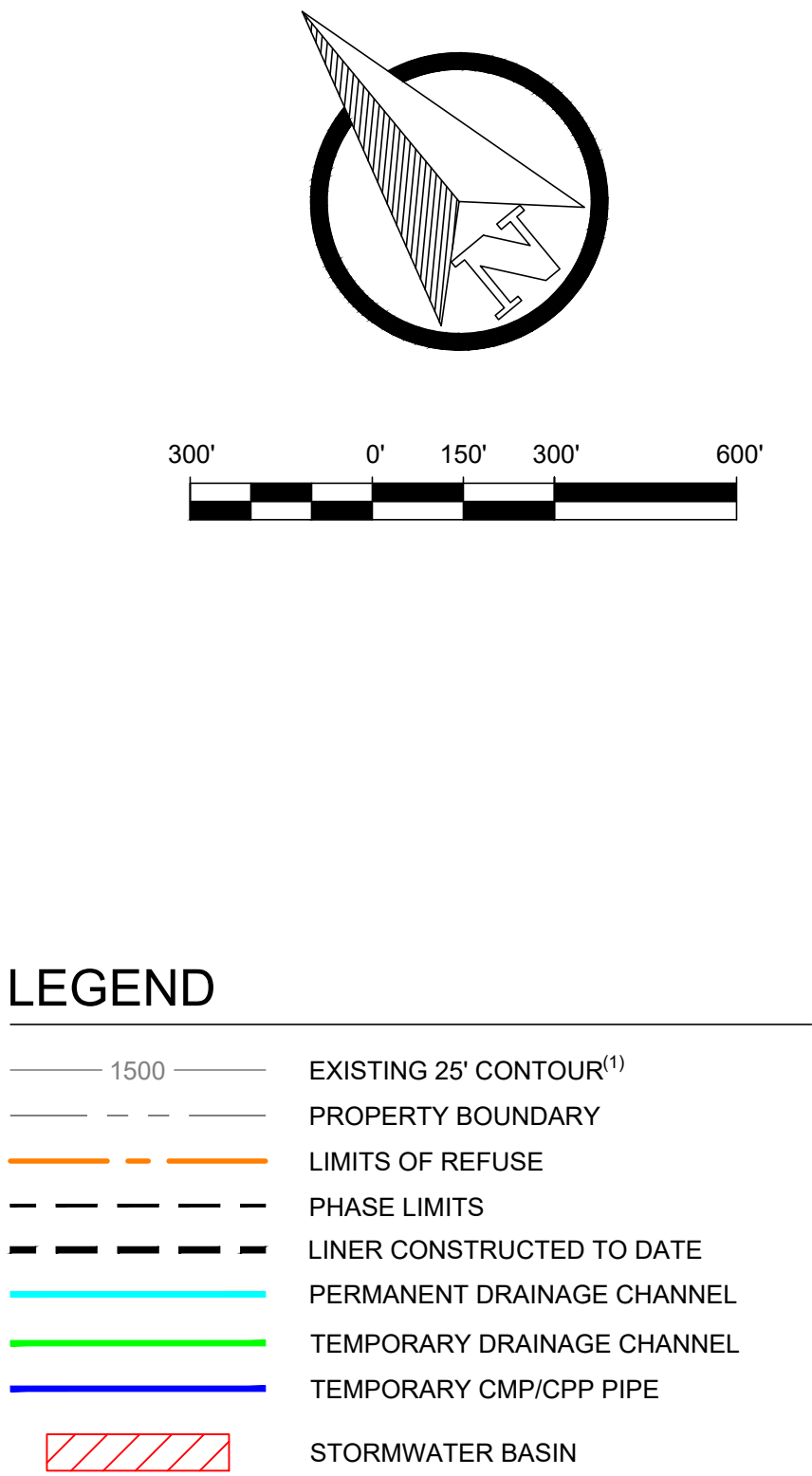
These forms apply to an industrial user (IU) required to submit any of the following: 1) Cyanide Certification, 2) Zero Discharge Certification, 3) TTO Certification, and, 4) Production Data.

A. FROM (date) TO (date) - Enter the inclusive dates (monitoring period) on the form.

B. SIGNATURE OF AUTHORIZED REPRESENTATIVE, ETC.. - Self Explanatory

C. FOR PRODUCTION BASED IU ONLY - Enter the production data during the monitoring period including product description, quantity, and unit.

ATTACHMENT E



REFERENCE AERIAL TOPO BASED ON NOVEMBER 25, 2023 AERIAL SURVEY BY COOPER AERIAL SURVEYS CO.

REV. NO.	DATE	DESCRIPTION	APPROVED BY	DATE OF ISSUE:			2777 EAST GUASTI ROAD SUITE 1 ONTARIO, CA 91761 (909) 626-2282 www.geo-logic.com		SUNSHINE CANYON LANDFILL 14747 SAN FERNANDO ROAD SYLMAR, CA. 91342	SUNSHINE CANYON LANDFILL SYLMAR, CALIFORNIA TAC REPORT	DWG NO. 1 PROJECT NO. S023.1029	
0	01/25/24	SITE DRAINAGE MAP	C. BARRETT	DESIGNED BY:								C. BARRETT
				DRAWN BY:								J. BLACKMAN
				CHECKED BY:								C. BARRETT
				APPROVED BY:								C. BARRETT
SITE DRAINAGE COMPONENTS												

ATTACHMENT F

Los Angeles Regional Water Quality Control Board

October 24, 2016

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

APPROVAL OF REVISED WEST DRAINAGE CHANNEL MASTER PLAN - SUNSHINE CANYON LANDFILL, SYLMAR, CALIFORNIA (FILE NO. 58-076, ORDER NO. R4-2008-0088, GEOTRACKER GLOBAL ID NO. L10006014618)

Dear Ms. Costa:

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board), is in receipt of your letter dated April 27, 2016, transmitting a revised *Surface Water Drainage Analysis, West Drainage Channel Master Plan, Sunshine Canyon Landfill* (Revised Plan), dated January 7, 2015, that was submitted to the State Water Resources Control Board Geotracker data system on April 27, 2016. The Revised Plan provides updated analysis and design details for the construction of the West Drainage Channel at the Sunshine Canyon City/County Landfill (Landfill), which is owned and operated by Republic Services (Discharger) and regulated under waste discharge requirements (WDRs) included in Order No. R4-2008-0088 adopted by this Regional Board on October 2, 2008.

The initial plan was submitted to the Regional Board on March 28, 2014. In a letter dated July 1, 2014 (copy attached), Regional Board staff provided comments that, among others, expressed concerns about potential damages that may be caused by differential settlements of the closed City Landfill No. 1, over which part of the drainage channel will be constructed. In addition, the letter included comments from the Los Angeles County Department of Public Works (LACDPW) on the technical aspects of the plan.

Regional Board staff have reviewed the Revised Plan and has determined that comments included in our July 1, 2014, letter have been adequately addressed. Specifically, the Revised Plan proposes to use Geocell-reinforced concrete with a geogrid reinforcement layer in the foundation of the channel in areas underlain by the closed landfill unit. We concur that such a design is expected to be able to offset the effects of potential differential settlements of the existing waste mass. The Revised Plan is therefore approved. In accordance with Section K (Provisions for Drainage and Erosion Control) of the WDRs, all drainage structures at the Landfill shall be protected and maintained continuously to ensure their effectiveness. The Discharger is responsible to inspect, repair, and replace the drainage channel if damages occur during the active life and post-closure period of the Landfill.


Please note that approval of the Revised Plan by the Regional Board staff is in conjunction with its approval and clearance by other regulatory agencies, including the LADPW. In accordance

with Requirement M.3. of the WDRs¹, approval of the Revised Plan by the Regional Board does not release the Discharger from the responsibility of complying with any other laws and regulations that may be enforced by other regulatory agencies.

A public notice regarding this approval was sent to known interested parties on September 12, 2016, to meet General Provision No. M.22. of the WDRs, which states: "*During oversight of this Order, wherever the Executive Officer is authorized to grant any approval under a particular provision of this Order, the Executive Officer is directed to assess if there is controversy associated with the decision following public notice and, if so, bring the decision to the Regional Board for approval.*" The deadline for submitting comments regarding this matter was October 12, 2016. We received no comments regarding this matter during the period.

If you have any questions, please contact Dr. Wen Yang, Chief of the Land Disposal Unit, at (213) 620-2253 or wyang@waterboards.ca.gov.

Sincerely,


Samuel Unger, P.E.
Executive Officer

Enclosure

Mailing List:

Leslie Graves, State Water Resources Control Board (Leslie.Graves@Waterboards.ca.gov)
Michael Wochnick, CalRecycle (Michael.Wochnick@CalRecycle.ca.gov)
Gerardo Villalobos, Sunshine Canyon Landfill LEA (gvillalobos@ph.lacounty.gov)
David Thompson, Sunshine Canyon Landfill LEA (david.thompson@lacity.org)
Martin Aiyitiwa, Los Angeles County Department of Public Works (MAIYET@dpw.lacounty.gov)
Mohsen Nazemi, South Coast Air Quality Management District (MNazemi1@aqmd.gov)
Richard Slade, Upper Los Angeles River Area Watermaster (ularawatermaster@rcslade.com)
Mitchell Englander, Councilmember, 12th District, City of LA
(councilmember.Englander@lacity.org)
Ly Lam, City of Los Angeles Department of City Planning (ly.t.lam@lacity.org)
Dave Nguyen, Los Angeles County Department of Public Works
(DNGUYEN@dpw.lacounty.gov)
Wayde Hunter, North Valley Coalition, Granada Hills (WHunter01@aol.com)
Wayne Aller, Knollwood Property Owners Association, Granada Hills
(waynealler07@hotmail.com)
Becky Bendickson, Granada Hills North Neighborhood Council (bebend99@gmail.com)
Kim Thompson, Granada Hill North Neighborhood Council (kimthompson@socal.rr.com)

¹ Requirement M.3. of the WDRs states: "*These requirements do not exempt the Discharger from compliance with any other current or future law that may be applicable. They do not legalize this waste management facility, and they leave unaffected any further restraints on the disposal of wastes at this waste management facility that may be contained in other statutes.*"

Patti Costa
Sunshine Canyon Landfill

- 3 -

Wayne Adelstein, North Valley Regional Chamber of Commerce (wayne@nvrcc.com)
Ralph Kroy, LA City Sunshine Canyon Landfill Community Advisory Committee
(REKroy@aol.com)
Robert Sherman, Republic Services (RSherman@republicservices.com)
Patti Costa, Republic Services (PCosta@republicservices.com)

ATTACHMENT G

2023 WET WEATHER PREPAREDNESS REPORT AND WINTER OPERATIONS PLAN

SUNSHINE CANYON
CITY/COUNTY LANDFILL



September 29th, 2023

Mr. Dave Thompson
SCL – LEA Program Manager
Los Angeles County Department of Public Health – LEA Program
5050 Commerce Dr
Baldwin Park, CA 91706

**SUBJECT: 2023 WET WEATHER PREPAREDNESS REPORT AND WINTER OPERATIONS
PLAN - SUNSHINE CANYON CITY/COUNTY LANDFILL -AUGUST 2023**

Mr. Thompson

In accordance with the Sunshine Canyon City/County Landfill (SCL), Solid Waste Facility Permit (SWFP) (Facility #19-AA-2000), Condition 16.I, SWT Engineering (SWT) has prepared this Wet Weather Preparedness Report and Winter Operations Plan (Wet Weather Preparedness Report) on behalf of Browning Ferris Industries of California, Inc. dba Sunshine Canyon Landfill, Inc. As reported in prior years, the goals of the Wet Weather Improvements installed at the SCL are classified under four categories:

1. **Sediment Management:** Consists of constructed measures to minimize suspended solids from the site runoff exiting the terminal basin;
2. **Erosion Control Measures:** Consists of features to prevent rainfall and runoff erosion of daily and intermediate soil layers that cover active refuse fill areas with the purpose of preventing storm water contact to buried refuse. This includes grading of soil covers to prevent surface ponding and subsequent storm water infiltration into the existing refuse fill;
3. **Maintenance:** Consists of maintaining existing storm water control structures serving both the active and the closed refuse fill areas; and
4. **Expansion:** Consists of installing new runoff control systems to meet the changing needs of the site due to ongoing fill operations.

According to the Los Angeles Regional Water Quality Control Board (LA RWQCB) inspection on April 21, 2023, and the Notice of Violation (NOV) letter received on May 17th, 2023, the site performed its wet weather prep prior to August 17th to meet the NOV requirements. During the site review prior that date, the site completed all tasks presented in the NOV; however, on August 22nd, 2023 the southern California area experienced a tropical storm from the Hurricane Hilary event, in which the site received over 5.5 inches of rain. As this was an extremely rare case for a heavy storm event in August for Southern California, several of the winter preparations that were done were impacted by the hurricane.

Some of the impacted site features included new sediment in all stormwater basins, collection of sediment in stormwater channels, some minor erosion rilling, and new sediment around stormwater inlets. A majority of these items have already been addressed. The following section breaks down the four classified categories listed above for the SCL that were completed year to date.

Sediment Management and Erosion Control Measures – (Categories 1 and 2):

The following is a list of work that has been completed to address sediment management and erosion control on site (improvements shown on Drawings 1 and 2 attached):

- Installed 26 acres of Closure Turf (2017) to provide slope protection on slope areas east of the administration buildings (See Drawing 2);
- Inspected Filtrexx compost rolls at the toe of disturbed slopes throughout various areas of the site, and replaced/added rolls on an as needed basis;
- Track-walked slopes throughout the site to reduce slope erosion and allow establishment of seeded or native vegetation in non-active areas;
- Inspected the basin risers filter fabric in Basins A, B, and D, replaced as needed;
- Cleaned the skimmer systems in the Terminal Basin to make sure they are functioning properly;
 - Repaired the terminal basin outlet riser after the 2022/2023 storm damage;
- Installed approximately ±16.5 acres of fiber rolls spaced at 15-feet vertically on landfill slopes;
- Graded active landfill decks to prevent erosion by avoiding overly steepened swales with deck berms;
- Based in operational wet weather deck with recycled asphalt concrete;
- Added geotextile k-rail wraps to help create sedimentation traps; and
- Graded soil cover in active landfill areas to prevent surface ponding.

Maintenance and Expansion of Storm Water Control Systems – (Categories 3 and 4):

The following is a list of maintenance and new stormwater project that have been completed on site (improvements shown on Drawings 1 and 2 attached):

- Removal of silt, gravel check dams, and vegetation from the perimeter channels;
- Cleanout of sediment from Basins A B, D, and the Terminal Basin;
- Cleaned the skimmer systems in the Terminal Basin to make sure they are functioning properly;
- Cleaned out the access road trench drain systems;
- Graded benches to promote positive drainage and reduce overtopping;
- Cleaned pipes and inlets of vegetation and litter;
- Fiber rolls were installed prior to down drain flumes/channels, and at the base of all stockpiles;
- Construction of Diversion Berms and swales were created or reconstructed to create flows towards drainage inlets/perimeter channels;
- Repaired and installed drainage pipes to convey stormwater to the perimeter;
- Installed drainage slides to help with temporary drainage areas;

- Installed a pumping system (prior to the first rain) in low points; and
- Repaired pipe joints and reset down-drains as required.

Constructed/Maintained Sediment Management and Erosion Control Measures:

The following control systems were constructed prior to the 2023-2024 wet weather season that have remained in place as part of the site's overall stormwater management plan:

- 26 Acres of Closure Turf (2017) and 15+ acres of coconut matting (2017-2019) on interim refuse fill slopes;
- Western perimeter drainage channel after sedimentation Basin A;
- Drainage improvements along the northeast perimeter road; and
- Graded landfill decks to ensure drainage to the perimeter channels/basins in the northwest via pumping system.

Planned Sediment Management and Erosion Control Measures:

As stated above, the site experienced over 5.5 inches of rainfall from Hurricane Hilary on August 22, which impacted several of the site's winter preparations. Therefore, and as previously communicated to the LEA and LA RWQCB, the site is finalizing the remaining improvements which are expected to be completed by October 15th. The following is a list of those improvements, which are shown on the "Planned Winterization" Drawings 3 and 4 apart of this submittal:

- Finish installing approximately ± 8.5 acres of fiber rolls spaced at 15-feet vertically on landfill slopes;
- Cleanout of sediment from Basin A (Note: Basin A to be cleaned out as time permits and material is safe to remove); and
- Install drainage slides to help with temporary drainage areas.

Sediment Management and Erosion Control Measures:

The SCL has the Entrance Road Improvements Construction Project which consists of three primary phases and is currently managed under a distinct Construction SWPPP overseen by Sukut Construction. Interim and post-development BMP's are included in the SWPPP and adhere to the requirements of the Construction General Permit (CGP). These measures are shown on the figures within Attachment 1 and Attachment 2 of this plan. A copy of the complete Construction SWPPP is available on SMARTS or per request.

Wet Weather Preparedness:

The Wet Weather Preparedness plan including actions that would be taken prior to a predicted severe wet weather event. These measures will be taken at least 24 hours prior to the projected on-set of the event. The application of these additional measures will be based on an assessment of the existing site conditions prior to the event and what additional measures will be most effective in minimizing surface erosions. The additional measures may include some or all of the following actions:

- Inspection of all onsite inlets to ensure they are clear;
- Drainage benches to be inspected ensure proper cambered to the inside hinge to reduce overtopping and erosion of the slopes;
- Additional fiber rolls/straw wattles will be placed on slope areas at approximately 15 vertical feet to slow stormwater flow as needed;
- Application of soil stabilizer containing polymers formulated specifically for stabilization of slopes on appropriate slope areas, where applicable; and
- Construction of additional stormwater control berms is necessary to direct stormwater flow to the appropriate existing on-site structures based on ongoing refuse filling operations.

Site inspections by SCL personnel will be conducted to ensure that all controls remain in place and any items that need to be addressed are completed prior to a rain event. Erosion and sediment controls will be assessed after each rain event and any actions needed to repair or replace a control will be addressed.

Site Inspection:

The SCL was inspected throughout the spring and summer of 2023 to prepare the site for the 2023-2024 wet weather season by the following staff and 3rd party consultants:

Paul Koster
Environmental Manager
Sunshine Canyon Landfill
PKoster@republicservices.com
Cell: 818-200-3016

Jeremy A. Botica, P.E. 81230, M.S.,
Project Manager
SWT Engineering
jab@swteng.com
Cell: 805-479-3844

Jacob Friedman
Environmental Specialists
Sunshine Canyon Landfill
JFriedman@republicservices.com
Cell: 661-190-3213

If you have any questions or require any additional information about this report or the SCL itself, please feel free to contact Paul Koster at 818-200-3016.

Sincerely,
Paul Koster,
Environmental Manager
Sunshine Canyon Landfill



09/29/2023

Environmental Manager

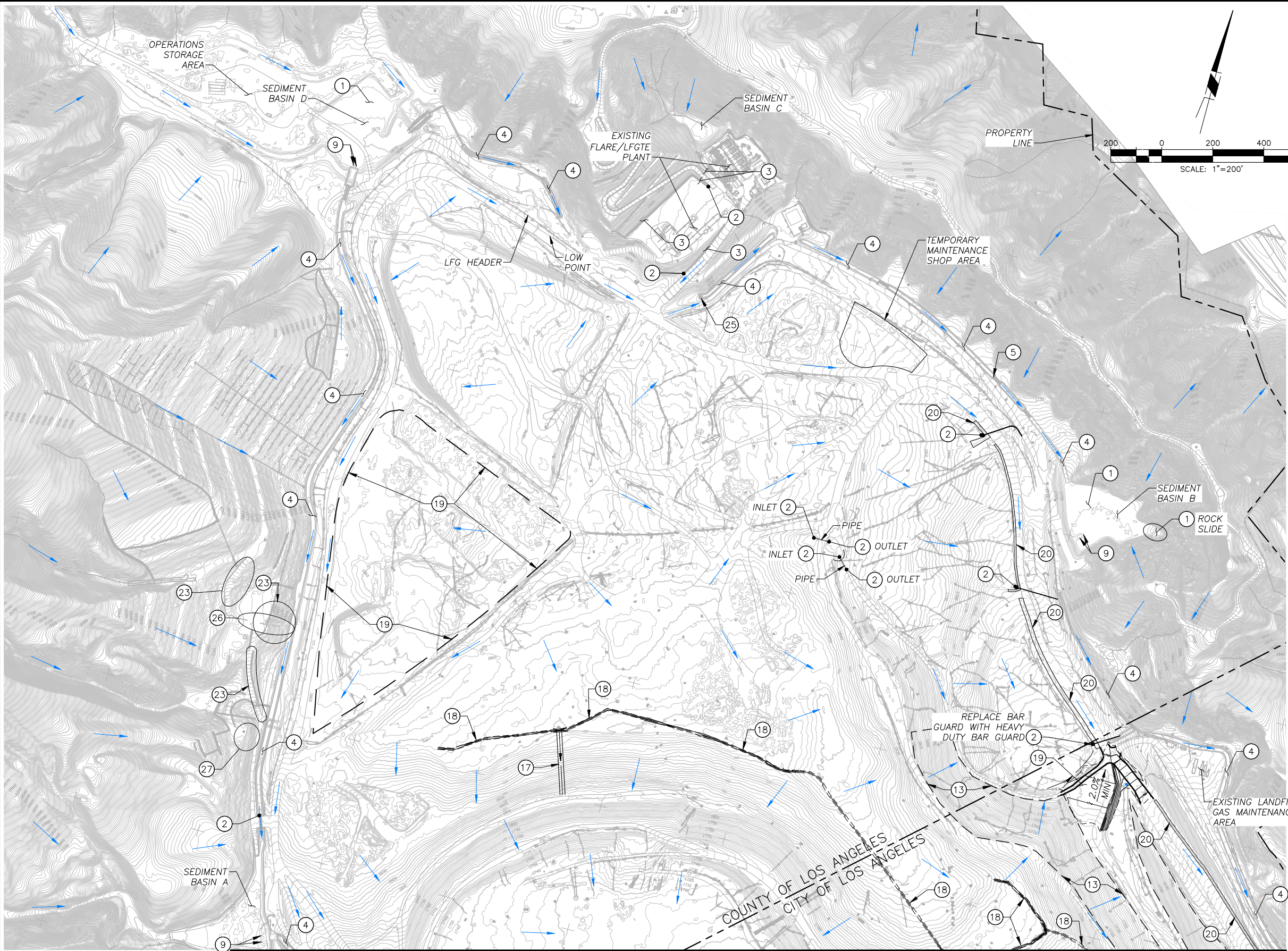
Date

Enclosures:

Drawing 1:	Constructed Northern Winterization Plan 1
Drawing 2:	Constructed Southern Winterization Plan 2
Drawing 3:	Planned Northern Winterization Plan 1 (none planned not included)
Drawing 4:	Planned Southern Winterization Plan 2 (none planned not included)
Attachment 1:	Entrance Road Improvements Construction Project Erosion Control Measures for Phase 1 and 2
Attachment 2:	Entrance Road Improvements Construction Project Erosion Control Measures for Phase 3

DRAWINGS

DRAWING 1: COMPLETED NORTHERN WINTERIZATION PLAN 1
DRAWING 2: COMPLETED SOUTHERN WINTERIZATION PLAN 2
DRAWING 3: PLANNED NORTHERN WINTERIZATION PLAN 1
DRAWING 4: PLANNED SOUTHERN WINTERIZATION PLAN 2



LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- 1650- EXISTING GRADE CONTOUR
- SILT FENCE
- TOP DECK BERN
- x- LITTER FENCE
- FLOW ARROW
- [Pattern] SOIL BINDER
- [Pattern] CLOSURE TURF
- [Pattern] COCONUT EROSION CONTROL BLANKET
- [Pattern] CEDAR WOOD CHIP COVERING

BMP's

- 1 CLEAN OUT SOIL FROM EARTHEN/CONCRETE BASIN
- 2 CLEAN OUT INLET AND PLACE A FIBER ROLL STAKED IN PLACE AROUND OPENING (SE-05)
- 3 CLEAN OUT V-DITCH
- 4 CLEAN SEDIMENT FROM PERIMETER CHANNEL
- 5 CLEAN OUT INLET AND REPAIR PIPE
- 9 INSPECT RISER PIPE(S) AND 16 OZ/SY GEOTEXTILE WRAP, REPLACE IF DAMAGED AND PLACE COBBLE ROCK AROUND FOR PROTECTION
- 13 INSTALL RICE ROLLS EVERY 15-VERTICAL FEET ON LEVEL CONTOUR
- 17 INSTALL TEMPORARY SLIP LINER DOWN CHUTE
- 18 CONSTRUCT TOP DECK EARTHEN BERM TO DIRECT FLOW TO LOW POINT INLET
- 19 FILL IN LOW POINTS WITH SOIL TO CREATE POSITIVE DRAINAGE TO PERIMETER DRAINAGE FEATURES
- 20 REMOVE AND RECONSTRUCT DRAINAGE BERM AND SWALE TO ALLOW STORMWATER TO DRAIN TOWARDS EXISTING INLET
- 21 INSTALL RICE ROLL AROUND THE TOE OF THE TOP DECK STOCKPILE (LIMITS PER CURRENT CONDITION)
- 23 REPAIR EROSION ON SLOPE TO 90% RELATIVE COMPACTION
- 25 BACKFILL CHANNEL EDGE TO STOP UNDERMINING
- 26 REPLACED DOWN DRAIN CHANNEL PER ENGINEERS RECOMMENDATIONS
- 27 STABILIZE SLOPE PER GEOTECHNICAL ENGINEERS RECOMMENDATIONS

MATCHLINE - SEE SHEET 2

DRAFT - NOT FOR
CONSTRUCTION

DATE OF TOPOGRAPHY:
JULY 25, 2023

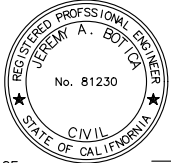
NO.	REVISION DESCRIPTION	DATE



SUNSHINE CANYON LANDFILL
14747 SAN FERNANDO ROAD
SYLMAR CA, 91342

PREPARED BY:

SWT Civil & Environmental
Engineering
800 C SOUTH ROCHESTER AVENUE
ONTARIO, CALIFORNIA 91761



PREPARED UNDER THE SUPERVISION OF

DATE

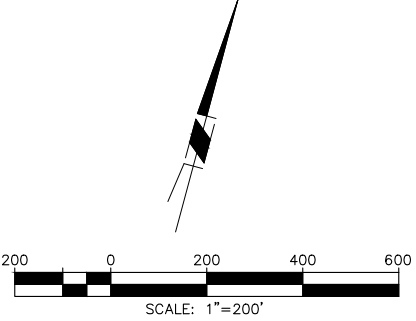
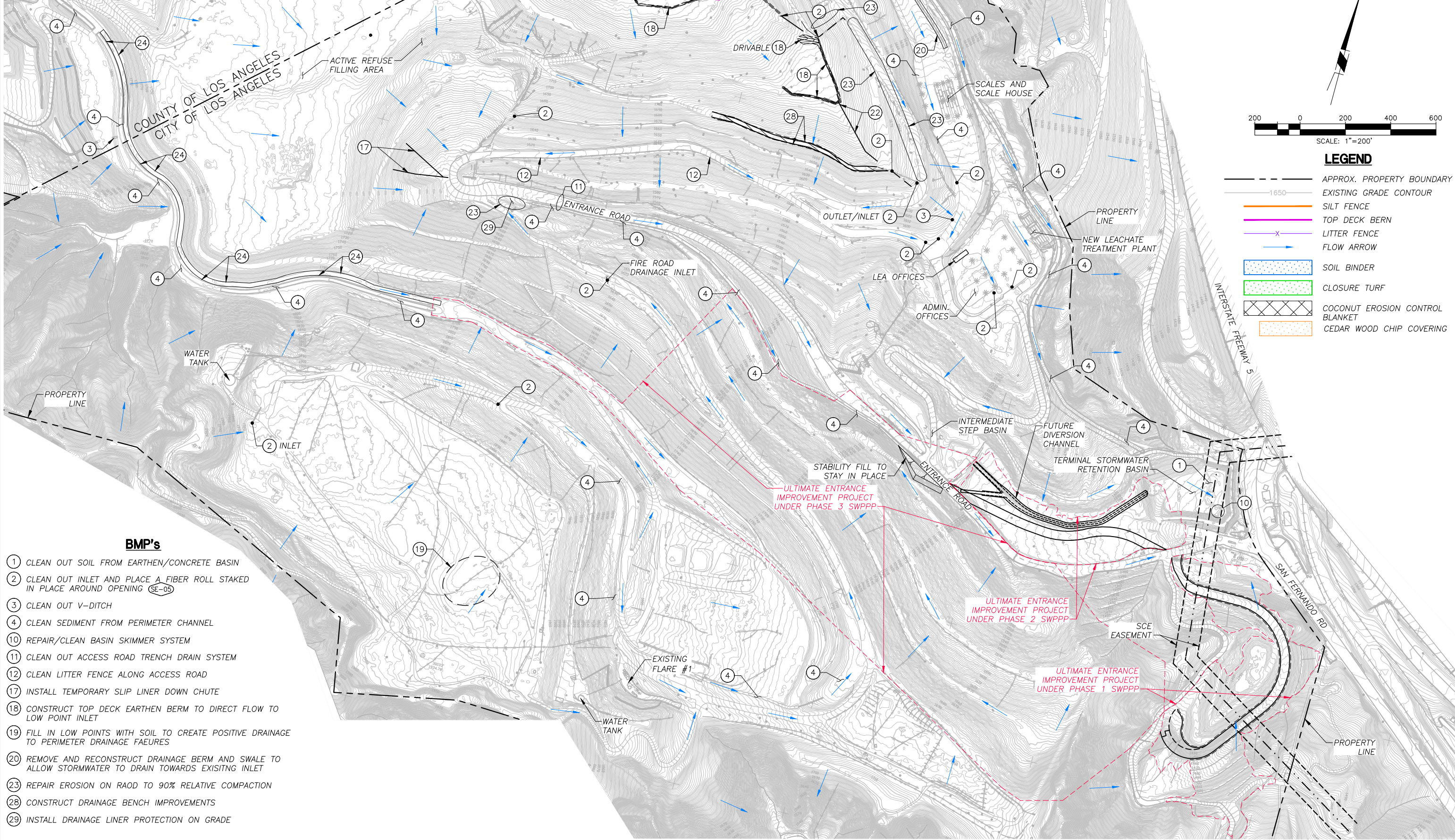
SUNSHINE CANYON LANDFILL

WET WEATHER PREPAREDNESS PLAN 2023
COMPLETED NORTHERN WINTERIZATION PLAN 1

DESIGNED BY : J.A.B.	SCALE : AS SHOWN	PROJECT NO: XXXXXX
DRAWN BY : J.A. / A.Z.	DATE : 08-2023	
CHECKED BY : J.A.B.	DATE : 08-2023	
APPROVED BY :	DATE :	SHEET 1 OF 4

Z:\PROJECTS\REPUBLIC SERVICES\SUNSHINE CANYON LANDFILL\WINTERIZATION PLANS\STORMWATER 2023\ACAD\Sheet Set\01-SOL-STORMWATER

MATCHLINE - SEE SHEET 1



LEGEND

- APPROX. PROPERTY BOUNDARY
- 1650- EXISTING GRADE CONTOUR
- SILT FENCE
- TOP DECK BERM
- LITTER FENCE
- FLOW ARROW
- SOIL BINDER
- CLOSURE TURF
- COCONUT EROSION CONTROL BLANKET
- CEDAR WOOD CHIP COVERING

BMP's

- 1 CLEAN OUT SOIL FROM EARTHEN/CONCRETE BASIN
- 2 CLEAN OUT INLET AND PLACE A FIBER ROLL STAKED IN PLACE AROUND OPENING (SE-05)
- 3 CLEAN OUT V-DITCH
- 4 CLEAN SEDIMENT FROM PERIMETER CHANNEL
- 10 REPAIR/CLEAN BASIN SKIMMER SYSTEM
- 11 CLEAN OUT ACCESS ROAD TRENCH DRAIN SYSTEM
- 12 CLEAN LITTER FENCE ALONG ACCESS ROAD
- 17 INSTALL TEMPORARY SLIP LINER DOWN CHUTE
- 18 CONSTRUCT TOP DECK EARTHEN BERM TO DIRECT FLOW TO LOW POINT INLET
- 19 FILL IN LOW POINTS WITH SOIL TO CREATE POSITIVE DRAINAGE TO PERIMETER DRAINAGE FAEURES
- 20 REMOVE AND RECONSTRUCT DRAINAGE BERM AND SWALE TO ALLOW STORMWATER TO DRAIN TOWARDS EXISITNG INLET
- 23 REPAIR EROSION ON RAOD TO 90% RELATIVE COMPACTION
- 28 CONSTRUCT DRAINAGE BENCH IMPROVEMENTS
- 29 INSTALL DRAINAGE LINER PROTECTION ON GRADE

DRAFT - NOT FOR CONSTRUCTION

DATE OF TOPOGRAPHY:
JULY 25, 2023

NO.	REVISION DESCRIPTION	DATE



SUNSHINE CANYON LANDFILL
14747 SAN FERNANDO ROAD
SYLMAR CA, 91342

PREPARED BY:

SWT Civil & Environmental Engineering
800 C SOUTH ROCHESTER AVENUE
ONTARIO, CALIFORNIA 91761



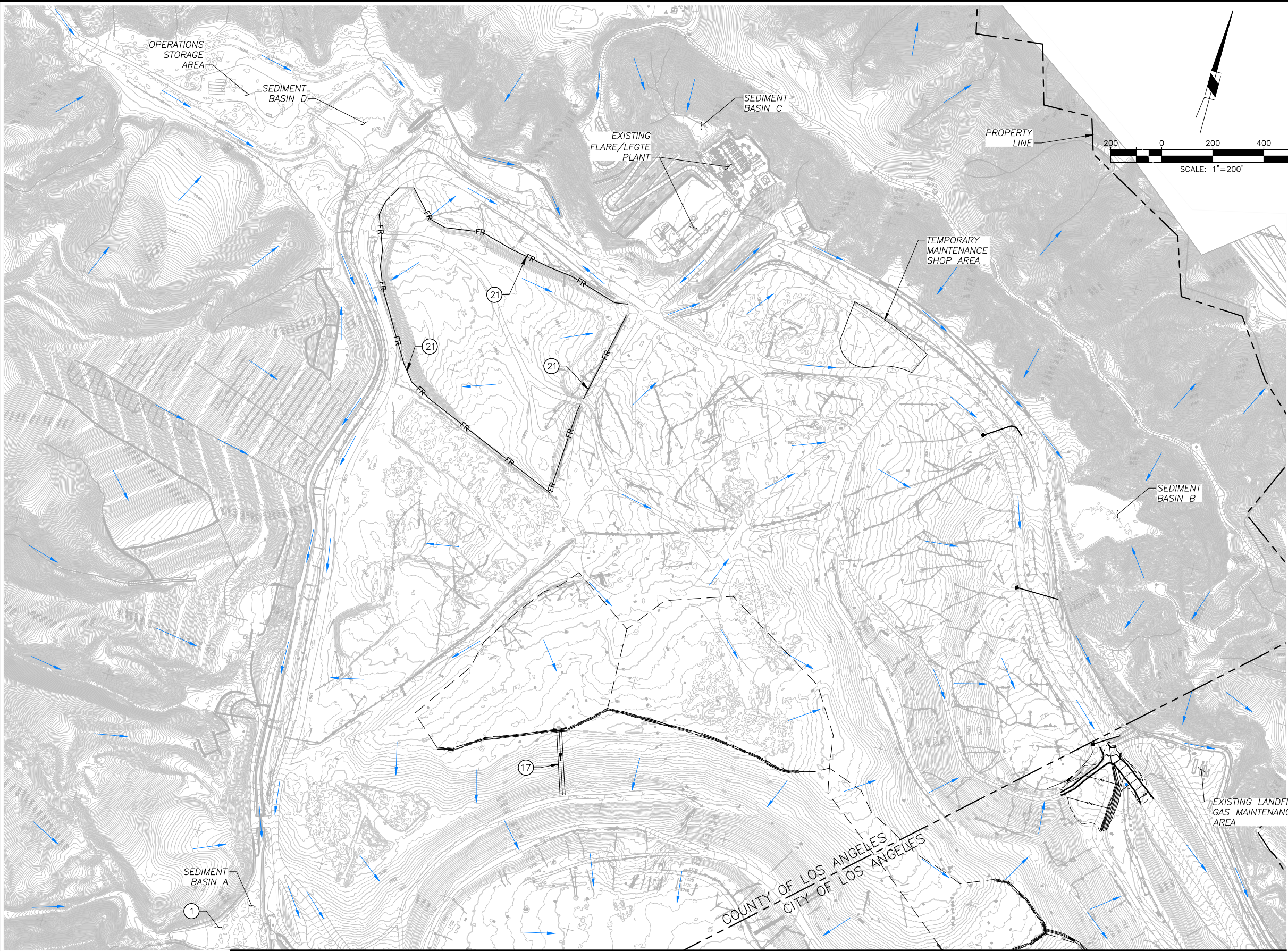
PREPARED UNDER THE SUPERVISION OF

DATE

SUNSHINE CANYON LANDFILL

WET WEATHER PREPAREDNESS PLAN 2023
COMPLETED SOUTHERN WINTERIZATION PLAN 2

DESIGNED BY : J.A.B.	SCALE : AS SHOWN	PROJECT NO: XXXXXX
DRAWN BY : J.A. / A.Z.	DATE : 08-2023	
CHECKED BY : J.A.B.	DATE : 08-2023	
APPROVED BY :	DATE :	



LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- 1650- EXISTING GRADE CONTOUR
- SILT FENCE
- TOP DECK BERN
- x- LITTER FENCE
- FLOW ARROW
- SOIL BINDER
- CLOSURE TURF
- COCONUT EROSION CONTROL BLANKET
- CEDAR WOOD CHIP COVERING

BMP's

- ① CLEAN OUT SOIL FROM EARTHEN/CONCRETE BASIN
- ①7 INSTALL TEMPORARY SLIP LINER DOWN CHUTE
- ②1 INSTALL RICE ROLL AROUND THE TOE OF THE TOP DECK STOCKPILE (LIMITS PER CURRENT CONDITION)

NOTES:

- 1. ALL DECK BERMS AND SLOPE FIBER ROLLS SHALL BE INSTALLED AND COMPLETED PRIOR TO OCTOBER 1ST.
- 2. ALL HYDROSEEDING TO BE INSTALLED AFTER FIRST RAIN EVENT IN OCTOBER/NOVEMBER TO HELP IMPROVE GERMINATION.

MATCHLINE - SEE SHEET 4

DRAFT - NOT FOR
CONSTRUCTION

DATE OF TOPOGRAPHY:
JULY 25, 2023

NO.	REVISION DESCRIPTION	DATE



SUNSHINE CANYON LANDFILL
14747 SAN FERNANDO ROAD
SYLMAR CA, 91342

PREPARED BY:

SWT Civil & Environmental
Engineering
800 C SOUTH ROCHESTER AVENUE
ONTARIO, CALIFORNIA 91761



PREPARED UNDER THE SUPERVISION OF

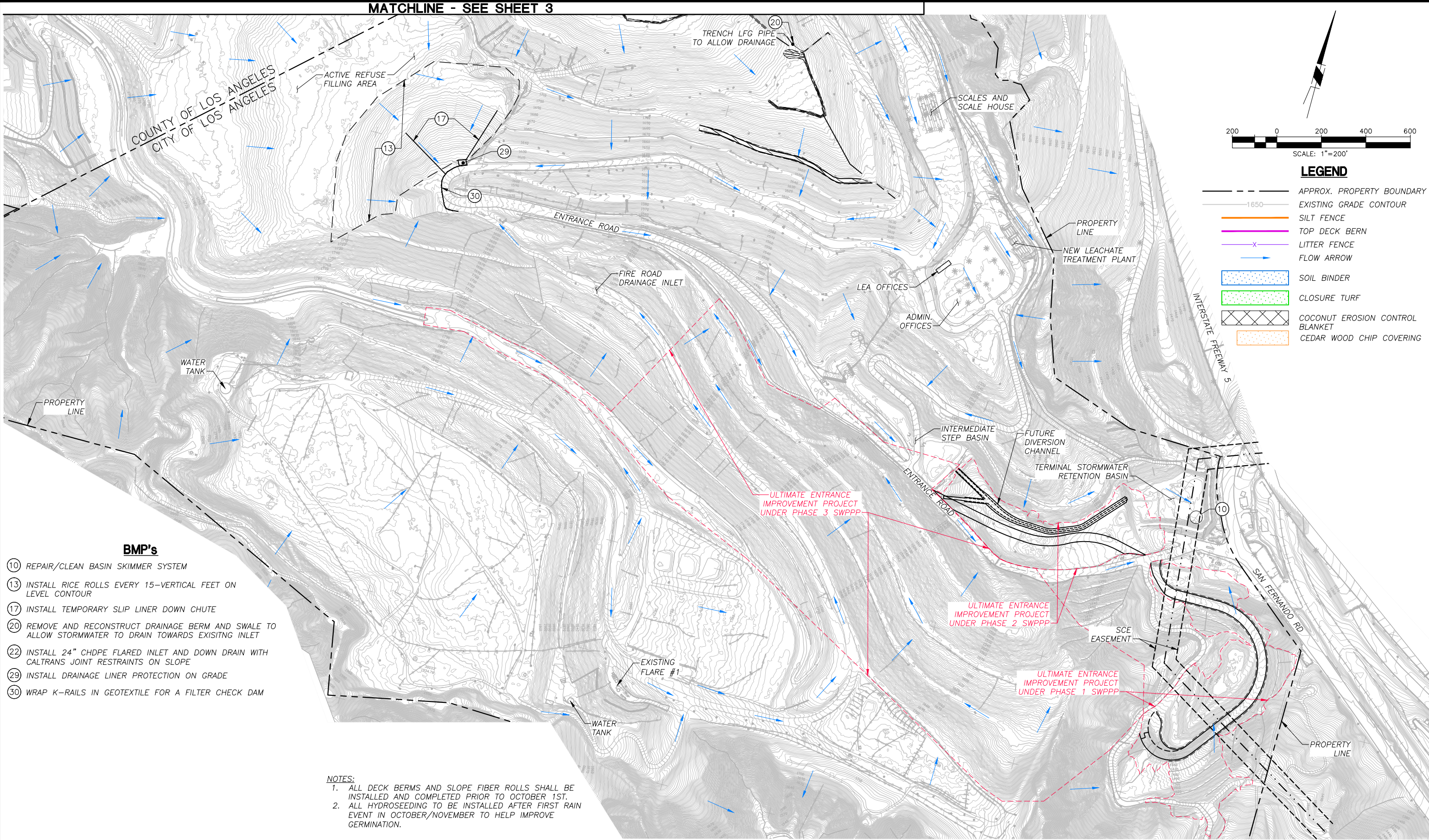
DATE

SUNSHINE CANYON LANDFILL

**WET WEATHER PREPAREDNESS PLAN 2023
PLANNED NORTHERN WINTERIZATION PLAN 1**

DESIGNED BY : J.A.B.	SCALE : AS SHOWN	PROJECT NO: XXXXXX
DRAWN BY : J.A. / A.Z.	DATE : 08-2023	
CHECKED BY : J.A.B.	DATE : 08-2023	
APPROVED BY :	DATE :	SHEET 3 OF 4

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DRAFT - NOT FOR CONSTRUCTION

DATE OF TOPOGRAPHY:
JULY 25, 2023

NO.	REVISION DESCRIPTION	DATE



SUNSHINE CANYON LANDFILL
14747 SAN FERNANDO ROAD
SYLMAR CA, 91342

PREPARED BY:

SWT Civil & Environmental Engineering

800 C SOUTH ROCHESTER AVENUE
ONTARIO, CALIFORNIA 91761

REGISTERED PROFESSIONAL ENGINEER
JEREMY A. BOTICA
No. 81230
CIVIL
STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF

DATE

SUNSHINE CANYON LANDFILL

WET WEATHER PREPAREDNESS PLAN 2023

PLANNED SOUTHERN WINTERIZATION PLAN 2

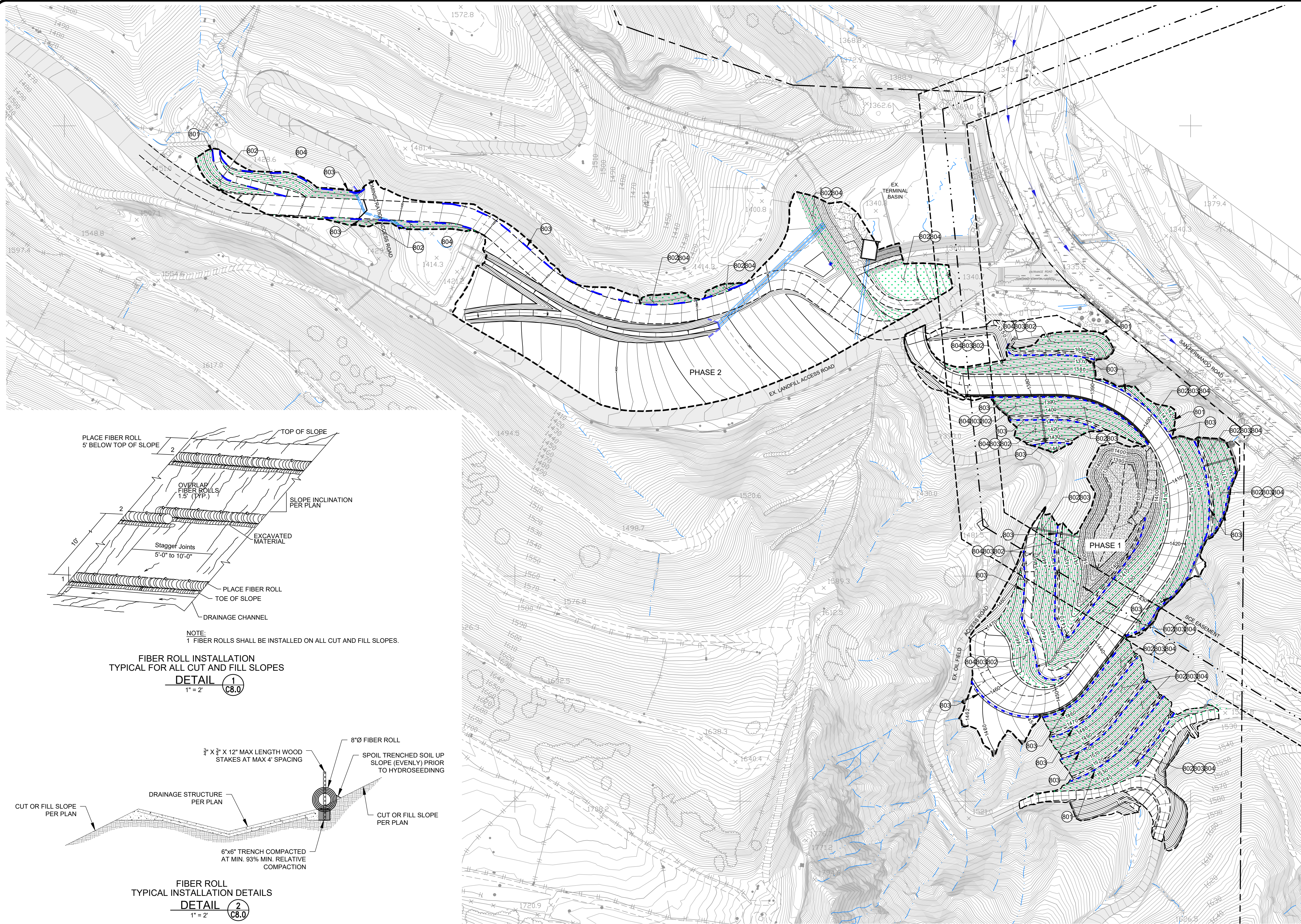
DESIGNED BY : J.A.B.	SCALE : AS SHOWN	PROJECT NO: XXXXXX
DRAWN BY : J.A. / A.Z.	DATE : 08-2023	
CHECKED BY : J.A.B.	DATE : 08-2023	
APPROVED BY :	DATE :	

SHEET **4** OF **4**

ATTACHMENT 1

ENTRANCE ROAD IMPROVEMENTS CONSTRUCTION PROJECT PHASES 1 AND 2 EROSION CONTROL MEASURES

P:\SITES\SUNSHINE CANYON\ULTIMATE ENTRANCE ROAD CONST. PHASE 1-2\EXHIBITS\SQL-IEP-PH 1&2-EROSION CONTROL PLAN AND CONSTRUCTION DETAILS (2023-08-30) DWG September 27, 2023 - 3:51 PM BY: GLA-USER

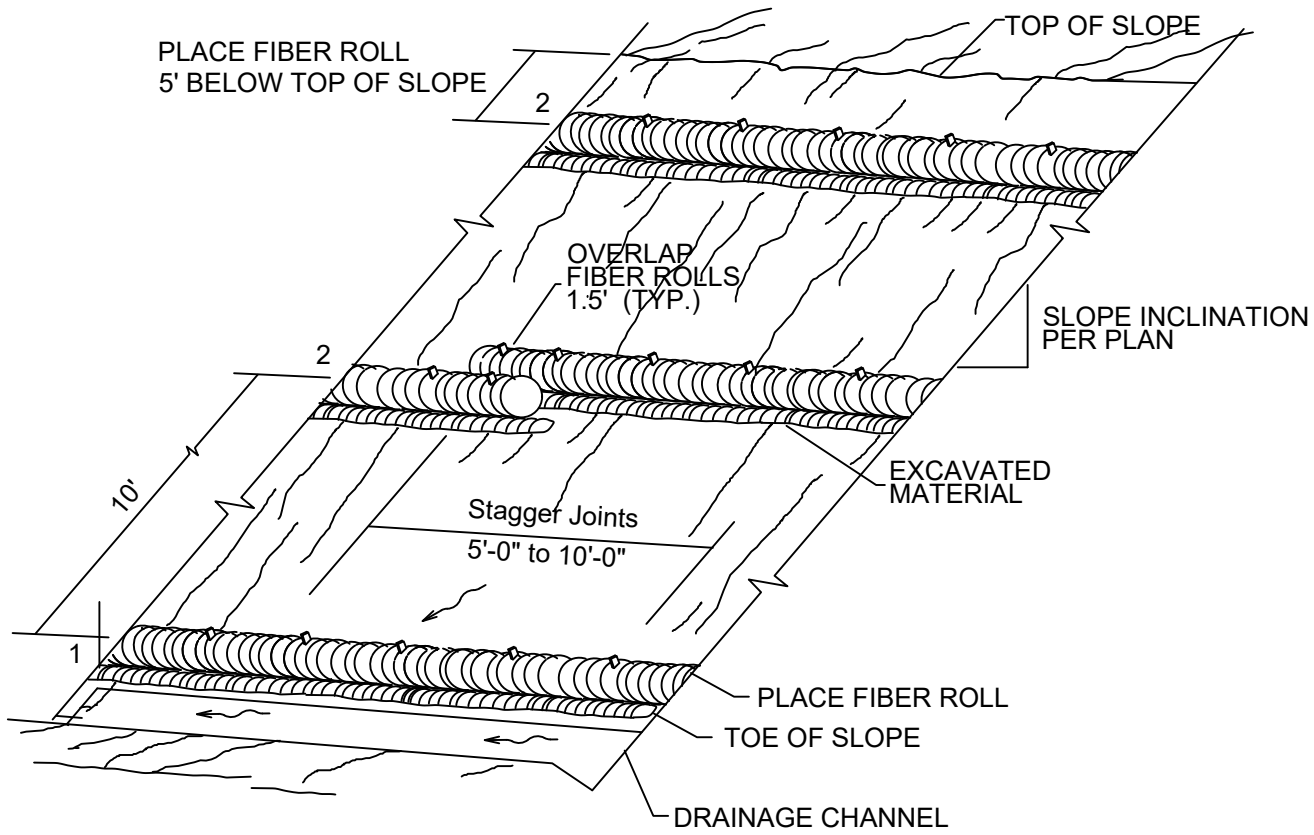


LEGEND

- PROPERTY BOUNDARY
- EXISTING 10 FT CONTOUR
- EXISTING 2 FT CONTOUR
- EXISTING PAVED ROAD
- EXISTING UNPAVED ROAD
- EXISTING FENCE
- EXISTING DRAINAGE
- PROPOSED 10 FT CONTOUR
- PROPOSED 2 FT CONTOUR
- GRADING HINGE
- SCE EASEMENT
- RETAINING WALL
- PHASE GRADING LIMITS
- FIBER ROLL
- HYDROSEED AND JUTE NET

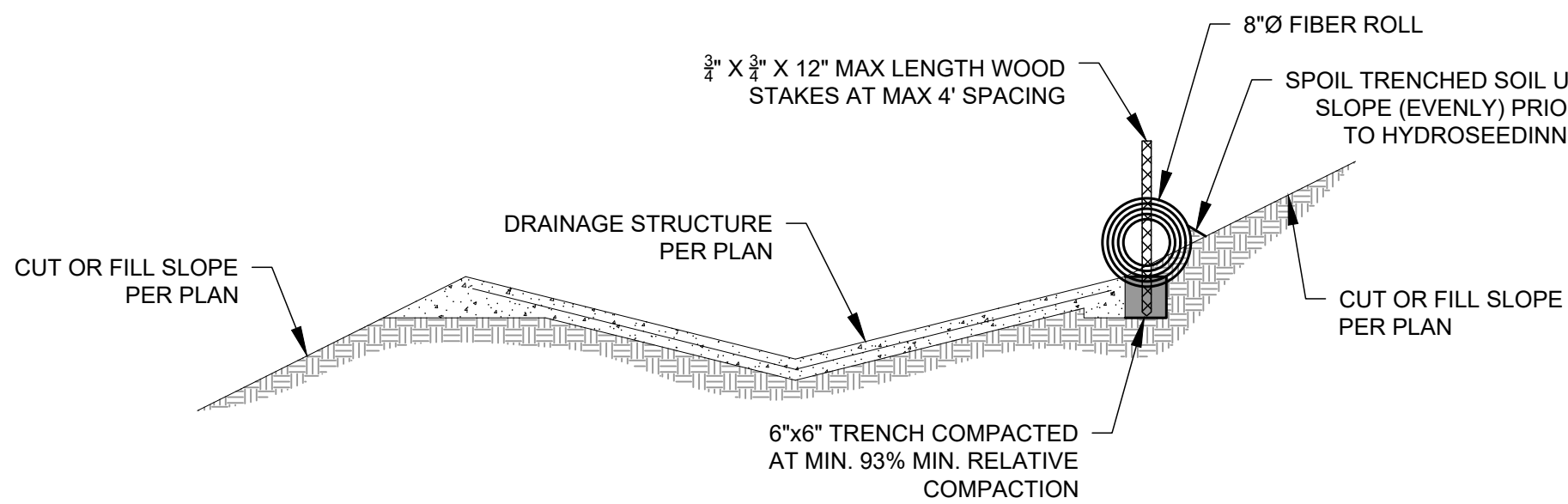
CONSTRUCTION NOTES

- 802 FURNISH & APPLY HYDROSEED ON SIDE SLOPES IN ACCORDANCE WITH APPLICABLE PROJECT SPECIFICATIONS
- 803 FURNISH & INSTALL FIBER ROLL EROSION BARRIERS IN ACCORDANCE WITH THE APPLICABLE PROJECT SPECIFICATIONS AND CONSTRUCTION DETAILS
- 804 FURNISH & INSTALL EROSION CONTROL BLANKET (SUCH AS JUTE MAT OR APPROVED EQUAL) IN ACCORDANCE WITH THE APPLICABLE PROJECT SPECIFICATIONS AND CONSTRUCTION DETAILS



NOTE:
1 FIBER ROLLS SHALL BE INSTALLED ON ALL CUT AND FILL SLOPES.

FIBER ROLL INSTALLATION
TYPICAL FOR ALL CUT AND FILL SLOPES
DETAIL 1
1" = 2' C8.0



FIBER ROLL
TYPICAL INSTALLATION DETAILS
DETAIL 2
1" = 2' C8.0

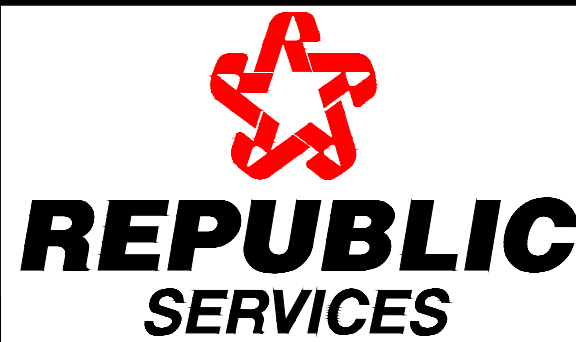
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REV. NO.	DATE	DESCRIPTION	APPROVED BY	DATE OF ISSUE:	AUGUST 2023
				DESIGNED BY:	F MINA
				CAD DESIGN BY:	J TAMBIA
				CHECKED BY:	F MINA
				APPROVED BY:	F MINA



Geo-Logic
ASSOCIATES

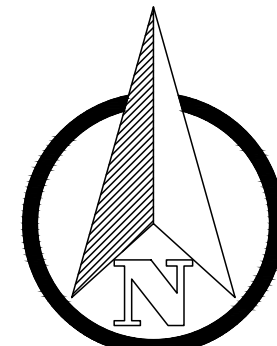
2777 EAST GUASTI ROAD
SUITE 1
ONTARIO, CA 91761
(909) 626-2282
www.geo-logic.com



SUNSHINE CANYON LANDFILL
14747 SAN FERNANDO ROAD
SYLMAR, CA 91342

SUNSHINE CANYON LANDFILL
ULTIMATE ENTRANCE IMPROVEMENT PROJECT
PHASES 1 - 2
**POST CONSTRUCTION
EROSION CONTROL PLAN**

DWG NO.
FIG-2
PROJECT NO.
S023.1102



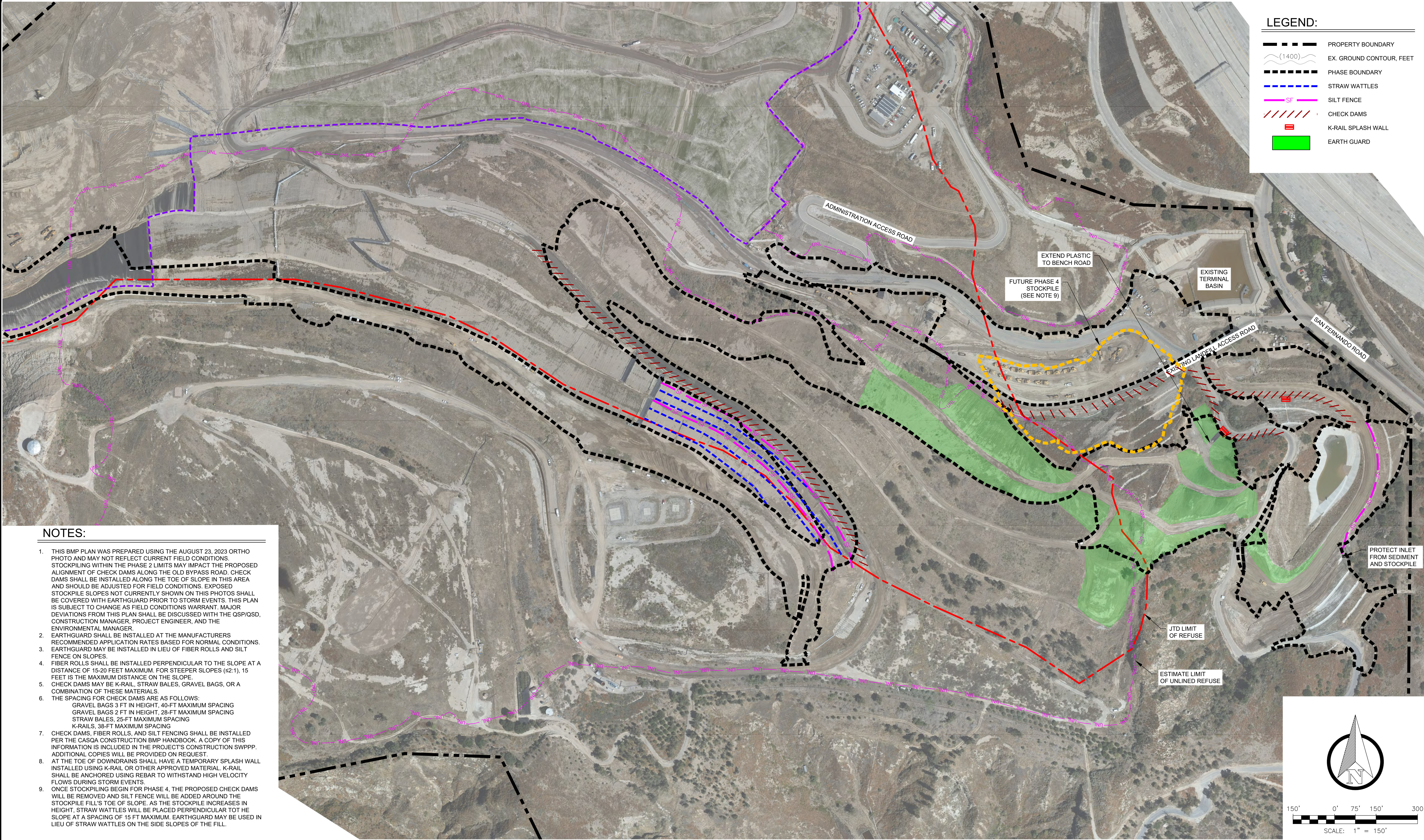
100' 0' 50' 100' 200'
SCALE: 1" = 100'

ISSUED FOR CONSTRUCTION
REFERENCE AERIAL TOPO BASED ON FEBRUARY 13, 2020
AERIAL SURVEY BY COOPER AERIAL SURVEYS CO.

ATTACHMENT 2

ENTRANCE ROAD IMPROVEMENTS CONSTRUCTION PROJECT PHASE 3 EROSION CONTROL MEASURES

P:\SITES\SUNSHINE CYN LF\ULTIMATE ENTRANCE AREA PHASE 3\FIGURES\S023.1102-SCU-UEP-INTERIM EC-PH 1, 2, & 3-(2023-09-22).DWG September 27, 2023 - 3:42 PM BY: GJA-LISER



NOTES:

1. THIS BMP PLAN WAS PREPARED USING THE AUGUST 23, 2023 ORTHO PHOTO AND MAY NOT REFLECT CURRENT FIELD CONDITIONS. STOCKPILING WITHIN THE PHASE 2 LIMITS MAY IMPACT THE PROPOSED ALIGNMENT OF CHECK DAMS ALONG THE OLD BYPASS ROAD. CHECK DAMS SHALL BE INSTALLED ALONG THE TOE OF SLOPE IN THIS AREA AND SHOULD BE ADJUSTED FOR FIELD CONDITIONS. EXPOSED STOCKPILE SLOPES NOT CURRENTLY SHOWN ON THIS PHOTOS SHALL BE COVERED WITH EARTHGUARD PRIOR TO STORM EVENTS. THIS PLAN IS SUBJECT TO CHANGE AS FIELD CONDITIONS WARRANT. MAJOR DEVIATIONS FROM THIS PLAN SHALL BE DISCUSSED WITH THE QSP/QSD, CONSTRUCTION MANAGER, PROJECT ENGINEER, AND THE ENVIRONMENTAL MANAGER.
2. EARTHGUARD SHALL BE INSTALLED AT THE MANUFACTURERS RECOMMENDED APPLICATION RATES BASED FOR NORMAL CONDITIONS.
3. EARTHGUARD MAY BE INSTALLED IN LIEU OF FIBER ROLLS AND SILT FENCE ON SLOPES.
4. FIBER ROLLS SHALL BE INSTALLED PERPENDICULAR TO THE SLOPE AT A DISTANCE OF 15-20 FEET MAXIMUM. FOR STEEPER SLOPES ($\leq 2:1$), 15 FEET IS THE MAXIMUM DISTANCE ON THE SLOPE.
5. CHECK DAMS MAY BE K-RAIL, STRAW BALES, GRAVEL BAGS, OR A COMBINATION OF THESE MATERIALS.
6. THE SPACING FOR CHECK DAMS ARE AS FOLLOWS:
GRAVEL BAGS 3 FT IN HEIGHT, 40-FT MAXIMUM SPACING
GRAVEL BAGS 2 FT IN HEIGHT, 28-FT MAXIMUM SPACING
STRAW BALES, 25-FT MAXIMUM SPACING
K-RAILS, 38-FT MAXIMUM SPACING
7. CHECK DAMS, FIBER ROLLS, AND SILT FENCING SHALL BE INSTALLED PER THE CASQA CONSTRUCTION BMP HANDBOOK. A COPY OF THIS INFORMATION IS INCLUDED IN THE PROJECT'S CONSTRUCTION SWPPP. ADDITIONAL COPIES WILL BE PROVIDED ON REQUEST.
8. AT THE TOE OF DOWNDRAINS SHALL HAVE A TEMPORARY SPLASH WALL INSTALLED USING K-RAIL OR OTHER APPROVED MATERIAL. K-RAIL SHALL BE ANCHORED USING REBAR TO WITHSTAND HIGH VELOCITY FLOWS DURING STORM EVENTS.
9. ONCE STOCKPILING BEGIN FOR PHASE 4, THE PROPOSED CHECK DAMS WILL BE REMOVED AND SILT FENCE WILL BE ADDED AROUND THE STOCKPILE FILL'S TOE OF SLOPE. AS THE STOCKPILE INCREASES IN HEIGHT, STRAW WATTLES WILL BE PLACED PERPENDICULAR TOT HE SLOPE AT A SPACING OF 15 FT MAXIMUM. EARTHGUARD MAY BE USED IN LIEU OF STRAW WATTLES ON THE SIDE SLOPES OF THE FILL.

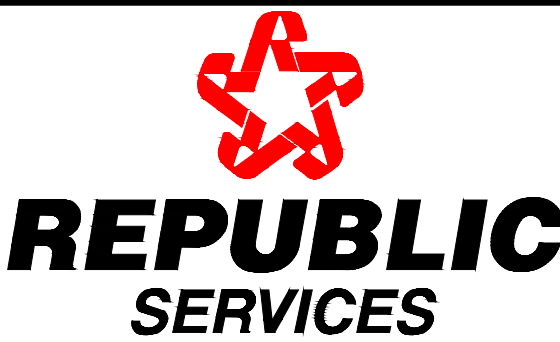
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REV. NO.	DATE	DESCRIPTION	APPROVED BY	DATE OF ISSUE: AUGUST 2023
				DESIGNED BY: --
				CAD DESIGN BY: L. PADILLA
				CHECKED BY: M. FOUAD
				APPROVED BY: M. FOUAD



Geo-Logic
ASSOCIATES

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SUNSHINE CANYON LANDFILL
14747 SAN FERNANDO ROAD
SYLMAR, CA 91342

SUNSHINE CANYON LANDFILL
ULTIMATE ENTRANCE IMPROVEMENT PROJECT
INTERIM EROSION CONTROL PLAN
PHASES 1-3

DWG NO.
FIG-1
PROJECT NO.
S023.1102

REFERENCE AERIAL IMAGE BASED ON AUGUST 23, 2023 AERIAL SURVEY BY FIRMATEK

ISSUED FOR REVIEW

ATTACHMENT H

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Sunshine Canyon Landfill, Facility ID No. 49111

Odor Complaints Reported to South Coast AQMD Alleging SCL; and Notices of Violation (NOV) Summary from 2009 through December 2023

Public Nuisance: South Coast AQMD Rule 402; Calif. H&S 41700

		Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Total NOVs	Total Complaints
2014	Complaints	32	37	164	122	52	28	83	81	302	223	80	278		1482
	NOVs	0	0	4	5	1	0	2	4	6	5	3	7	37	
2015	Complaints	260	119	297	60	12	41	23	126	337	370	85	65		1795
	NOVs	5	3	7	2	0	0	0	2	11	7	2	0	39	
2016	Complaints	100	188	185	181	30	74	52	85	206	193	206	59		1559
	NOVs	2	4	6	5	0	1	1	1	2	4	4	1	31	
2017	Complaints	200	254	274	116	19	10	14	30	44	27	22	18		1028
	NOVs	6	7	6	1	0	0	0	0	0	0	0	0	20	
2018	Complaints	32	18	21	9	5	9	16	6	33	21	2	36		208
	NOVs	0	0	0	0	0	0	0	0	0	0	0	1	1	
2019	Complaints	17	17	76	12	2	5	7	7	95	82	14	16		350
	NOVs	0	1	1	0	0	0	0	0	1	2	0	0	5	
2020	Complaints	29	17	12	33	98	20	23	82	105	121	18	22		580
	NOVs	0	0	0	0	2	1	0	1	3	4	0	1	12	
2021	Complaints	7	10	3	22	4	31	27	71	55	74	59	83		446
	NOVs	0	0	0	1	0	0	0	2	1	2	0	0	6	
2022	Complaints	158	84	58	38	17	40	12	40	85	64	25	32		653
	NOVs	5	1	0	1	0	2	0	0	2	1	0	0	12	
2023	Complaints	226	191	146	185	32	22	34	264	148	230	130	113		1721
	NOVs	6	7	5	11	1	0	1	9	4	6	7	4	61	
Total R402 NOVs Issued to Date															
Total Complaints *															14,959
Total R402 NOVs Issued **															311

45/8524.0

* Includes 5,137 Complaints from 2009 through 2013

** Includes 87 NOVs from 2009 through 2013

*** Includes eight NOVs from 2011 through 2013

January 4, 2024

NOVs for Other South Coast AQMD Rules

	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	
2014	0	0	0	0	0	0	0	0	0	0	0	0	0
Rule													
2015	0	0	0	0	0	0	0	0	0	0	0	0	0
Rule													
2016	0	0	0	0	0	0	0	0	0	0	0	0	0
Rule													
2017	0	0	0	0	0	0	0	0	0	0	0	0	0
Rule													
2018	1	0	0	0	0	0	0	0	0	0	0	0	1
Rule	3002, 431.1												
2019	0	0	0	0	0	0	0	0	0	0	0	0	0
Rule													
2020	0	0	0	0	0	0	0	0	0	0	0	0	0
Rule													
2021	0	0	0	0	0	0	0	0	0	0	0	0	0
Rule													
2022	0	0	0	0	0	0	0	0	0	0	0	0	0
Rule													
2023	1	0	0	0	1	0	1	2	1	0	0	0	6
Rule	403				402		403	403	403				
Total Other NOVs Issued***													15

* Includes 5,137 Complaints from 2009 through 2013

** Includes 87 NOVs from 2009 through 2013

*** Includes eight NOVs from 2011 through 2013

January 4, 2024

ATTACHMENT I



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

EDMUND G. BROWN, Jr., Governor
CHARLTON H. BONHAM, Director



November 27, 2017

Chris Coyle
Republic Services, Inc.
14747 San Fernando Road
Sylmar, CA 91342
Ccoyle@republicservices.com

Dear Mr. Coyle:

Complete Notification of Lake or Streambed Alteration
Notification No. 1600-2017-0220-R5
Chatsworth Reservoir Wetland/Riparian Mitigation Program

On October 26, 2017, the California Department of Fish and Wildlife (CDFW) received your Notification of Lake or Streambed Alteration (Notification). On November 27, 2017, your Notification was deemed complete.

CDFW is required to submit a draft Lake or Streambed Alteration Agreement (Agreement) to you within 60 calendar days from the date the Notification is complete, if CDFW determines that an Agreement is required for the project. An Agreement will be required if CDFW determines that your project could substantially adversely affect an existing fish or wildlife resource. Therefore, CDFW has until January 26, 2018, to issue you a draft Agreement or inform you that an Agreement is not required.

Please be advised that you may not proceed with any work until CDFW executes an Agreement, informs you that an Agreement is not needed, or does not provide you with a draft Agreement within 60 days of the date your notification was deemed complete.

If you have questions regarding this letter, please contact Brock Warmuth, Environmental Scientist, at 805-962-4698 or by email at brock.warmuth@wildlife.ca.gov.

Sincerely,

Erin Wilson
Senior Environmental Scientist (Supervisory)

ATTACHMENT J



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region/Region 5
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

EDMUND G. BROWN, Jr., Governor
CHARLTON H. BONHAM, Director



January 26, 2018

Chris Coyle
Republic Services, Inc.
14747 San Fernando Road
Sylmar, CA 91342
CCoyle@republicservices.com

Subject: Notification of Lake or Streambed Alteration No. 1600-2017-0220-R5
Chatsworth Reservoir Wetland/Riparian Mitigation Program Project

Dear Mr. Chris Coyle:

As the California Department of Fish and Wildlife (Department) explained in a previous letter to you dated November 27, 2017, the Department had until January 26, 2018 to submit a draft Lake or Streambed Alteration Agreement (Agreement) to you or inform you that an Agreement is not required. The Department did not meet that date. As a result, by law, you may now complete the project described in your notification without an Agreement.

Please note that pursuant to Fish and Game Code section 1602(a)(4)(D), if you proceed with this project, it must be the same as described and conducted in the same manner as specified in the notification and any modifications to that notification received by the Department in writing prior to November 27, 2017. This includes completing the project within the proposed term and seasonal work period and implementing all avoidance and mitigation measures to protect fish and wildlife resources specified in the notification. If the term proposed in your notification has expired, you will need to re-notify the Department before you may begin your project. Beginning or completing a project that differs in any way from the one described in the notification may constitute a violation of Fish and Game Code section 1602.

Also note that while you are entitled to complete the project without an Agreement, you are still responsible for complying with other applicable local, state, and federal laws. These include, but are not limited to, the state and federal Endangered Species Acts and Fish and Game Code sections 5650 (water pollution) and 5901 (fish passage).

Finally, if you decide to proceed with your project without an Agreement, you must have a copy of this letter and your notification with all attachments available at all times at the work site. If you have any questions regarding this matter, please contact Erinn Wilson at (562) 342-7172 or Erinn.Wilson@wildlife.ca.gov

Sincerely,

Erinn Wilson
Senior Environmental Scientist (Supervisory)



To: Republic Services and LADWP

From: Ray Corbett, JMA

Date: March 17, 2018

Subject: Native American Consultation regarding Chatsworth Reservoir project

After completion of the draft report on the results of Phase II Investigations at the Chatsworth Reservoir APE, I circulated the draft report (attached) along with the consultation letter (attached) among our consulting Native American Tribes for this project. Subsequently I followed up with phone calls to the respective Tribal representatives. All of the comments were positive and each tribe expressed satisfaction with the Phase II Investigation program and the ensuing draft report. All of the comments except one came through phone conversations. The single written response is attached.

I will finalize the Phase II Investigation report and submit it to the South Central Coastal Information Center of the California Historical Resource Information System located at California State University, Fullerton.

This completes the Native American consultation process for this phase of the project. In light of this, it would be appropriate to resurrect work on the MND Addendum.

If I can answer any questions please let me know.

Sincerely,

A handwritten signature in black ink that reads 'Ray Corbett'.

Ray Corbett, Ph.D., RPA
Principal Archaeologist
JMA

February 27, 2018

Dear Dr. Corbett,

Thank you for providing the draft report on the Chatsworth Reservoir Phase II Investigations. After review of the document provided by your office I would like to commend John Minch & Associates for generating an excellent report on the project. I am satisfied with the results of the Phase II archaeological field work performed in response to Tribal concerns surrounding the proximity of known prehistoric archaeological sites and the project's APE.

The Gabrielino Tongva Nation will look forward to continuing consultation and participation as the Chatsworth Reservoir Wetland and Riparian Mitigation Project progresses. As discussed in previous conversations, we look forward in providing tribal cultural resource monitoring when the need arises.

Sincerely,

Sam Dunlap
Cultural Resource Director
Gabrielino Tongva Nation
(909) 262-9351 cell

Tribal responses to a request for Native American Consultation regarding the *Initial Study and Draft Mitigated Negative Declaration for Chatsworth Reservoir Wetland and Riparian Mitigation Program* and *Phase I Cultural Resources Survey for the Chatsworth Reservoir Wetland Riparian Restoration Project*.

Dear Dr. Corbett,

In response to the Chatsworth Reservoir Wetland and Riparian Mitigation Project. After reading the Phase I Cultural Resource Survey, I strongly feel that the disturbance to this area would affect cultural resources along with various plant communities. As documented, there are sensitive sites, the water that has pushed through at one time could have very well carried any items of significance.

Thank you for your conscious effort in supporting Cultural Resources.

Sincerely,

Eleanor Arellanes Fishburn
Barbareno/Ventureno Band of Mission Indians
PO Box 5687
Ventura, CA 93005

Notes from phone conversation with Mr. Anthony Morales, Chairperson,
Gabrielino/Tongva San Gabriel Band of Mission Indians.

The fact that there was a reservoir there indicates there was water and this means there would be villages in the area, so we consider this to be important to our tribe and we, (the Gabrielino/Tongva San Gabriel Band of Mission Indians) want to be involved with any monitoring regarding this project.

Dr. Corbett,

The SYBCI Elders will not be getting involved in this project, but would like to make some comments about the protection and preservation of cultural resources;

1. They agree that additional survey and studies need to take place in and around the area are in order to better categorize the sites that do exist within the APE;
2. The survey plan for this project needs to be completed in consultation with tribes and agreed to by those involved;
3. Native American advisor/consultant need to be present during the surveys, as well as during any ground disturbing activities;

4. A plan needs to be created for long term preservation, in consultation with tribes. because once completed, this will more than likely become a refuge for wildlife and with that comes folks that interested in nature, i.e. bird watching, walking, plant viewing, etc.;

5. If at all possible, it would be nice to have available for tribes to possibly gather in the area plants that they would traditionally use.

These would be the comments and suggestions for this area. If there is no response from any of tribes, please advise and I will inform the Elders to see if they may want me to participate based on non-involvement by the tribes.

I look forward to hearing from you.

Freddie Romero
Cultural Resources Coordinator
SYBCI Elders Council
805-688-7997 X4109
805-403-2873

Notes from phone conversation with Mr. Robert Dorame, Chairperson, Gabrielino Tongva Indians of California Tribal Council. In the course of our phone conversation he said that he believed that the area was “highly sensitive” and that any ground disturbing activity be monitored by Native Americans. He went on to say that the monitoring should be rotated among Tribes. He informed me that he would not submit written comments (because of his busy schedule), but that he wanted what he conveyed to me by phone to serve as his Tribe’s comments.

Dear Dr. Corbett,

Thank you for contacting the Gabrielino Tongva Nation for the purpose of Native American consultation regarding the Chatsworth Reservoir Project. The project area lies within the traditional tribal territory of the Gabrielino Tongva Nation and the following comments are intended to express the concerns of our Tribe.

After review of the material provided by your office I am of the opinion that further archaeological investigation is needed to properly assess the recent discovery of the archaeological sites found within the project area by JMA during their site survey. I believe archaeological data recovery is warranted given the history of the project area.

As the project area is within our tribal territory the Gabrielino Tongva Nation is culturally affiliated to any prehistoric cultural items that may be discovered during new archaeological testing as well as any archaeological items already recorded within the project area and its vicinity.

The Gabrielino Tongva Nation also requests that a Native American monitor from our tribal group be present during all phases of archaeological testing and future subsurface construction activity associated with the Chatsworth Reservoir project. The Native American monitor will be a documented tribal member of the Gabrielino Tongva Nation.

I hope that my comments and concerns are helpful to this consultation process. Please feel free to contact me as this project moves forward.

Sincerely,

Sam Dunlap
Cultural Resource Director
Gabrielino Tongva Nation
909-262-9351 cell

Attn: Dr. Corbett, JMA

Thank you for providing the Torres Martinez Desert Cahuilla Indians with the notifications of your projects. However after having reviewed the information you have been providing and the locations of your projects it is apparent that you are out of our traditional use area. Therefore we wish to defer projects to other tribes closer to the area.

Respectfully,
Michael Miralez
Cultural Resource Coordinator
Torres-Martinez DCI
Office: 760-397-0300 Ext: 1213
Email: mmiralez@tmdci.org

The Gabrielino Band of Mission Indians – Kizh Nation communicated through a phone conversation that they wanted subsurface testing of the archaeological sites within the APE and that all ground disturbing activity be monitored by a Native American representative. Furthermore, by email the Tribe provided the following:

“The Chatsworth Reservoir area is definitely in Kizh Tribal Territory. Bernice Johnston (1962) identifies the Chatsworth area as in Gabrielino (Kizh) territory and states as to its sensitivity:

 "Many a modern community in the San Fernando Valley can boast of an Indian predecessor. From Tujunga to Chatsworth archeological sites (i.e. village sites) abound. . ."(Johnston 1962:125).

McCawley (1996) also includes the Chatsworth area as Gabrielino (Kizh) territory and specifically about Chatsworth Reservoir:

 "Melendrez (Kizh informant) reported to Harrington that a rancheria, or Indian community, existed near Chatsworth Reservoir. 'Melendrez v'd [volunteered]. . . that one long rancheria extended from where we were [probably northwest of Chatsworth Reservoir] a couple of miles to the

Triunfo ward [southwestward] of where we were and that fragments of shell, etc., are picked up in this whole stretch.' According to Harrington, Melendrez implied that 'the name of that rancheria was El Escorpion de las Salinas'. . ."

Respectfully submitted,

A handwritten signature in black ink that reads "Ray Corbett". The signature is written in a cursive style with a large, looping "R" and "C".

Ray Corbett, Ph.D., RPA
Principal Archaeologist
JMA
April 28, 2017

ERIC GARCETTI
Mayor

Commission
MEL LEVINE, *President*
WILLIAM W. FUNDERBURK JR., *Vice President*
JILL BANKS BARAD
CHRISTINA E. NOONAN
AURA VASQUEZ
BARBARA E. MOSCHOS, *Secretary*

DAVID H. WRIGHT
General Manager

June 13, 2017

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

Dear Ms. Costa:

This letter is to request that Republic authorize its consultant, JMA, to conduct additional studies as requested by the Native American Consultation survey findings. As discussed in our conference call on May 31, 2017, due to the request from some Tribes for additional studies, Republic/JMA will perform the requested additional studies, with permission from the Los Angeles Department of Water and Power (LADWP)

JMA will conduct additional studies on some or all of the archaeological sites in the Chatsworth Mitigation Project Area (Project Area), including additional survey, testing, and data recovery. There should be monitoring during of all ground-disturbing activity related to the project, and, to the extent possible, Native American tribes that specifically requested that their Tribe be involved with the monitoring should be included in the plan.

LADWP gives Republic permission to perform additional archaeological studies to include Tribes that request to be involved in the monitoring. Additionally, LADWP will allow tribal members who request to collect plants from the Project Area, to do so, subject to the scheduling of appointments and the availability of resources to provide access to the site.

If you have any questions regarding this matter, please contact Ms. Julie Van Wagner, Environmental Supervisor at julie.vanwagner@ladwp.com or me at heidi.hiraoka@ladwp.com.

We look forward to continue working with you on this project.

Sincerely,



Heidi HK Hiraoka
Manager of Property Management

bc: Julie Van Wagner
Chuck Holloway
Mark Sedleck

June 13, 2017

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

Dear Ms. Costa:

This letter is to request that Republic authorize its consultant, JMA, to conduct additional studies as requested by the Native American Consultation survey findings. As discussed in our conference call on May 31, 2017, due to the request from some Tribes for additional studies, Republic/JMA will perform the requested additional studies, with permission from the Los Angeles Department of Water and Power (LADWP).

JMA will conduct additional studies on some or all of the archaeological sites in the Chatsworth Mitigation Project Area (Project Area), including additional survey, testing, and data recovery. There should be monitoring during of all ground-disturbing activity related to the project, and, to the extent possible, Native American tribes that specifically requested that their Tribe be involved with the monitoring should be included in the plan.

LADWP gives Republic permission to perform additional archaeological studies to include Tribes that request to be involved in the monitoring. Additionally, LADWP will allow tribal members who request to collect plants from the Project Area, to do so, subject to the scheduling of appointments and the availability of resources to provide access to the site.

If you have any questions regarding this matter, please contact Ms. Julie Van Wagner, Environmental Supervisor at julie.vanwagner@ladwp.com or me at heidi.hiraoka@ladwp.com.

We look forward to continue working with you on this project.

Sincerely,

Heidi HK Hiraoka
Manager of Property Management



January 31, 2018

Dear Tribal Chairperson,

As the Archaeological Principal Investigator on the Chatsworth Reservoir Wetland and Riparian Mitigation Project, I am following up with an update regarding the results of Native American Consultation and the subsequent Phase II investigation for the sites in the project APE. In March 2017, I sent to Tribes the document titled *Initial Study and Draft Mitigated Negative Declaration for Chatsworth Reservoir Wetland and Riparian Mitigation Program* as well as the draft of our report documenting the archival research and the results of our pedestrian survey titled, *Phase I Cultural Resources Survey for the Chatsworth Reservoir Wetland Riparian Restoration Project, Los Angeles County, California*. My accompanying letter requested consultation, solicited input and welcomed any comments or questions from Tribes regarding cultural resources on this project. In April I followed up with phone calls and emails to tribes.

Gratefully, I received substantive comments and input from a number of Tribes which I compiled and forwarded to the property owner, the Los Angeles Department of Water and Power (LADWP). Summarizing the responses, the substantive comments primarily concerned three issues. 1) A number of Tribes requested that additional studies be conducted on some or all of the archaeological sites in the Chatsworth Area of Potential Effect (APE). Comments specifically mentioned additional survey, testing, and data recovery. 2) Virtually all Tribes commented that there should be Native American monitoring of all ground-disturbing activity related to the project and a few Tribes specifically requested that their Tribe be involved with the monitoring. 3) One Tribe requested that tribal members be allowed to gather plants from the Chatsworth Reservoir site for traditional purposes.

In the subsequent discussions in response to the Native American comments, The LADWP authorized the mitigation contractor, Republic Services, to commission additional investigation of the archaeological sites, Tribal monitoring of ground disturbing activity, and for tribal members to collect traditional plants. In August-September 2017, John Minch and Associates Inc. (JMA) conducted the Phase II investigations with the assistance and participation of tribal members. Attached is the recently-completed report on these investigations. Please review the draft report and I welcome and appreciate any comments or feedback. And if I can answer any questions please let me know.

Sincerely,

Ray Corbett, Ph.D., RPA
Principal Archaeologist
JMA

2620 Yucca Dr.
Camarillo, CA 93012
805-491-3062
rcorbett@jma-ca.com



November 29, 2016

Patti Costa
Sunshine Canyon Landfill
Republic Services, Inc.
14747 San Fernando Road
Sylmar, CA 91342

Subject: Update on Archaeological Services Performed for Chatsworth Reservoir Mitigation MND Addendum.

Dear Patti Costa,

As requested, John Minch and Associates, Inc. (JMA) is conducting an investigation to identify and document cultural resources in the proposed project area for the Chatsworth Reservoir Mitigation Project and prepare a report to satisfy requirements in compliance with the California Environmental Quality Act (CEQA). JMA staff performed the proposed archaeological services Tasks 1-3 on November 17th-18th. The tasks included: **Task 1)** a comprehensive archaeological records and literature search of a One-mile radius of the project area in order to identify known cultural resources and the potential impacts that may result from construction activities; **Task 2)** a pedestrian survey of the project area; **Task 3)** the recordation two newly discovered archaeological site locations that were located during the original 2010 field survey, and the recordation of a new site that was located during the November 2016 survey.

The results of the pedestrian survey include the identification of a new site location, and three isolated artifacts. All of the identified site locations are outside of the footprint of the mitigation area and can be avoided. However, the results of the Sacred Lands File check performed for Task 1 indicated a change in status of Sacred Lands within the Chatsworth Reservoir Mitigation Project area. The Native American Heritage Commission has informed us that the "Sacred Lands Inventory has records of sacred sites within the Chatsworth Reservoir APE". The items contained therein are confidential and exempt from the California Public Records Act pursuant to California Government Code Section 6254.10. Therefore information regarding the nature and location of these sacred sites must be obtained through direct consultation with Native Americans. Such information would then be used to assess the potential effects of the mitigation project on these sacred sites pursuant to CEQA and California Assembly Bill No. 52. In our opinion, due diligence addressing this issue would need to be exercised before a Mitigated Negative Declaration regarding cultural resources could be asserted.

JMA will continue progress on the additional two Tasks: **Task 4)** production of a comprehensive narrative report for review, and provide final revisions for the

Orange County
26623 Sierra Vista
Mission Viejo, CA 92692
Phone: 949-367-1000
www.jma-ca.com



Addendum; and as needed, **Task 5)** participation in any necessary meetings and/or conference calls during the remaining course of the project.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Edwin Minch'.

Edwin Minch
Managing Principal

ATTACHMENT K



GAIL FARBER, Director

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
<http://dpw.lacounty.gov>

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE

REFER TO FILE: **EP-5**

May 4, 2016

Mr. Rob Sherman, General Manager
Republic Services, Inc.
Sunshine Canyon Landfill
14747 San Fernando Road
Sylmar, CA 91342-1021

**SUNSHINE CANYON CITY/COUNTY LANDFILL
CONDITIONAL USE PERMIT NO. 00-194-(5)
AUTHORIZATION TO IMPORT CLEAN DIRT FROM THE LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT**

Dear Mr. Sherman:

We have reviewed your request dated July 28, 2015, and subsequent revision dated October 9, 2015, to import clean dirt from the Los Angeles County Flood Control District (District), beginning on April 2017, and ending on December 2021. Your request for importation of clean dirt for beneficial use at the Sunshine Canyon Landfill is hereby approved pursuant to Conditional Use Permit 00-194-(5), Conditions 1.D and 23.E, which requires Republic Services to obtain prior authorization from the Department of Public Works prior to importation and acceptance of clean dirt material for beneficial use and disposal at the site.

This authorization is being granted in order to allow the landfill to import soil for the site's daily and intermediate soil cover needs and other beneficial uses. Based on your submittal, the volume of on-site soil stockpile will be exhausted by October 2019 and importation of soil is necessary for effective landfilling operations at the site. This approval is subject to the following conditions:

1. The quantity of soil to be imported shall not exceed the following:
 - 2,200 tons per day average or 13,200 tons per week and
 - 2.5 million tons total for a 5-year duration of the project

Mr. Rob Sherman, General Manager

May 4, 2016

Page 2

2. The quantity of soil imported (tonnage) shall be included in the total permitted weekly tonnage capacity of materials (Solid Waste, Inert Debris and Beneficial Use Materials), which is limited to 72,600 tons per week. Pursuant to the CUP, in no event shall the daily tonnage of all materials received by the Landfill exceed 12,100 tons on any given day, six working days per week.
3. Limited only to Clean Dirt and sediments from the District
4. The soil importation schedule shall be from Monday to Friday, between the hours of 7:00 am to 6:00 pm.
5. The imported soil shall only be used for on-site daily and intermediate soil cover needs and other beneficial uses at the site.
6. All incoming and departing truck routes associated with this soil importation project shall be limited to Roxford Street, Sepulveda Boulevard and San Fernando Road.
7. The imported soil shall be placed adjacent to the working face area for immediate usage in a designated location, or, if soil is not needed at the working face, it will be taken to a designated stockpile location as defined in the Joint Technical Document. Additionally, all stockpile areas shall be vegetated if left unused longer than 180 days.
8. The operator shall comply with the currently approved Fugitive Dust Control Program to minimize dust resulting from the importation project
9. The operator shall follow the approved Waste Load Checking Program and the Waste Discharge Requirements issued by the California Regional Water Quality Control Board to ensure the imported soil's quality is acceptable under this program and permit.
10. Republic shall keep records of all materials received from the District including quantities accepted, stockpiled, beneficially used, and disposed of.

Mr. Rob Sherman, General Manager

May 4, 2016

Page 3

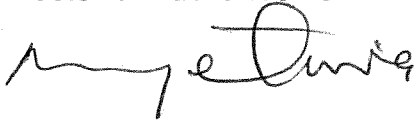
11. The operator shall submit a monthly summary of these records on an annual basis, including a stockpile location map, to Public Works' Environmental Programs Division at the end of each calendar year for the duration of this project.
12. The Director of Public Works, at his/her sole discretion may rescind or terminate this approval if the Department determines that any of the conditions of approval has been violated and/or that such termination is necessary to protect public health, safety, welfare, and/or the environment.

If you have any questions, please contact me at (626) 458-3553, Monday to Thursday, 7:00 a.m. to 5:30 p.m.

Very truly yours,

GAIL FARBER

Director of Public Works



MARTIN AIYETIWA

Senior Civil Engineer

Environmental Programs Division

DN:jl

P:\Sec\Sunshine Canyon Landfill Importation of Soil from FCD

cc: Sunshine Canyon Landfill Local Enforcement Agency (Gerry Villalobos, David Thompson)
Department of Regional Planning (Maria Masis, Tim Stapleton)
Department of Public Health (Gerry Villalobos)
City of Los Angeles Department of City Planning (Nicholas Hendricks, Ly Lam)
Sunshine Canyon Landfill Technical Advisory Committee (Lisa Webber, Jon Sanabria)
Sunshine Canyon Landfill Community Advisory Committee (Wayde Hunter, Gale Gunderson, Joe Vitti)
Members of the Los Angeles County Solid Waste Management Committee/Integrated Waste Management Task Force
County of Los Angeles Public Works, Water Resources Division (Chris Stone, Ken Zimmer)

NOTICE OF VIOLATION

May 02, 2023

Browning Ferris Industries of California, Inc.
Republic Services, Inc.
ATTN: Michael Stewart
14747 San Fernando Rd
Sylmar, CA 91342

Code Enforcement Case Number: RPZPE2023000609
Conditional Use Permit: 00-194

Dear Property Owner/Tenant:

A review of Conditional Use Permit (CUP) 00-194 and associated reports for the landfill operation located at 14747 San Fernando Road, Los Angeles, CA 91342, disclosed the following violation(s):

1. **Conditional Use Permit Violation**

One or more conditions of an approved Conditional Use Permit are not being met (Los Angeles County Zoning Code: 22.242.020; 22.242.030)

Condition 21: The maximum tonnage capacity to be received by the Landfill shall be as follows:

A. The City/County Project:

Weekly Tonnage Capacity

I. Subject to the daily tonnage limit set forth in subsection II below, when operating as a City/County Project, the amount of Solid Waste that may be disposed of in the Landfill shall not exceed 66,000 tons per week, and the amount of Inert Debris and Beneficial Use Materials deposited shall not exceed 6,600 tons per week, for an overall total of all materials of 72,600 tons.

Daily Tonnage Capacity

II. When operating as a City/County Project, the daily tonnage capacity of all materials received by the Landfill collectively in both

Case Number:
RPZPE2023000609

Permit Number:
00-194

Zone:
A-2-2

Investigating Planner:
Edgar De La Torre

Email:
edelatorre@planning.lacounty.gov

Phone Number:
213-974-6483

Monday - Thursday

jurisdictions, as described in subsection I above, shall not exceed 12,100 tons on any given day, six working days per week (based on the permitted maximum intake rate of 5,500 tons per day in the City and the permitted maximum intake rate of 6,600 tons per day in the County). The Permittee may allocate that total between the jurisdictions as it deems appropriate.

Los Angeles County Public Works has reviewed the Monthly Tonnage Reports from Republic for the months of July 2022 to March 2023 and have found that the landfill has exceeded the daily tonnage capacity of 12,100 tons for all material on numerous days each month.

July 2022 – Total days of exceedances was 6.
August 2022 – Total days of exceedances was 7.
September 2022 – Total days of exceedances was 13.
October 2022 – Total days of exceedances was 18.
November 2022 – Total days of exceedances was 12.
December 2022 – Total days of exceedances was 9.
January 2023 – Total days of exceedances was 5.
February 2023 – Total days of exceedances was 10.
March 2023 – Total days of exceedances was 4.

In order to abate this violation and comply with Condition 21, SCL must immediately stop exceeding the permitted daily tonnage capacity limits detailed in Condition 21.

Please consider this an order to comply with the provisions of CUP 00-194. Failure to correct the violation(s) as provided in Condition 11 of the CUP shall result in the imposition of the penalty in the amount of \$1,000 per violation.

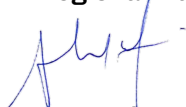
As also provided by Condition 11 of the CUP, you may appeal this notice of violation to a Hearing Officer pursuant to Section 22.242.070(C)(1) [formerly, Section 22.60.390(C)(1)] of the Los Angeles County Code within fifteen (15) days of receipt of this notice.

Furthermore, continued noncompliance may also cause this matter to be referred to the District Attorney or County Counsel at any time with the request that a criminal complaint be filed if compliance is not achieved.

For any other inquiries please contact the investigating planner directly as noted by the contact information listed in the right-hand column on page 1.

Sincerely,

Amy J. Bodek, AICP
Director,
Regional Planning



Alex Garcia
Supervising Regional Planner
Zoning Enforcement Special Projects

Ref: RPZPE2023000609

Page 2 of 2

NOTICE OF VIOLATION RESCISSION

October 16, 2023

Browning Ferris Industries of California, Inc.
Republic Services, Inc.
ATTN: Michael Stewart
14747 San Fernando Rd
Sylmar, CA 91342

56

Code Enforcement Case Number: RPZPE2023000609

Conditional Use Permit Number: 00-194

Dear Michael Stewart:

Per the request of the County of Los Angeles Department of Public Works, LA County Planning hereby rescinds the Notice of Violation (NOV) dated May 2, 2023, that cited violations of Condition 21 of the Conditional Use Permit 00-194 for exceeding daily tonnage limits.

Please be advised that the rescission of the NOV is without prejudice to the authority and discretion of the County of Los Angeles (County) to issue a new NOV, in the future, based on the same or similar issues, or otherwise. Furthermore, the County reserves all rights and remedies under the Conditional Use Permit 00-194 and applicable law.

For any other inquiries please contact Edgar De La Torre of my staff at 213-974-6483 or edelatorre@planning.lacounty.gov. Our office hours are Monday – Thursday, 7am – 6pm.

Sincerely,

Amy J. Bodek, AICP
Director,
Regional Planning

Steven Jareb

Steven Jareb
Supervising Regional Planner
Zoning Enforcement Special Projects

Ref: RPCE2023000609

ATTACHMENT L

VAN AMBATIELOS
PRESIDENT

JAVIER NUNEZ
VICE PRESIDENT

JOSELYN GEAGA-ROSENTHAL
GEORGE HOVAGUIMIAN
ELVIN W. MOON



ERIC GARCETTI
MAYOR

OSAMA YOUNAN, P.E.
GENERAL MANAGER
SUPERINTENDENT OF BUILDING

GEOLOGY AND SOILS REPORT APPROVAL LETTER

August 7, 2020

LOG # 112559-01
SOILS/GEOLOGY FILE - 2
LIQ/LAN/AP-Exempt

Republic Services
14747 N. San Fernando Road
Sylmar, CA 91344

TRACT: 10422
LOT(S): FR 9 (Arbs. 1 & 2)
LOCATION: 14747 N. San Fernando Road

<u>CURRENT REFERENCE REPORT/LETTER(S)</u>	<u>REPORT No.</u>	<u>DATE OF DOCUMENT</u>	<u>PREPARED BY</u>
Request for Modification	RFM 27303	08/07/2020	LADBS
Geology/Soils Report	SO19.1200	06/11/2020	Geo-Logic Associates
Oversized Doc(s).	"	"	"

<u>CURRENT REFERENCE REPORT/LETTER(S)</u>	<u>REPORT No.</u>	<u>DATE OF DOCUMENT</u>	<u>PREPARED BY</u>
Dept. Review Letter	112559	03/31/2020	LADBS
Geology/Soils Report	SO19.1200	03/09/2020	Geo-Logic Associates

The Grading Division of the Department of Building and Safety has reviewed the referenced report that provides recommendations for the proposed termination fill berm ranging up to 200 feet in height, cut slopes ranging up to 100 feet in height, and retaining walls ranging up to 15 feet in height. The new berm will be located at the main entrance area and is intended to expand the capacity of the landfill area to accommodate future municipal solid waste. The fill berm will be at a gradient of 1½:1 (H:V) on the west-facing side of the berm and 1¾:1 (H:V) on the east-facing side. Additionally, the eastern portion of the berm will range in gradient from 1¾:1 to 2:1 (H:V) to accommodate a new access road. The consultants recommend to support the proposed retaining walls on conventional foundations bearing on properly placed fill and/or competent bedrock.

Subsurface exploration performed by the consultant consisted of six hollow stem borings and one core boring to a maximum depth of 103 feet. The geotechnical exploration was supplemented with borings from groundwater monitoring and gas probe monitoring wells. The earth materials at the subsurface exploration locations consist of up to 75 feet of uncertified fill underlain by alluvium and sandstone and siltstone bedrock. Geologic structure observed by the consultant within the grading area generally consisted of northeast to southeast dipping bedding between 21 and 62 degrees. Groundwater was encountered at a depth of 13 feet at the main entrance area near San Fernando Road.

A "Request for Modification of Building Ordinances" (RFM 27303) has been reviewed and approved by the Department to allow the placement of fill at gradients of 1½:1 and 1¼:1 (H:V) for the construction of the landfill termination berm.

The project is located within a Fault Zone identified by the State of California Alquist-Priolo Act and in a designated seismically induced landslide and liquefaction hazard zones as shown on the Seismic Hazard Zones map issued by the State of California. However, the proposed construction is currently exempt (P/BC 2020-044).

As of January 1, 2020, the City of Los Angeles has adopted the new 2020 Los Angeles Building Code (LABC). The 2020 LABC requirements will apply to all projects where the permit application submittal date is after January 1, 2020.

The referenced report is acceptable, provided the following conditions are complied with during site development:

(Note: Numbers in parenthesis () refer to applicable sections of the 2020 City of LA Building Code. P/BC numbers refer the applicable Information Bulletin. Information Bulletins can be accessed on the internet at LADBS.ORG.)

1. Conformance with the Zoning Code Section 12.21 C8, which limits the heights and number of retaining walls, will be determined during structural plan check.
2. A detailed geologic mapping of the subgrade slope shall be performed during clearing and grubbing of slopes and during excavations, as recommended on page 34 of the 03/09/2020 report.
3. The geologist and soils engineer shall review and approve the detailed plans prior to issuance of any permits. This approval shall be by signature on the plans that clearly indicates the geologist and soils engineer have reviewed the plans prepared by the design engineer and that the plans include the recommendations contained in their reports (7006.1).
4. All recommendations of the report that are in addition to or more restrictive than the conditions contained herein shall be incorporated into the plans.
5. A copy of the subject and appropriate referenced reports and this approval letter shall be attached to the District Office and field set of plans (7006.1). Submit one copy of the above reports to the Building Department Plan Checker prior to issuance of the permit.
6. A grading permit shall be obtained for all structural fill and retaining wall backfill (106.1.2).
7. All graded, brushed or bare slopes shall be planted with low-water consumption, native-type plant varieties to protect slopes against erosion (7012).
8. All new graded slopes shall be no steeper than 2H:1V, except as specifically approved by the RFM (7010.2 & 7011.2).
9. Prior to the issuance of any permit, an accurate volume determination shall be made and included in the final plans, with regard to the amount of earth material to be exported from the site. For grading involving import or export of more than 1000 cubic yards of earth materials within the grading hillside area, approval is required by the Board of Building and Safety. Application for approval of the haul route must be filed with the Board of Building and Safety Commission Office. Processing time for application is approximately 8 weeks to hearing plus 10-day appeal period.
10. Man-made fill placed in the upper 40 feet shall be compacted to a minimum of 90 percent of the maximum dry density and 93 percent below 40 feet.

11. All man-made fill shall be compacted to a minimum 90 percent of the maximum dry density of the fill material per the latest version of ASTM D 1557. Where cohesionless soil having less than 15 percent finer than 0.005 millimeters is used for fill, it shall be compacted to a minimum of 95 percent relative compaction based on maximum dry density. Placement of gravel in lieu of compacted fill is only allowed if complying with LAMC Section 91.7011.3.
12. If import soils are used, no footings shall be poured until the soils engineer has submitted a compaction report containing in-place shear test data and settlement data to the Grading Division of the Department; and, obtained approval (7008.2).
13. Compacted fill shall extend beyond the footings a minimum distance equal to the depth of the fill below the bottom of footings or a minimum of three feet whichever is greater, except at locations where lateral over excavation is not possible (i.e., foundations adjacent to property lines or structures), in which case the foundations may be deepened to bear in competent bedrock, as recommended (7011.3).
14. Existing uncertified fill shall not be used for support of footings, concrete slabs or new fill (1809.2, 7011.3).
15. Drainage in conformance with the provisions of the Code shall be maintained during and subsequent to construction (7013.12).
16. Grading shall be scheduled for completion prior to the start of the rainy season, or detailed temporary erosion control plans shall be filed in a manner satisfactory to the Grading Division of the Department and the Department of Public Works, Bureau of Engineering, B-Permit Section, for any grading work in excess of 200 cubic yards (7007.1).

6262 Van Nuys Blvd. Ste 351, Van Nuys (818) 374-4605

17. The applicant is advised that the approval of this report does not waive the requirements for excavations contained in the General Safety Orders of the California Department of Industrial Relations (3301.1).
18. Excavations shall not remove lateral support from a public way, adjacent property or an existing structure. Note: Lateral support shall be considered to be removed when the excavation extends below a plane projected downward at an angle of 45 degrees from the bottom of a footing of an existing structure, from the edge of the public way or an adjacent property. (3307.3.1)
19. A supplemental report shall be submitted to the Grading Division of the Department containing recommendations for shoring, underpinning, and sequence of construction in the event that any excavation would remove lateral support to the public way, adjacent property, or adjacent structures (3307.3). A plot plan and cross-section(s) showing the construction type, number of stories, and location of the structures adjacent to the excavation shall be part of the excavation plans (7006.2).
20. All foundations shall derive entire support from properly placed fill or competent bedrock, as recommended and approved by the geologist and soils engineer by inspection.
21. Foundations adjacent to a descending slope steeper than 3:1 (horizontal to vertical) in gradient shall be a minimum distance of one-third the vertical height of the slope but need not exceed 40 feet measured horizontally from the footing bottom to the face of the slope (1808.7.2).
22. Footings supported on approved compacted fill or expansive soil shall be reinforced with a minimum of four (4), ½-inch diameter (#4) deformed reinforcing bars. Two (2) bars shall be placed near the bottom and two (2) bars placed near the top of the footing.

23. The foundation/slab design shall satisfy all requirements of the Information Bulletin P/BC 2017-116 "Foundation Design for Expansive Soils" (1803.5.3).
24. The seismic design shall be based on a Site Class C as recommended. All other seismic design parameters shall be reviewed by LADBS building plan check.
25. Retaining walls shall be designed for the lateral earth pressures specified in Appendix F of the 03/2020 report. All surcharge loads shall be included into the design.
26. Retaining walls higher than 6 feet shall be designed for lateral earth pressure due to earthquake motions as specified in Appendix F of the 03/2020 report (1803.5.12).
27. Retaining walls at the base of ascending slopes shall be provided with a minimum freeboard of 12 inches, as recommended.
28. The recommended equivalent fluid pressure (EFP) for the proposed retaining wall shall apply from the top of the freeboard to the bottom of the wall footing.
29. All retaining walls shall be provided with a standard surface backdrain system and all drainage shall be conducted in a non-erosive device to the street in an acceptable manner (7013.11).
30. With the exception of retaining walls designed for hydrostatic pressure, all retaining walls shall be provided with a subdrain system to prevent possible hydrostatic pressure behind the wall. Prior to issuance of any permit, the retaining wall subdrain system recommended in the soils report shall be incorporated into the foundation plan which shall be reviewed and approved by the soils engineer of record (1805.4).
31. Installation of the subdrain system shall be inspected and approved by the soils engineer of record and the City grading/building inspector (108.9).
32. Prefabricated drainage composites (Miradrain, Geotextiles) may be only used in addition to traditionally accepted methods of draining retained earth.
33. All concentrated drainage shall be conducted in an approved device and disposed of in a manner approved by the LADBS (7013.10).
34. Any recommendations prepared by the geologist and/or the soils engineer for correction of geological hazards found during grading shall be submitted to the Grading Division of the Department for approval prior to use in the field (7008.2, 7008.3).
35. The geologist and soils engineer shall inspect all excavations to determine that conditions anticipated in the report have been encountered and to provide recommendations for the correction of hazards found during grading (7008, 1705.6, & 1705.8).
36. Prior to pouring concrete, a representative of the consulting soils engineer shall inspect and approve the footing excavations. The representative shall post a notice on the job site for the LADBS Inspector and the Contractor stating that the work inspected meets the conditions of the report. No concrete shall be poured until the LADBS Inspector has also inspected and approved the footing excavations. A written certification to this effect shall be filed with the Grading Division of the Department upon completion of the work. (108.9 & 7008.2)
37. Prior to excavation an initial inspection shall be called with the LADBS Inspector. During the initial inspection, the sequence of construction, protection fences, and dust and traffic control will be scheduled (108.9.1).

38. Prior to the placing of compacted fill, a representative of the soils engineer shall inspect and approve the bottom excavations. The representative shall post a notice on the job site for the LADBS Inspector and the Contractor stating that the soil inspected meets the conditions of the report. No fill shall be placed until the LADBS Inspector has also inspected and approved the bottom excavations. A written certification to this effect shall be included in the final compaction report filed with the Grading Division of the Department. All fill shall be placed under the inspection and approval of the soils engineer. A compaction report together with the approved soil report and Department approval letter shall be submitted to the Grading Division of the Department upon completion of the compaction. In addition, an Engineer's Certificate of Compliance with the legal description as indicated in the grading permit and the permit number shall be included (7011.3).
39. Where foundations and/or slabs are to be supported on certified fill, no footing/slab shall be poured until the compaction report is submitted and approved by the Grading Division of the Department.



EDMOND LEE
Engineering Geologist Associate III



DAN RYAN EVANGELISTA
Structural Engineering Associate III

Log No. 112559-01
213-482-0480

cc: Geo-Logic Associates, Project Consultant
VN District Office

District	Log No. 112 559-0
----------	-------------------

INSTRUCTIONS

2. PROJECT ADDRESS: 14747 San Fernando Rd.
Sylmar, CA 91342

Tract: 10422

Block: 1 Lots: 9 Arb 1 & 2

3. OWNER: Republic Services

Address: 14747 San Fernando Rd.

City: Sylmar Zip: 91342

Phone (Daytime): 818-617-1143

4. APPLICANT

Address: 14747 Sandénado. Rd.

City: Sylmar Zip: 91342

Phone (Daytime): 818-612-1143

E-mail address: tno@republicservices.com

5. Report(s) Prepared by:

Geologic Associates

6. Report Date(s):

6/11/2020

7. Status of project: ☐ Proposed

☐ Under Construction☐ Storm Damage

8. Previous site reports? ☒ YES if yes, give date(s) of report(s) and name of company who prepared report(s)

9. Previous Department actions?

☒ YES

if yes, provide dates and attach a copy to expedite processing.

Dates:

10. Applicant Signature: _____

Tung Phu Ngo

Position: Environmental Manager

(DEPARTMENT USE ONLY)

REVIEW REQUESTED	FEES	REVIEW REQUESTED	FEES
<input type="checkbox"/> Soils Engineering		No. of Lots	
<input type="checkbox"/> Geology		No. of Acres	
<input type="checkbox"/> Combined Soils Engr. & Geol.		<input type="checkbox"/> Division of Land	
<input type="checkbox"/> Supplemental		Other	
<input checked="" type="checkbox"/> Combined Supplemental	363.00	<input checked="" type="checkbox"/> Expedite	181.50
<input type="checkbox"/> Import-Export Route		<input type="checkbox"/> Response to Correction	
Cubic Yards: <input type="text"/>		<input type="checkbox"/> Expedite ONLY	
		Sub-total	544.50
		Surcharges	129.80
		TOTAL FEE	674.30

ACTION BY: _____

Fee Due: 674.30

Fee Verified By: ml Date: 6/18/20
(Cashier Use Only)

ACTION BY:

THE REPORT IS:

☐ NOT APPROVED☐ APPROVED WITH CONDITIONS☐ BELOW☐ ATTACHED

For Geology		Date
For Soils		Date
GRADING REPORT		LA Department of Building and Safety
SYSTEMS DEV SURCH		LA HANN 10801614 6/19/20
GEN PLAN ALTIM SURCH		20 8:44:01 AM
DEV GEN/ CENTER SURCH	\$25.41	
STIP PLAN SURCH	\$11.39	
	\$21.78	
PLAN APPROVAL FEE		
SYSTEMS DEV SURCH	\$181.50	
	\$10.39	
GEN PLAN MAIN SURCH	\$12.71	

Receipt #: 0108179644

4674-30

Sub Total

DEV SERV CENTER SURCH	\$5.45
CITY PLAN SURCH	\$10.89
MISCELLANEOUS	
\$10.00	

14747 N San Fernando Road



Permit #:
Plan Check #: G2ILA00175
Event Code:

21030 - 10000 - 05897

Printed: 10/12/23 03:41 PM

Grading
Commercial
Regular Plan Check
Plan Check

City of Los Angeles - Department of Building and Safety

APPLICATION FOR GRADING PERMIT AND GRADING CERTIFICATE

Issued on: 10/12/2023

Last Status: Issued

Status Date: 10/12/2023

1. TRACT	BLOCK	LOT(s)	ARB	COUNTY MAP REF #	PARCEL ID # (PIN #)	2. ASSESSOR PARCEL #
TR 10422		LT 9	2	M B 157-38/44	228B133 49	2601 - 011 - 015

3. PARCEL INFORMATION

Airport Hazard Area - 840' Height Limit Above Elevation LADBS Branch Office - VN
 Airport Hazard Area - 870' Height Limit Above Elevation Council District - 12
 Airport Hazard Area - 900' Height Limit Above Elevation Cmpt. Fill Grd. - FG
 Airport Hazard Area - 930' Height Limit Above Elevation Certified Neighborhood Council - Granada Hills North
 Alquist Priolo - YES Census Tract - 1066.03

District Map - 228B133
 Energy Zone - 9
 Fire District - 2
 Fire District - VHFHSZ
 Flood Haz. Zone - A D=N/A E=N/A IN

ZONES(S): A1-1-O / [T][Q]M3-1-O

4. DOCUMENTS

ZI - ZI-1195 Construction Site Review: 1 ZA - ZA-13154	ZA - ZA-16211	ZA - ZA-1977-299
ZI - ZI-2427 FWY Adj Advisory Notice ZA - ZA-13266	ZA - ZA-17804-RV	ZA - ZA-1978-463
ZI - ZI-2438 Equine Keeping in the City ZA - ZA-13427	ZA - ZA-1958-14544	ZA - ZA-1983-318
ZAI - ZAI-1983-182	ZA - ZA-1961-15925	ZA - ZA-1988-1448-ZV

5. CHECKLIST ITEMS

Special Inspect - Grading: Area > 60,000 Sqft
 Special Inspect - Grading: Slope > 2:1
 Storm Water - NOI/SWPPP-1 acre and greater

6. PROPERTY OWNER, TENANT, APPLICANT INFORMATION

Owner(s):
 BROWNING FERRIS INDUSTRIES OF CA 0 PO BOX 29246

PHOENIX AZ 85038

Tenant:

Applicant: (Relationship: Agent for Owner)
 KATE DOWNEY -

(818) 362-2154

7. EXISTING USE**PROPOSED USE**

(70) Grading - Hillside

8. DESCRIPTION OF WORK

PHASE 3, 4, & 5 GRADING FOR FRONT ENTRANCE AND LANDFILL
 TERMINATION BERM. FILL = 1,383,224 CY ; IMPORT = 1,522,000 CY BOARD FILE
 220005 APPROVED FOR A MAXIMUM IMPORT OF 1,522,000 CUBIC YARDS

9. # Bldgs on Site & Use:**10. APPLICATION PROCESSING INFORMATION**

BLDG. PC By: Dan Ryan Evangelista
 OK for Cashier: Dan Ryan Evangelista

DAS PC By:
 Coord. OK:

Signature:

Date: 10/12/2023

For inspection requests, call toll-free (888) LA4BUILD (524-2845),
 or request inspections via www.ladbs.org. To speak to a Call Center
 agent, call 311. Outside LA County, call (213) 473-3231.

For Cashier's Use Only

W/O #: 13005897

11. PROJECT VALUATION & FEE INFORMATION Final Fee Period

Permit Valuation: 1,383,224 cu yd PC Valuation:

FINAL TOTAL Grading	48,535.50
Permit Fee Subtotal Grading	39,475.00
Plan Check Subtotal Grading	0.00
Off-hour Plan Check	0.00
Plan Maintenance	300.00
D.S.C. Surcharge	1,193.25
Sys. Surcharge	2,386.50
Planning Surcharge	2,386.50
Planning Surcharge Misc Fee	10.00
Planning Gen Plan Maint Surcharge	2,784.25
Permit Issuing Fee	0.00

Sewer Cap ID:

Total Bond(s) Due:

12. ATTACHMENTS

Plot Plan
 Signed Declaration

LA DBARROZO 10/12/23 3:41:32 PM

Payment Date: 10/12/23

Receipt No.: 2023285003-121

Amount: \$48,535.50

Method: ICL Check

Building Card No.: 2023LA06372



* 0 8 0 0 1 2 1 0 3 0 1 0 0 0 0 0 5 8 9 7 F N *

14. APPLICATION COMMENTS:

GRADING BOND COLLECTED UNDER PERMIT 20030-10000-05470

In the event that any box (i.e. 1-16) is filled to capacity, it is possible that additional information has been captured electronically and could not be printed due to space restrictions. Nevertheless the information printed exceeds that required by section 19825 of the Health and Safety Code of the State of California.

15. BUILDING RELOCATED FROM:

16. CONTRACTOR, ARCHITECT & ENGINEER NAME	ADDRESS	CLASS	LICENSE #	PHONE #
(C) SUKUT CONSTRUCTION LLC	4010 W CHANDLER AVENUE,	SANTA ANA, CA 92704	A	985106
(E) MINA,, FOUAD	17202 SILVER MOON CT,	RIVERSIDE, CA 92503		C52592
(E) WARNER,, ROBBIE MICHAEL	PO BOX 518/46, ICE HOUSE CANYON	MT BALDY, CA 91759051		GE2690
(G) VINCENT,, MARK WILLIAM	2546 THIRD ST,	LA VERNE, CA 91750		EG1873

PERMIT EXPIRATION/REFUNDS: This permit expires two years after the date of the permit issuance. This permit will also expire if no construction work is performed for a continuous period of 180 days (Sec. 98.0602 LAMC). Claims for refund of fees paid must be filed within one year from the date of expiration for permits granted by LADBS (Sec. 22.12 & 22.13 LAMC). The permittee may be entitled to reimbursement of permit fees if the Department fails to conduct an inspection within 60 days of receiving a request for final inspection (HS 17951).

17. LICENSED CONTRACTOR'S DECLARATION

I hereby affirm under penalty of perjury that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect. The following applies to B contractors only: I understand the limitations of Section 7057 of the Business and Professional Code related to my ability to take prime contracts or subcontracts involving specialty trades.

License Class: A License No.: 985106 Contractor: SUKUT CONSTRUCTION LLC

18. WORKERS' COMPENSATION DECLARATION

I hereby affirm, under penalty of perjury, one of the following declarations:

- ☐ I have and will maintain a certificate of consent to self insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.
- ☐ I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier: ACIG INS. CO.

Policy Number: WCA000027922

- ☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES

19. ASBESTOS REMOVAL DECLARATION / LEAD HAZARD WARNING

I certify that notification of asbestos removal is either not applicable or has been submitted to the AQMD or EPA as per section 19827.5 of the Health and Safety Code. Information is available at (909) 396-2336 and the notification form at www.aqmd.gov. Lead safe construction practices are required when doing repairs that disturb paint in pre-1978 buildings due to the presence of lead per section 6716 and 6717 of the Labor Code. Information is available at Health Services for LA County at (800) 524-5323 or the State of California at (800) 597-5323 or www.dhs.ca.gov/childlead.

20. CONSTRUCTION LENDING AGENCY DECLARATION

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civil Code).

Lender's Name (If Any): _____ Lender's Address: _____

21. FINAL DECLARATION

I certify that I have read this application INCLUDING THE ABOVE DECLARATIONS and state that the above information INCLUDING THE ABOVE DECLARATIONS is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes. I realize that this permit is an application for inspection and that it does not approve or authorize the work specified herein, and it does not authorize or permit any violation or failure to comply with any applicable law. Furthermore, neither the City of Los Angeles nor any board, department officer, or employee thereof, make any warranty, nor shall be responsible for the performance or results of any work described herein, nor the condition of the property nor the soil upon which such work is performed. I further affirm under penalty of perjury, that the proposed work will not destroy or unreasonably interfere with any access or utility easement belonging to others and located on my property, but in the event such work does destroy or unreasonably interfere with such easement, a substitute easement(s) satisfactory to the holder(s) of the easement will be provided (Sec. 91.0106.4.3.4 LAMC).

By signing below, I certify that:

- (1) I accept all the declarations above namely the Licensed Contractor's Declaration, Workers' Compensation Declaration, Asbestos Removal Declaration/ Lead Hazard Warning, Construction Lending Agency Declaration, and Final Declaration; and
- (2) This permit is being obtained with the consent of the legal owner of the property.

Print Name: _____ Sign: _____ Date: 10/12/2023 ☒ Contractor ☒ Authorized Agent

INSPECTION RECORD



Your feedback is important, please visit our website to complete customer Survey at www.ladbs.org/LADBSWeb/customer-survey.jsf
If you would like to provide additional feedback, need clarification, or have any question regarding plan check or inspection matters, please call our Customer Hotline at (213) 482-0056

For use by cashier only

2023LA06372

10/12/2023 12:00:00AM
dbar 2023285003-121
21030-10000-05897 Final

PERMIT NO : 21030-10000-05897

ADDRESS : 14747 N SAN FERNANDO ROAD

WORK DESC : PHASE 3, 4, & 5 GRADING FOR FRONT ENTRANCE AND LANDFILL TERMINATION BERM FILL = 1,383,224 CY ; IMPORT = 1,522,000 CY

INSPECTION RECORDS AND PLANS MUST BE AVAILABLE DURING INSPECTION

GRADING INSPECTIONS		
TYPE	DATE	INSPECTOR
Initial Grading		
Toe or Bottom		
Soils Report Approved		
DO NOT PLACE FILL UNTIL ABOVE IS SIGNED		
Backfill		
Fill		
Excavation		
Drainage Devices		
Rough Grading		
Approved Compaction Report		
FOOTING INSPECTIONS		
Footing Excavation		
Forms		
Reinforcing Steel		
OK to place concrete		
GROUNDWORK INSPECTIONS		
Electrical		
Plumbing		
Plumbing Methane		
Gas Piping		
Heating & Refrigeration		
Fire Sprinklers		
Disabled Access		
Methane		
OK to Place Floor		
DO NOT PLACE FLOOR UNTIL ABOVE IS SIGNED		
ROUGH INSPECTIONS		
Green Code		
Electrical		
Plumbing		
Fire Sprinkler		
Heating & Refrigeration		
Roof Sheathing		
Disabled Access		
Framing		
Insulation		
Suspended Ceiling		
OK to Cover		

FOR INSPECTION REQUESTS, PLEASE CALL 3-1-1
OR OUTSIDE CITY OF LOS ANGELES
888-LA4-BUILD (888)524-2845 or www.ladbs.org

DO NOT COVER UNTIL PREVIOUS IS SIGNED		
TYPE	DATE	INSPECTOR
Exterior Lathing		
Interior Lathing		
Drywall		
DO NOT COVER UNTIL ABOVE IS SIGNED		
WORK OUTSIDE OF THE BUILDING		
Electrical Underground		
Gas		
Heating & Refrigeration		
Sewer		
Disabled Access		
POOL INSPECTIONS		
Excavation		
Reinforcing Steel		
Bonding		
Piping		
Pre-Gunite		
Deck		
Enclosure/Fence		
Pool/Spa Cover		
DO NOT FILL POOL UNTIL ABOVE IS SIGNED		
FINAL INSPECTIONS		
Grading		
Electrical		
Plumbing		
Gas Test		
Gas		
Heating & Refrigeration		
Pressure Vessels		
Elevator		
Fire Sprinkler		
Disabled Access		
Green Building		
LAFD (Title 19 only)		
LAFD Fire Life Safety		
Pool Final		
AQMD sign-off provided		
Public Works		
Building		
PROJECT FINAL		

Certificate of Occupancy Required

☐ YES ☐ NO

SUPPLEMENTAL NOTES:

IMPORTANT NOTICE

- * **Prior to the start of any construction work adjacent to any public way, pedestrian protection shall be provided. (Sec. 91.3303 L.A.M.C.).**
- * Inspections may be requested Monday through Friday by calling 1-888-LA-4-BUILD. When requesting an inspection, the following information is required: (1) The job address, (2) Type of inspection, (3) Use of Building, (4) Permit number, (5) Phone number of a contact person should the department need to reach someone.
- * Inspection requests received before 4:00 p.m. Monday through Friday (excluding holidays) will normally be made the next business day. Requests received after 4:00 p.m. will be made following the next business day. The Automated Inspection Call Back System (AICBS) will phone the contact person to confirm the inspection.
- * Permit fees provide for a limited number of inspections. A reinspection fee may be assessed when the work for which an inspection was requested is not complete, when the inspection record or plans are not available, or when there is failure to provide site access to department staff.
- * No person shall perform any construction or repair work between the hours of 9:00 p.m. (6:00 p.m. grading) and 7:00 a.m. the following day which results in loud noises to the disturbance of persons occupying sleeping quarters in any dwelling, hotel, motel, apartment, or other place of residence (Sec. 41.40 L.A.M.C.).
- * No person, other than an individual homeowner engaged in the repair or construction of his/her single-family dwelling, shall perform any construction or repair work of any kind upon any building or structure located on land developed with residential buildings or perform work within 500 feet of land so occupied, before 8:00 a.m. or after 6:00 p.m. on any Saturday or at any time on Sunday (Sec. 41.40 L.A.M.C.).
- * Dust control measures to prevent dust from being blown or deposited over or upon any private property in any residential area must be implemented during any excavation or earth-moving phase of construction, sand blasting, or demolition.
- * A separate permit from the State of California Division of Industrial Safety is required prior to starting certain work involving substantial risk to workers such as: construction or demolition exceeding 3 stories or 36 feet in height, or excavations or trenches over 5 feet in depth involving entry by workers.
- * Building permits are valid for two years or expire on the 180th day from the date of issuance if the work permitted has not commenced. The department reserves the right to expire any permit where work has been suspended for a period of 180 days or more.
- * Inspection services will not be provided when there is an unleashed dog on the premises.

BUILDING AND SAFETY PERMIT AND PLAN CHECK OFFICE LOCATIONS

Downtown Los Angeles
201 N. Figueroa St., 4th Fl.
Los Angeles, CA 90012

Van Nuys
6262 Van Nuys Blvd., 2nd Fl.
Van Nuys, CA 91401

West Los Angeles
1828 Sawtelle Blvd., 2nd Fl.
Los Angeles, CA 90025

San Pedro
638 S. Beacon St., 2nd Fl.
San Pedro, CA 90731

South Los Angeles
8475 S. Vermont Ave., 2nd Fl.
Los Angeles, CA 90044

LE03-AWIN MANAGEMENT INC
REPUBLIC SERVICES

No 20041802
Check Date: 10/06/2023

CITY OF LOS ANGELES DEPT OF BLDG & SAFETY 201 N FIGUEROA ST 4TH FL LOS ANGELES, CA 90012				Vendor Number: 10016179	
INVOICE	DATE	DESCRIPTION	GROSS AMOUNT	DISCOUNT	NET AMOUNT
21030-10000-05897 URG OTV WITH ATTACH CITY OF	10/05/2023	LOS ANGELES BLDNG AND SAFETY FIN SVCS 201 N. FIGUEROA STREET #740 LOS AN	\$48,535.50	\$0.00	\$48,535.50
Detach at perforation Before Depositing Check			TOTALS:	\$48,535.50	\$0.00
					\$48,535.50

14747 N San Fernando Road



Permit #:

20030 - 10000 - 05470

Plan Check #: B20LA18067

Printed: 06/30/21 03:08 PM

Event Code:

Grading Commercial Regular Plan Check Plan Check	City of Los Angeles - Department of Building and Safety APPLICATION FOR GRADING PERMIT AND GRADING CERTIFICATE	Issued on: 06/30/2021 Last Status: Issued Status Date: 06/30/2021
---	--	---

1. TRACT TR 10422	BLOCK LT 9	LOT(s) LT 9	ARB 2	COUNTY MAP REF # M B 157-38/44	PARCEL ID # (PIN #) 228B133 49	2. ASSESSOR PARCEL # 2601 - 011 - 015
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3. PARCEL INFORMATION		
Airport Hazard Area - 840' Height Limit Above Elevation 790 Airport Hazard Area - 870' Height Limit Above Elevation 790 Airport Hazard Area - 900' Height Limit Above Elevation 790 Airport Hazard Area - 930' Height Limit Above Elevation 790 Alquist Priolo - YES	Area Planning Commission - North Valley LADBS Branch Office - VN Council District - 12 Cmpt. Fill Grd. - FG Certified Neighborhood Council - Granada Hills North	Community Plan Area - Granada Hills - Knollwood Census Tract - 1066.03 District Map - 228B133 Energy Zone - 9 Fire District - 2
ZONES(S): A1-1-O / [T][Q]M3-1-O		

4. DOCUMENTS		
ZI - ZI-1195 Construction Site Review: Depar	ZA - ZA-13154	ZA - ZA-16211
ZI - ZI-2208	ZA - ZA-13266	ZA - ZA-17804-RV
ZI - ZI-2427 FWY Adj Advisory Notice for St	ZA - ZA-13427	ZA - ZA-1958-14544
ZAI - ZAI-1983-182	ZA - ZA-13625	ZA - ZA-1961-15925
		ZA - ZA-1977-299
		ZA - ZA-1978-463
		ZA - ZA-1983-318
		ZA - ZA-1988-1448-ZV

5. CHECKLIST ITEMS
Special Inspect - Grading: Area > 60,000 Sqft
Special Inspect - Grading: Slope > 2:1

6. PROPERTY OWNER, TENANT, APPLICANT INFORMATION	
Owner(s): BROWNING FERRIS INDUSTRIES OF CALIFC 14747 SAN FERNANDO RD	SYLMAR CA 91342
Tenant:	
Applicant: (Relationship: Owner) TUONG-PHU NGO -	
(818) 617-1143	

7. EXISTING USE	PROPOSED USE (70) Grading - Hillside	8. DESCRIPTION OF WORK SITE PREP FOR PHASE 1 & 2 GRADING FOR FRONT ENTRANCE AND LANDFILL TERMINATION BERM. CUT = 80,000 CY.; FILL = 80,000 CY.; R&R 115,000 CY.; **NO IMPORT OR EXPORT**
------------------------	--	--

9. # Bldgs on Site & Use:	For inspection requests, call toll-free (888) LA4BUILD (524-2845), or request inspections via www.ladbs.org . To speak to a Call Center agent, call 311. Outside LA County, call (213) 473-3231.
10. APPLICATION PROCESSING INFORMATION	For Cashier's Use Only W/O #: 03005470
BLDG. PC By: Dan Ryan Evangelista OK for Cashier: Dan Ryan Evangelista Signature:	DAS PC By: Coord. OK: Date: 06/30/2021

11. PROJECT VALUATION & FEE INFORMATION	
Permit Valuation 80,000 cu yd	Final Fee Period PC Valuation:
FINAL TOTAL Grading	7,756.40
Permit Fee Subtotal Grading	6,225.00
Plan Check Subtotal Grading	0.00
Plan Maintenance	124.50
D.S.C. Surcharge	190.49
Sys. Surcharge	380.97
Planning Surcharge	380.97
Planning Surcharge Misc Fee	10.00
Planning Gen Plan Maint Surcharge	444.47
Permit Issuing Fee	0.00
Sewer Cap ID: Total Bond(s) Due: \$1,558,787.12	

12. ATTACHMENTS
Plot Plan
Signed Declaration



* 0 8 0 0 1 2 0 0 3 0 1 0 0 0 0 0 5 4 7 0 F N *

13. STRUCTURE INVENTORY

(Note: Numeric measurement data in the format "number / number" implies "change in numeric value / total resulting numeric value")

20030 - 10000 - 05470**14. APPLICATION COMMENTS:**

In the event that any box (i.e. 1-16) is filled to capacity, it is possible that additional information has been captured electronically and could not be printed due to space restrictions. Nevertheless the information printed exceeds that required by section 19825 of the Health and Safety Code of the State of California.

15. BUILDING RELOCATED FROM:**16. CONTRACTOR, ARCHITECT & ENGINEER NAME**

(C) SUKUT CONSTRUCTION LLC
(E) WARNER,, ROBBIE MICHAEL
(G) VINCENT,, MARK WILLIAM

ADDRESS

4010 WEST CHANDLER AVENUE,
PO BOX 518/46 ICE HOUSE CYN TRACT,
2546 THIRD ST,

SANTA ANA, CA 927045202
MT BALDY, CA 917590518
LA VERNE, CA 91750

CLASS

A

LICENSE #

985106
GE2690
EG1873

PHONE #

PERMIT EXPIRATION/REFUNDS: This permit expires two years after the date of the permit issuance. This permit will also expire if no construction work is performed for a continuous period of 180 days (Sec. 98.0602 LAMC). Claims for refund of fees paid must be filed within one year from the date of expiration for permits granted by LADBS (Sec. 22.12 & 22.13 LAMC). The permittee may be entitled to reimbursement of permit fees if the Department fails to conduct an inspection within 60 days of receiving a request for final inspection (HS 17951).

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I hereby affirm under penalty of perjury that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect. The following applies to B contractors only: I understand the limitations of Section 7057 of the Business and Professional Code related to my ability to take prime contracts or subcontracts involving specialty trades.

License Class: **A** License No.: **985106** Contractor: **SUKUT CONSTRUCTION LLC**

18. WORKERS' COMPENSATION DECLARATION

I hereby affirm, under penalty of perjury, one of the following declarations:

- ☐ I have and will maintain a certificate of consent to self insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.
- ☐ I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier: **ACIG INS. CO.** Policy Number: **WCA000017921**

- ☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

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I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civil Code).

Lender's Name (If Any): _____ Lender's Address: _____

21. FINAL DECLARATION

I certify that I have read this application **INCLUDING THE ABOVE DECLARATIONS** and state that the above information **INCLUDING THE ABOVE DECLARATIONS** is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes. I realize that this permit is an application for inspection and that it does not approve or authorize the work specified herein, and it does not authorize or permit any violation or failure to comply with any applicable law. Furthermore, neither the City of Los Angeles nor any board, department officer, or employee thereof, make any warranty, nor shall be responsible for the performance or results of any work described herein, nor the condition of the property nor the soil upon which such work is performed. I further affirm under penalty of perjury, that the proposed work will not destroy or unreasonably interfere with any access or utility easement belonging to others and located on my property, but in the event such work does destroy or unreasonably interfere with such easement, a substitute easement(s) satisfactory to the holder(s) of the easement will be provided (Sec. 91.0106.4.3.4 LAMC).

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- (1) I accept all the declarations above namely the Licensed Contractor's Declaration, Workers' Compensation Declaration, Asbestos Removal Declaration / Lead Hazard Warning, Construction Lending Agency Declaration, and Final Declaration; and
- (2) This permit is being obtained with the consent of the legal owner of the property.

Print Name: _____

Sign: _____

Date: **06/30/2021**

☒ Contractor

☒ Authorized Agent

EXPRESS PERMIT INSPECTION RECORD



Your feedback is important. Please visit our website to complete a Customer Survey at www.ladbs.org/LADBSWeb/customer-survey.jsf. If you would like to provide additional feedback, need clarification, or have any questions regarding plan check or inspection matters, please call our Customer Hotline at (213) 482-0056.

For use by cashier only

2021ON 45344

Payment Date: 06/30/2021

Receipt No: 1061465

Amount: \$7,756.40

Method: CC

PERMIT #: 20030 - 10000 - 05470

ADDRESS: 14747 N San Fernando Road

OWNER: Browning Ferris Industries Of California Inc
14747 San Fernando Rd
SYLMAR CA 91342

Grading

Commercial

Regular Plan Check

Plan Check

JOB DESCRIPTION: SITE PREP FOR PHASE 1 & 2 GRADING FOR FRONT ENTRANCE AND LANDFILL TERMINATION BERM.
CUT = 80,000 CY.; FILL = 80,000 CY.; R&R 115,000 CY.; **NO IMPORT OR EXPORT**

INSPECTION RECORDS AND PLANS MUST BE AVAILABLE DURING INSPECTION

GRADING INSPECTIONS		
TYPE	DATE	INSPECTOR
Initial Grading		
Toe or Bottom		
Soils Report Approved		
DO NOT PLACE FILL UNTIL ABOVE IS SIGNED		
Backfill		
Fill		
Excavation		
Drainage Devices		
Rough Grading		
Approved Compaction Report		
FOOTING INSPECTIONS		
Footing Excavation		
Form s		
Reinforcing Steel		
OK to Place Concrete		
GROUNDWORK INSPECTIONS		
Electrical		
Plum bing		
Plum bing Methane		
Gas Piping		
Heating & Refrigeration		
Fire Sprinklers		
Disabled Access		
Methane		
OK to Place Floor		
DO NOT PLACE FLOOR UNTIL ABOVE IS SIGNED		
ROUGH INSPECTIONS		
Green Code		
Electrical		
Plum bing		
Fire Sprinkler		
Heating & Refrigeration		
Roof Sheathing		
Disabled Access		
Fram ing		
Insulation		
Suspended Ceiling		
OK to Cover		
FOR INSPECTION REQUESTS, PLEASE CALL 3-1-1 OR OUTSIDE CITY OF LOS ANGELES 888-LA4-BUILD (888)524-2845 or www.ladbs.org		

DO NOT COVER UNTIL PREVIOUS IS SIGNED		
TYPE	DATE	INSPECTOR
Exterior Lathing		
Interior Lathing		
Drywall		
DO NOT COVER UNTIL ABOVE IS SIGNED		
WORK OUTSIDE OF THE BUILDING		
Electrical Underground		
Gas		
Heating & Refrigeration		
Sewer		
Disabled Access		
POOL INSPECTIONS		
Excavation		
Reinforcing Steel		
Bonding		
Piping		
Pre-Gunite		
Deck		
Enclosure/Fence		
Pool/Spa Cover		
DO NOT FILL POOL UNTIL ABOVE IS SIGNED		
FINAL INSPECTIONS		
Grading		
Electrical		
Plum bing		
Gas Test		
Gas		
Heating & Refrigeration		
Pressure Vessels		
Elevator		
Fire Sprinkler		
Disabled Access		
Green Building		
LAFD (Title 19 only)		
LAFD Fire Life Safety		
Pool Final		
AQMD Sign-off Provided		
Public Works		
Building		
PROJECT FINAL		

Certificate of Occupancy Required ☐ YES ☐ NO

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins or other markings on the paper.

- * **Prior to the start of any construction work adjacent to any public way, pedestrian protection shall be provided (Sec. 91.3303 L.A.M.C.).**
- * Inspection(s) may be requested anytime via the internet or touch tone phone. To request an inspection via the internet, go to www.ladbs.org and click on "Request an Inspection" under Online Services. To request an inspection via touch tone phone, call toll free (888) LA4BUILD (888-524-2845) and select option 1 for Automated Request System. To request an inspection via the Customer Call Center, call 3-1-1 within the City of Los Angeles or (213) 473-3231 outside the City of Los Angeles between 7:00 a.m. and 10:00 p.m.. When requesting an inspection, the following are required: (1) The job address, (2) Type of inspection, (3) Use of building, (4) Permit number, (5) Phone number of a contact person should the department need to reach someone.
- * Inspection requests received before 4:00 p.m. Monday through Friday (excluding holidays) will normally be made the next business day. Requests received after 4:00 p.m. will be made following the next business day. The Automated Inspection Call Back System (AICBS) will attempt to telephone the contact phonenumber to confirm the inspection.
- * Permit fees provide for a limited number of inspections. A reinspection fee may be assessed when the work for which an inspection was requested is not complete, when the inspection record or plans are not available, or when there is failure to provide site access to department staff.
- * No person shall perform any construction or repair work between the hours of 9:00 p.m. (6:00 p.m. grading) and 7:00 a.m. the following day which results in loud noises to the disturbance of persons occupying sleeping quarters in any dwelling, hotel, motel, apartment, or other place of residence (Sec. 41.40 L.A.M.C.).
- * No person, other than an individual homeowner engaged in the repair or construction of his/her single-family dwelling, shall perform any construction or repair work of any kind upon any building or structure located on land developed with residential buildings or perform work within 500 feet of land so occupied, before 8:00 a.m. or after 6:00 p.m. on any Saturday or at any time on Sunday (Sec. 41.40 L.A.M.C.).
- * Dust control measures to prevent dust from being blown or deposited over or upon any private property in any residential area must be implemented during any excavation or earth-moving phase of construction, sand blasting, or demolition.
- * A separate permit from the State of California Division of Industrial Safety is required prior to starting certain work involving substantial risk to workers such as: construction or demolition exceeding 3 stories or 36 feet in height, or excavations or trenches over 5 feet in depth involving entry by workers.
- * Building permits are valid for two years or expire on the 180th day from the date of issuance if the work permitted has not commenced. The department reserves the right to expire any permit where work has been suspended for a period of 180 days or more.
- * Inspection services will not be provided when there is an unleashed dog on the premises.

Downtown Los Angeles 201 N. Figueroa St., 4th Fl. Los Angeles, CA 90012	Van Nuys 6262 Van Nuys Blvd., 2nd Fl. Van Nuys, CA 91401	West Los Angeles 1828 Sawtelle Blvd., 2nd Fl. Los Angeles, CA 90025
San Pedro 638 S. Beacon St., 2nd Fl. San Pedro, CA 90731		South Los Angeles 8475 S. Vermont Ave., 2nd Fl. Los Angeles, CA 90044

ATTACHMENT M

July 28, 2023

Mr. David Nguyen
County of Los Angeles, Department of Public Works
900 South Fremont Avenue
Alhambra, CA 91803-1331

Subject: Sunshine Canyon Landfill, Quarterly Vegetation Report
Second Quarter 2023 Vegetation Report

Mr. Nguyen,

This report has been prepared in accordance with the following:

- Condition 18B of the Finding of Conformance
- Condition 44A of the Condition Use Permit (CUP)
- Los Angeles City Condition [Q] C.8 of the Ordinance No. 172,933

This report presents the progress of the site's landscaping and revegetation activities for the second quarter of 2023. The intent of these reports is to provide detailed information regarding the site's efforts related to vegetation including vegetation of interim and permanent slopes and activities conducted for the on-site sage mitigation areas.

Architerra Design Group continues to assist site personnel in evaluating current site conditions relating to vegetation and provide recommendations for future efforts. This report includes their assessment of the pilot sage vegetation area as well as recommendations for this area. Architerra's evaluation is in addition to the required quarterly monitoring performed by our consulting biologist.

1.0 Interim Slopes

For the purposes of this report, interim slopes are those defined as slope areas where no activities have taken place for 180 days or longer. CUP Condition 44A requires "a temporary hydroseed vegetation cover on any slope or landfill area that is projected to be inactive for a period of greater than 180 days".

1.1 Hydroseeding Activities

Based on the results of the trial project completed in August 2017, a 57-acre vegetative cover project using the approved seed mix was completed in mid-December 2017. Additionally, the site completed hydroseeding approximately 155 acres; application of the approved seed mix was completed during 2019. The increase in hydroseeding application is a result of our normal winterization efforts along with slope revegetation as a result of the Saddle Ridge Fire that impacted Sylmar, CA on October 2019. These areas had successful vegetation growth after the recent rains.

2.0 Permanent Slopes

Permanent slopes are defined as those where no landfilling activities will be conducted in the future.

As part of our Saddle Ridge Fire recovery efforts both the City and County permanent slopes of the landfill had hydroseed applied as necessary. This application of hydroseed was completed for soil stabilization purposes.

3.0 Non-Permanent Cut Slopes

Prior quarterly vegetation reports have illustrated one area above the front terminal sedimentation basin and one area near the temporary bypass road as “non-permanent cut slopes”. An evaluation of these areas has been conducted and it has been determined that these areas are “permanent slopes” because no landfilling activities will be conducted against these slopes in the future.

4.0 Activities Conducted in Sage Mitigation Areas – 2Q2023

During the second quarter of 2023, the following activities were conducted in the sage mitigation areas at the landfill.

4.1 City South Sage Pilot Project Area – Deck C

The lower Deck C mitigation project area was impacted by the Saddle Ridge fire in October 2019. As noted in Rincon’s (formerly JMA) City-Side Sage Mitigation Area Lower Deck report a substantial amount of the lower deck was burned or scorched. However, in previous reports they note that because this was an established site, they expect natural re-establishment of the native vegetation within the first two to three years. Rincon has noted a substantial amount of regrowth has occurred following the fire and included the most prevalent natives such as California Sunflower, Saltbush, Horsetail, and pockets of Wild Ryegrass. Rincon also indicated the intense weeding efforts implemented has greatly reduced the cover of the noxious non-native annual species and non-native plant cover has slightly declined between fourth quarter 2022 and first quarter 2023.

As reported previously, Architerra Design Group indicates that there has been an abundance of Venturan CSS species germinating and crown-sprouting since the

fire. The species following the rebound include Purple Sage, Coast Sunflower, White Sage, Creeping Wild Rye, Deerweed, Black Sage, and Mexican Elderberry. Surprisingly there are also new species from the original seed mix are now sprouting up in decent numbers and included in the list below:

- Purple Sage (*Salvia leucophylla*)
- Coast Sunflower (*Encelia californica*)
- White Sage (*Salvia apiana*)
- Creeping Wild Rye (*Leymus triticoides*)
- Deerweed (*Lotus scoparius*)
- Black Sage (*Salvia mellifera*)
- Mexican Elderberry (*Sambucus mexicana*)
- Scarlet Bugler (*Penstemon centranthifolia*)
- Telegraph Weed (*Heterotheca grandiflora*)
- Monkey Flower (*Mimulus aurantiacus*)
- Smooth-Leaf Yerba Santa (*Eriodictyon trichocalyx*)
- Thicketleaf Yerba Santa (*Eriodictyon crassifolium*)
- Sunflower (*Helianthus annuus*)
- California Bush Sunflower (*Encelia californica*)
- California Sagebrush (*Artemisia californica*)
- California Buckwheat (*Eriogonum fasciculatum*)
- Quail Bush (*Atriplex lentiformis*)
- Four-Wing Saltbush (*Atriplex canescens*)
- Cattle Spinach (*Atriplex polycarpa*)
- Spinescale (*Atriplex spinifera*)
- Toyon (*Heteromeles arbutifolia*)
- Foothill Needlegrass (*Nassella lepida*)
- Coyote Bush (*Baccharis pilularis*)
- Showy Penstemon (*Penstemon spectabilis*)
- Wright's Cudweed (*Pseudognaphalium microcephalum*)
- White Horehound (*Marrubium vulgare*) Non-Native
- Australian Saltbush (*Atriplex semibaccata*) Non-Native

As reported from Architerra, the abundance of historic level rains has assisted in the emergence of many of the Ventruan CSS Species. With the warmer temperatures, several of the VCSS species are currently going through their drought dormant stage. Many species of the Saltbush are in full bloom and new Saltbush plants germinated due to the extensive winter rains. California Bush Sunflower (*Encelia californica*), California Sagebrush (*Artemisia californica*), Deerweed (*Acmispon glaber*) and several Sage species (*Salvia* sp.) are now beginning summer dormancy response. Typically Mexican Elderberry (*Sambucus mexicana*) goes drought deciduous by this time of year, but due to the extended winter rains has not and is flowering and developing fruit thus providing a vital resource to many of the birds that visit the deck.

Also noted were new emerging seedlings of several invasive species; Shortpod Mustard (*Hirshfeldia incana*). Yellow Star Thistle (*Centaurea solstitialis*) reseeded and continues to be problematic. It was recommended maintenance

personnel work on removing these before they flower and seed. In Q2 maintenance worked on removing invasive species but it was also noted the interior of the deck still needed to be weeded. Also noted were to identify native species prior to any invasive removals. In addition, the majority of the Coast Live Oaks at the PM 10 berm have recovered from fire damage in 2020.

4.2 City South Deck B

The Deck B sage mitigation project began on April 9, 2018 and planting was completed by the end of the fourth quarter 2018. Soil samples indicated low pH and high salinity, as a result Deck B underwent a leaching schedule. Additional soil amendments and resampling were completed before planting began, which took place during the fourth quarter 2018. Pacific Restoration Group, Inc (PRG) has been working with Architerra for the completion of project. A summary of the progress is included in Attachment 3. The northwest portion of the Middle Deck burned during the Saddle Ridge Fire in October 2019. Architerra Design Group (ADG) indicated previously Deck B was doing quite well and there was evidence of desiccation of the seedlings especially the Common Yarrow and other native species that have recently spouted and are beginning to harden off and defoliate. Architerra has, in the past, also indicated the plant diversity on Deck B is impressive and many of the species in the seed mix have germinated and the containerized plants also are doing well and are blooming or just finished which are the White Sage, Mexican Elderberry, Menzie's Goldenbush, and Prickly Pear.

During Ricon's observation of Deck B, brittlebush (*Encelia farinosa*) coverage was estimated at 4%. Recognizing the concerns of the County Biologist, Republic will work with our mitigation team to recognize this plant and perform the next several quarters. It will also be removed from future seed mixes.

Revegetation efforts have been successful in the establishment of the Venturan Coastal Sage Scrub habitat and evidence of species and age diversity and resprouting of larger species. Architerra also noted Deck B site is similar to those found on Deck C in the growth of the VCSS. Deck B is also dominated by California Buckwheat (*Eriogonum fasciculatum*). However, the downslopes are primarily covered with little to no native species and should be addressed to remove the invasive weeds as soon as possible. The south side of the slope has been overtaken by invasive Slenderleaf Iceplant (*Mesembryanthemum nodiflorum*) and was growing in the revegetation area and has spread northward. The northern part of Deck B has been completely filled in and is well established with shading to prevent weed growth.

4.3 City South Deck A

In December 2022, Conversations with Architerra were started to discuss a plan to address the potential mitigation plans for Deck A. An onsite meeting occurred during May 2023 for an initial assessment of Deck A and determine what will need

to be done. We anticipate a tentative schedule to be established in the coming months.

Prior to any mitigation efforts, soil was placed in a large area affected by subsidence and graded for proper drainage. This occurred in June and July 2023 and it is anticipated in quarter four 2023, mitigation plans will commence to address the area.

The Deck A sage mitigation is anticipated to restart late 2023 and early 2024. Recent grading activity on approximately 1.5 acres occurred during the second quarter and into early third quarter 2023. This grading activity was completed in order to fill a low spot resulting from subsidence and which led to ponding during this past winter. The initial plan for Deck A is to partition the approximately 25 acres into more manageable 5-acre plots. The recently graded area will be part of the initial revegetation plot and is expected to start after the first rains to allow the soil to properly leach. Additional details outlining the steps to reseed and mitigate this area are included in Attachment 3.

4.4 County Sage Mitigation Area

The County sage mitigation area is located on the western side of the County portion of Sunshine Canyon Landfill (Drawing 1). As noted in the fourth quarter Rincon County-Side Sage Mitigation Area report the upper half of the mitigation site was burned in the Saddle Ridge fire in October of 2019. No revegetation activities were conducted in this area during the second quarter 2023, and as noted in multiple Rincon progress reports, the conditions in this mitigation area have remained unchanged for some time. Rincon notes in their attached 2023 second quarter vegetation report that this area remains problematic for establishment of vegetation due to barren soil. Soil samples from this location indicate low pH, high salinity, and Boron present in native soils.

5.0 Assessments of Sage Mitigation Areas

Assessments of the site's sage mitigation areas are conducted by a qualified biologist on a quarterly basis. The following sections present a summary of the recommendations for the sage mitigation areas from Rincon (City and County sage mitigation areas) and Archterra (City South Sage Pilot Project Area (Deck C) and Middle Deck (Deck B) and the proposed actions in response to the recommendations.

5.1 Rincon Recommendations for City Sage Mitigation Areas

Rincon's progress reports for the City Sage Mitigation Areas for the second quarter of 2023 are provided in Attachment 1. These reports include recommendations

based on the assessments. Table 1 presents a summary of these recommendations and the proposed actions.

- The booster pump and power that was destroyed in the Saddleridge Fire will need to be replaced for irrigation to deck A. Architerra's initial recommendation is to get a team on site to walk the deck and determine best strategy moving forwards to tackle the approximately 25 acres.

Table 1 – Rincon Recommendations and Proposed Actions – City Sage Mitigation Areas, Fourth Quarter 2022

AREA		RECOMMENDATION	PROPOSED ACTION
Lower, Middle, and Upper Decks (Decks C, B, and A)	1	Weed Control – Implement a year-round weed control program to control non-native species.	A weed control program is already in place on Deck C and B as part of the pilot project and will continue. A weed control program on A will be implemented along with the mitigation plans for these areas.
Lower, Middle Decks (Decks C, B)	2	Irrigation – Reinstall irrigation system if drought conditions continue to the areas to alleviate stress on regrowth	Even with above average rainfall this winter, supplemental irrigation systems may be reinstalled to promote germination and growth of native plants if signs of desiccation appear.
Lower, Middle, and Upper Decks (Decks C, B, and A)	3	Prohibit Access – Continue to prohibit vehicle access to mitigation areas.	Repairs to the T-post fencing will be made as needed.
Upper Deck (Deck A)	3	Improve root zone and soil conditions	This will be addressed when the plans for Deck A is developed. Actions were taken to address improving the root zone in Decks B & C; it is expected that similar actions will be incorporated into the plans for Deck A.
Upper Deck (Deck A)	4	Plant natives in areas dominated with non-natives	This will be addressed when the plans for Deck A are developed. Various planting methods were used for the construction of the pilot project on Decks B & C; it is expected that similar actions will be incorporated into the plans for Deck A.
Upper Deck (Deck A)	5	Reseeding – apply native seeds during the rainy season after soil mounds have been established	Deck A was partially regraded to fill in ponding locations. Reseeding will start in graded section in Q4 2023 or Q1 2024

Rincon also recommended that a monitoring biologist should be present during weed control activities or the native plants should be flagged to ensure only non-native species are removed. A monitoring biologist will be consulted prior to any weed control activities to ensure native plants are protected.

Architerra and Rincon continue to provide support to the Oakridge maintenance personnel to assist in removal of the invasive weeds on both Deck B and C. Architerra has pointed out some of the more aggressive weeds that have flourished since the Saddle Ridge Fire. Architerra provided them with images of the invasive weeds to help identify and target these invasive species. Oakridge Landscape have been diligently removing Russian Thistle, Wild Oat, Shortpod Mustard, Red Brome Grass, False Barley, Tree Tobabcco, and Yellow Star Thistle that took hold in the burned barren areas. During May 2023, An Architerra biologist was present during weeding activities to ensure native species are properly identified within the heavily non-native vegetation.

5.2 Rincon Recommendations for County Sage Mitigation Area

Table 2 presents a summary of the recommendations proposed by Rincon based on the assessment of the County Sage Mitigation Area and the proposed actions. Please refer to the full recommendations in the Rincon reports in Attachment 2.

Table 2 – Rincon Recommendations and Proposed Actions – County Sage Mitigation Area, Fourth Quarter 2022

AREA	RECOMMENDATION		PROPOSED ACTION
County Sage Mitigation Area	1	Create benches to control soil erosion and improve soil conditions to improve plant establishment and seed dispersal	Rincon and ADG continue to evaluate recommendations from the County Task Force and UltraSystems.
County Sage Mitigation Area	2	Reseed and plant container plants	A trail test pilot plan will be discussed with California Native shrubs.
County Sage Mitigation Area	3	Use soil amendments	A trial test plot would need to be developed. This recommendation will be considered at a later date.
County Sage Mitigation Area	5	Signage – Install signage indicating revegetation efforts.	Due to the slopes, stormwater channel and overall difficulty to access this area, personnel are limited to access this area.
County Sage Mitigation Area	6	Weed Control – Continue weeding as needed on a quarterly basis.	Personnel continues to evaluate the current status.

County Sage Mitigation Area	7	Prohibit Access – continue to prohibit vehicle access to mitigation deck.	Upper entrance has a locked gate, no further action is required.
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5.3 Architerra Inspection for City South Sage Mitigation Pilot Project Area – Second Quarter 2023

The inspection report is included in Attachment 3 along with photos of the area taken at the photo stations.

5.4 Quarterly Assessment of City South Sage Pilot Project Area

The methodology for assessment of the City South Sage Pilot Project Area developed by Rincon (formerly JMA) was included in the first quarter 2015 Vegetation Report. The evaluation report for the first quarter of 2023 based on this methodology is included in Attachment 4 and Attachment 5 for Deck C and Deck B, respectively. Concerns for the county-side stability for soil erosion will be addressed in the coming months. Current plans require some regrading and infrastructure repairs due to the extremely heavy rains over this past winter.

6.0 Status of Other Vegetated Areas

Big Cone Douglas Fir Tree Mitigation

As reported in the vegetation report for the first quarter of 2015, 200 Big Cone Douglas fir tree saplings were planted the third week of March 2015. These big cone Douglas fir pine trees continue to be monitored and maintenance activities were conducted in this mitigation area for 2022 and into the future.

A meeting with Rincon biologist was conducted on November 18, 2022 at the Big Cone Mitigation area. We will begin to work with local nurseries to help replace and replant some of the existing dead big cone pine and canyon oak. We are also evaluating a new location for planting more big cone pines and canyon oak in this area, and finally to establish healthy big cone pine and canyon oak in a timely established schedule. We look forward to working with the LA County forester, local nurseries in 2023. Plans to replenish the mitigation bank will commence with seed collection in the fall of 2023. Once the seeds are collected and stratified, seed will then be potted in the spring of 2024 whereas they will be allowed to germinate for a year at a nursery. Once saplings are viable, they will be brought to site to be planted in the mitigation area on site. This planting is anticipated the fall of 2025.

PM10 Berm

Republic Services hosted an Adopt-A-Tree event for employees and their family members. On Saturday, November 14th, 2020, at 2:00 pm, Fourteen (14) Coast Live Oak trees were planted in critical areas of the PM10 Berm that was damaged during the Saddleridge Fire.

Architerra and JMA (i.e. Rincon) assisted in the planting efforts with their expertise and knowledge of tree growth and ideal planting locations. Republic Services is actively working on hosting another Adopt-A-Tree event in Q4 2023 or Q1 2024.



Front Entrance Toe Berm

The proposed project involves the development of a landfill termination berm and construction of a roadway. There were 20 coast live oak trees surveyed within the project footprint by Rincon and project leads. One of the oak trees was dead, and all of them would be removed by the project activities. There are currently 48 coast live oak trees in the landfill's mitigation bank. As noted, the 20 coast live oak trees would be removed by the proposed project, therefore at a mitigation ratio of 2:1, a total of 40 coast live oak trees will be deducted from the landfill's oak tree mitigation bank, leaving 4 oak trees remaining in the bank for future removals at the landfill, if needed. A report detailing the survey is located in Attachment 6.

Donation to Local Community

As part of community outreach, a rancher in the area asked if he could plant some oak trees on his ranch nearby, and Sunshine Canyon agreed it would be a great idea. Thereafter on September 9th 2021, twenty-two (22) coast live oaks and two sycamores were donated from the Sunshine Canyon nursery and given to the rancher. The rancher

mentioned the oak trees shall provide shade for his livestock and beautify the surrounding private property and was very pleased with the trees.



Please do not hesitate to contact me at (818) 200-3016 if you have any questions.

Regards,

A handwritten signature in black ink that reads "Paul D. Koster II".

Paul D. Koster II
Environmental Manager
Sunshine Canyon Landfill

Cc: Ms. Dorcas Dee Hanson-Lugo, SCL LEA
Mr. David Thompson, SCL LEA
Ms. Tiffany Butler, City of Los Angeles, Department of City Planning
Ms. Devon Zatorski, City of Los Angeles Department of City Planning
Ms. Ly Lam, City of Los Angeles, Department of City Planning
Mr. Nicholas Hendricks, City of Los Angeles, Department of City Planning
Dr. Wen Yang, Los Angeles Regional Water Quality Control Board
Ms. Maria Masis, County of Los Angeles, Department of Regional Planning
Mr. Wayde Hunter, SCL CAC
Mr. Jim Aidukus, UltraSystems
County DPW Landfill Unit

Attachments

Attachment 1	Rincon Progress Report, 1Q2023 City-Side Sage Mitigation Area
Attachment 2	Rincon Progress Report, 1Q2023 County-Side Sage Mitigation Area
Attachment 3	Architerra Design Group, Field Observation Report, South City Sage Mitigation Pilot Project – 1Q2023 with Photo Log
Attachment 4	Rincon Quarterly Monitoring Report - Coastal Sage Scrub Deck C Pilot Study, 1Q2023
Attachment 5	Rincon Quarterly Monitoring Report - Coastal Sage Scrub Deck B Pilot Study, 1Q2023
Attachment 6	Rincon Sunshine Canyon Landfill Ultimate Entry Improvement Project, Oak Tree Survey Report

Drawing

Drawing 1	Site Vegetation Status and Activity
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ATTACHMENT 1





Rincon Consultants, Inc.

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Ventura, California 93003

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www.rinconconsultants.com

July 21, 2023

Project No: 21-11086

Paul D. Koster II
Environmental Manager
Republic Services
14747 San Fernando Road
Sylmar, California 91342

Via email: PKoster@republicservices.com

**Subject: Qualitative Monitoring Report for the City-Side Sage Mitigation Area – 2nd Quarter 2023
Sunshine Canyon Landfill, Sylmar, California**

Dear Mr. Koster,

On June 22, 2023, Rincon Consultants performed the second quarter qualitative monitoring of 2023 for the Republic Services City-Side Sage Mitigation Area. This report qualitatively documents the current conditions of the City-Side Sage Mitigation Area with regards to the Landfill's coastal sage scrub restoration efforts. The City-Side Sage Mitigation Area consists of the Lower Deck, Middle Deck, and Upper Deck (including slope between middle and upper decks), which are discussed in detail below.

General Conditions

Lower Deck

In 2014, the Landfill initiated a pilot study at the Lower Deck (Deck C) to assess three different seeding applications of native species that included hand broadcasting, imprinting, and hydroseeding. Some container plants were also planted at the Lower Deck, but in low quantities. Germination, establishment, and natural recruitment of native plants ensued; however, the Lower Deck and surrounding area burned during the Saddleridge Fire in October 2019. The fire burned a substantial amount of the Lower Deck, scorching some of the vegetation entirely and partially burning some of the vegetation. The fire also burned the irrigation system, and the vegetation has been without supplemental water ever since.

A substantial amount of regrowth has occurred following the fire, including germination from the seed bank in the soil and resprouting of below- and above-ground plant parts. The Lower Deck appears to have almost fully recovered from the fire. The most prevalent native plant species observed within the Lower Deck in the second quarter of 2023 was California sunflower (*Encelia californica*), followed by big saltbush (*Atriplex lentiformis*), allscale saltbush (*Atriplex polycarpa*), and beardless wild rye (*Elymus triticoides*). Immediately following the Saddleridge Fire, areas that were previously dominated with saltbush species were largely replaced by mats of non-native grasses such as red brome (*Bromus rubens*), ripgut brome (*Bromus diandrus*), foxtail barley (*Hordeum murinum*), and non-native forbs such as redstem filaree (*Erodium cicutarium*). Native shrub species have resprouted and are almost fully re-established, and have shown signs of continuous growth since the fire.



Exotic annual plant species, which increased slightly between the fourth quarter of 2022 and first quarter of 2023, have remained relatively constant between the first and second quarters of 2023, likely as a result of declining water availability as the summer season approaches. A majority of exotic annual plant species were observed in flower or setting seed in the Lower Deck in the second quarter of 2023, with a few mid- to late-season non-native plants (e.g., Russian thistle [*Salsola tragus*]) observed in their vegetative state. Exotic annual plants appear to be successfully managed through hand pulling and ongoing weed control activities. However, some native grass species (i.e., beardless wild rye) have also been inadvertently cut and may have been misidentified as non-native species during the weed control activities. Beardless wild rye has shown notable increases in cover between the first and second quarters of 2023, indicating that it is recovering from weeding activities. Non-native plant species cover is anticipated to remain constant throughout the summer of 2023, and decrease in the fall and winter months. The majority of non-native vegetation observed at the Lower Deck in the second quarter of 2023 consisted of non-native annual grasses, short podded mustard (*Hirschfeldia incana*), redstem filaree, and tocalote (*Centaurea melitensis*).

Middle Deck

In 2019, the Landfill initiated a pilot study at the Middle Deck (Deck B) to assess germination and establishment rates (e.g., percent cover) of soil imprinting and broadcast seeding methods. Some container plants were also planted at the Middle Deck, but in low quantities. Germination and establishment of native plants ensued; however, there was not much evidence of natural recruitment due to the short timeframe from when the deck was seeded to when it burned during the Saddleridge Fire, which also decimated the irrigation system.

As described in previous monitoring reports, the vegetation composition at the Middle Deck before the Saddleridge Fire was approximately 35 percent of sage scrub plantings/seedlings and 30 percent non-native grasses. The remainder of the area was comprised of bare ground and/or rock substrate. A substantial amount of the planted vegetation on the Middle Deck burned in the fire; however, a large amount has resprouted and appears to have mostly recovered. Native vegetation observed at the Middle Deck consists of woody species such as brittlebush (*Encelia farinosa*), California sunflower (*Encelia californica*), scarlet bugler (*Penstemon centranthifolius*), deerweed (*Acmispon glaber*), California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), coastal goldenbush (*Isocoma menziesii*), white sage (*Salvia apiana*), coyote brush (*Baccharis pilularis*), and herbaceous species such as beardless wild rye. Of all the observed native species, brittlebush, coastal goldenbush, California sagebrush, and deerweed have shown the greatest increase in abundance since the fire. Almost all native shrub species were in their vegetative state, with the exception of California buckwheat and deerweed, which were in flower.

Non-native plant establishment was also observed within the Middle Deck; however, this establishment is lower than what has been observed within the Lower Deck. Non-native plants observed include exotic grasses such as foxtail barley, Mediterranean grass (*Schismus arabicus*), red brome, and forbs such as short podded mustard, tocalote, redstem filaree, and small flowered iceplant (*Mesembryanthemum nodiflorum*). These species were observed in their flowering or seed-setting state during the second quarter of 2023. In general, non-native weed cover is low to moderate, and has slightly increased since the first quarter of 2023. Small flowered iceplant saw the greatest increase in cover of all non-native species. Non-native plants are anticipated to remain constant throughout the summer of 2023 and decline in the fall and winter months.



Upper Deck

Overall, the Upper Deck (Deck A) continues to be sparsely covered with native vegetation, and total vegetation coverage (native and non-native) is generally sparse due to compacted and poor soil conditions. However, in the southern-center of the Upper Deck, vegetation cover is higher than in other areas and includes native species such as California buckwheat, as well as non-native species such as foxtail barley, redstem filaree, and Australian saltbush (*Atriplex semibaccata*). California goldfields (*Lasthenia californica*), which were observed in flower during the first quarter of 2023, have since set seed (Attachment B, Photograph 6). The presence of vegetation in the southern-center portion of the Upper Deck generally demonstrates that the soils in this area are suitable for supporting vegetation, both native and exotic. However, the soils elsewhere on the Upper Deck appear to be heavily compacted and gravelly, and vegetation coverage in these areas is sparse. Evidence of previous seeding is no longer discernible within the portions of the Upper Deck where plant establishment is visibly poor.

Non-native herbaceous species that dominate the Upper Deck currently include wild oats (*Avena fatua*), Russian thistle, ripgut brome, red brome, short podded mustard, and redstem filaree. California buckwheat is the most dominant native perennial woody plant species on the Upper Deck, and it is currently in its flowering. However, as described in previous monitoring reports, overall natural recruitment of native plant species within the Upper Deck is low due to poor and dry soil conditions.

Table 1 Summary of Observations in the Lower, Middle, and Upper Decks in Quarter 2, 2023

Location	Native Plant Vegetation				Exotic Plant Vegetation	
	Native Plant Cover	Plant Health Issues	Height of Native Species	Native Species Richness	Exotic Plant Cover	Phenological State
Lower Deck	Moderate-High	Recovering from fire, drought	12"-48"	Shrubs: Moderate Herbs: Low	Moderate	Flowering and setting seed
Middle Deck	Moderate	Recovering from fire, drought	12"-48"	Shrubs: Moderate Herbs: Low	Low to Moderate	Flowering and setting seed
Upper Deck	Minimal	Poor soils, drought	12"-24"	Shrubs: Low Herbs: Low	High	Flowering and setting seed

Recommendations

Lower and Middle Decks

Weed Control

- Implement a year-round weed control program to control non-native species. The weed control program should incorporate both chemical and mechanical control practices and should be initiated in the late winter to early spring prior to seed set, which typically occurs between the months of February and April. This will prevent further dispersal of exotic plants within the Lower and Middle Decks.



- Following weed control, any dead material harboring seeds should be removed to an off-site location to the extent feasible. Dense areas covered with red brome, ripgut brome, foxtail barley, and short podded mustard should be controlled by removing flowers and immature seeds heads before they drop. These areas should be reseeded with native herbaceous species that are known to grow well in the Lower (and Middle) Decks, such as beardless wild rye and yarrow (*Achillea millefolium*).
- A qualified biologist should be present during weed control activities or flag the native plants that should remain prior to weed control activities to ensure only non-native species are removed and to minimize damage to native plant species to the greatest extent feasible. If a contractor is responsible for weed control, the contractor should verify with the Landfill that all personnel are experienced in native and non-native plant identification.
- Weeding is best performed just before, or at the onset of flowering, but before seed set. If seeds are already present, additional care should be taken to remove the plants with the seeds attached, or the seeds should be removed from the plants prior to the plant removal. A consistent weed abatement schedule will reduce the potential for non-natives to set seed. Soil disturbance should be limited by hand weeding, wherever possible, and weeds should be disposed of off-site to avoid any reinfestation through reseeding or from plant propagules. If hand weeding is not possible, the monitoring biologist should be consulted regarding the appropriate method of weed removal. For example, using mechanical equipment to remove flowers and immature seed heads may be appropriate where dense mats of non-native grasses have established. If there continues to be high incidence of weed infestation, weed control may need to be increased to every four to six weeks. Otherwise, weeds should continue to be monitored and controlled on a quarterly basis.

Irrigation

- The Lower and Middle Decks burned during the Saddleridge Fire in October 2019. The fire burned the irrigation system that was installed prior to the fire, and the vegetation has been without supplemental water ever since. While southern California received above-average rainfall in the winter of 2022 and spring of 2023, supplemental irrigation may be necessary if native plants show signs of desiccation stress. If indicators of drought stress are observed, it is recommended that the irrigation system within the Lower and Middle Decks are re-installed to promote germination and growth of native plant species.

Prohibit Access

- Continue to prohibit vehicle access to mitigation areas.

Upper Deck

Improve Root Zone and Soil Conditions

- Continue to investigate ways to import the soil layer to improve the root penetration and saturation zone to enable plant growth in heavily compacted areas. Consider applying soil in random undulations or uneven mounds to improve soil porosity and filtration and to control soluble salts from leaching from existing layer.



- Prior to seeding (broadcast, hydroseeding, or drilling) of native species, incorporate a soil amendment or mulch with high organic content by tilling it into the top 12 inches of the existing compacted soils to improve soil texture, drainage, porosity, and aerobic conditions. If an organic mulch or soil amendment is not feasible or available, incorporate available soil from borrow sites within the landfill that have the appropriate soil properties, so long as these borrowed soils have been determined to not have toxic conditions, such as boron or high salinity.

Plant Natives in Areas Dominated with Non-Natives

- The vegetated areas on the Upper Deck that are currently dominated with non-native annual species have decent soil-texture conditions. These areas are less compacted than adjacent areas that are gravelly and mostly devoid of vegetation. In general, the soil texture within the vegetated areas with non-native vegetation is friable down to approximately 8-12 inches in depth. Various planting methods (i.e., planting container plants and hydroseeding) may be used to re-establish native plants on the Upper Deck where non-natives currently dominate.

Weed Control

- Implement a year-round weed control program to control non-native species. The weed control program should incorporate both chemical and mechanical control practices. Following weed control, any dead material harboring seeds should be removed to an off-site location to the extent feasible.
- A qualified biologist should be present during weed control activities or flag the native plants that should remain prior to weed control activities to ensure only non-native species are removed and to minimize damage to native plant species to the greatest extent feasible. A biologist should verify that the weed removal methodology does not encourage re-colonizing of non-native plant species.
- Weeding is best performed just before, or at the onset of flowering, but before seed set. If seeds are already present, additional care should be taken to remove the plants with the seeds attached, or the seeds should be removed from the plants prior to the plant removal. A consistent weed abatement schedule will reduce the potential for non-natives to set seed. Soil disturbance should be limited by hand weeding, wherever possible, and weeds should be disposed of off-site to avoid any reinfestation through reseeding or from plant propagules. If hand weeding is not possible, the monitoring biologist should be consulted regarding the appropriate method of weed removal. For example, using mechanical equipment to remove flowers and immature seed heads may be appropriate where dense mats of non-native grasses have established. If there continues to be high incidence of weed infestation, weed control frequency may need to be increased. Otherwise, weeds should continue to be monitored and controlled on a quarterly basis.

Reseeding

- Following the application of soil mounds as previously described, apply native seed (by means of broadcast seeding, hydroseeding or drilling) during the rainy season, between December and March, or prior to a forecasted rain event.



Prohibit Access

- Continue to prohibit vehicle access to mitigation areas.

Thank you for the opportunity to work with you on this important project. Please contact Greg Ainsworth if you have questions concerning the contents of this report. He may be reached by telephone at (818) 564-5544, or by email at gainsworth@rinconconsultants.com.

Sincerely,

Rincon Consultants, Inc.

A handwritten signature in black ink, appearing to read 'Greg Ainsworth'.

Greg Ainsworth
Natural Resources Director

A handwritten signature in black ink, appearing to read 'Kyle Gern'.

Kyle Gern
Biologist

Attachments

- | | |
|--------------|--------------------------------|
| Attachment A | Figure 1. Photograph Locations |
| Attachment B | Site Photographs |

Attachment A

Figure 1. Photograph Locations

Figure 1 Photograph Locations



Attachment B

Site Photographs



Photograph 1. Facing west at Lower Deck. View of eastern limits dominated by *Atriplex* spp. and California sunflower (June 22, 2023).



Photograph 2. Facing east at Lower Deck from western boundary (June 22, 2023).



Photograph 3. Facing east at the Middle Deck from western boundary (June 22, 2023).



Photograph 4. Facing west at the easterly-facing slope located between the Middle and Upper Decks. The vegetation on the slopes between the Upper Deck is dominated by California buckwheat (currently vegetative) and non-native annual grasses (June 22, 2023).



Photograph 5. Facing northeast at the Upper Deck. This area is compacted and gravelly and continues to be problematic for supporting vegetation. Non-native annual grasses and forbs, and California buckwheat shrubs are evident in the background (June 22, 2023).



Photograph 6. Facing southwest at the Upper Deck. This area is primarily dominated by wild oats, brome grasses, redstem filaree, and short podded mustard (June 22, 2023).



Photograph 7. Facing southeast at the western portion of the Upper Deck. This area is dominated by short podded mustard, Australian saltbush, and Russian thistle (June 22, 2023).

ATTACHMENT 2





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July 20, 2023

Project No: 21-11086

Paul D. Koster II
Environmental Manager
Republic Services
14747 San Fernando Road
Sylmar, California 91342

Via email: PKoster@republicservices.com

**Subject: Qualitative Monitoring Report for the County-Side Sage Mitigation Area – 2nd Quarter 2023
Sunshine Canyon Landfill, Sylmar, California**

Dear Mr. Koster,

On June 22, 2023, Rincon Consultants performed the second quarter qualitative monitoring of 2023 for the County-Side Sage Mitigation Area (mitigation area). This report documents the current conditions of the mitigation area.

General Conditions

Hydroseeded Areas

Germination and plant growth from hydroseeding that occurred several years ago is not discernible in some portions of the mitigation area. Conditions in the mitigation area remain relatively unchanged since the first quarter of 2023. Areas that are moderately covered with native and non-native vegetation are concentrated in the southeastern portion of the mitigation area. The northern and upper portions of the mitigation area continue to be bare and problematic for establishment of vegetation, primarily because of highly eroded soils, steep slopes, and Boron-toxic soils (See *Recommendations* section). However, there are some small patches of vegetation that have established in the northern-central portion of the mitigation area and include shrubs such as California buckwheat (*Eriogonum fasciculatum*), deerweed (*Acmispon glaber*), and California sagebrush (*Artemisia californica*).

Native plant coverage is similar to the previous quarterly monitoring reports. The southern half of the mitigation area has relatively good coverage of native species, mostly California buckwheat and California sunflower (*Encelia californica*). Established laurel sumac (*Malosma laurina*) individuals are present as well. A majority of native shrub species were in their vegetative state or setting seed, while California buckwheat was in full flower during the monitoring event. The native vegetation coverage is assumed to be a direct result of seeding; however, some natural recruitment of native plant species is apparent based on the various sizes of shrubs and the presence of California sunflower seedlings within the understory. Due to rocky (hydrophobic) soil conditions, soil erosion and Boron-toxic soils on the northern-half and upper portions of the mitigation area, minimal plant growth is present. Due to the lack of plant establishment in these areas, erosional features have become prominent, especially following recent above-average rainfall events.

Annual non-native grasses and forbs currently dominate the understory and serve as ground cover in most of the vegetated areas. Brome grasses (*Bromus* spp.), wild oats (*Avena fatua*), short podded



mustard (*Hirschfeldia incana*), Russian thistle (*Salsola tragus*), and tocalote (*Centaurea melitensis*) are the most dominant non-native species present, and comprise approximately 25 to 30 percent of the total cover. California buckwheat dominates the native vegetation coverage with California sagebrush and California sunflower present as co-dominants. Native species comprise of approximately 75 to 80 percent of the native vegetation cover in areas where vegetation is present. Other less dominant native species observed include golden bush (*Ericameria linearifolia*), coyote brush (*Baccharis pilularis*), black sage (*Salvia mellifera*), deerweed, and laurel sumac.

Seed Mix Areas

Like the hydroseeded areas, germination and plant growth from the seed mix areas that occurred several years ago is not discernible. As described in previous monitoring reports, a substantial portion of the mitigation area continues to be bare and problematic, which has inhibited the establishment and growth of vegetation. However, in areas where vegetation is present, there is a moderate coverage of native species (e.g., California buckwheat and California sunflower).

As described in the *Hydroseeded Areas* discussion above, a moderate cover of native plants exists within vegetated areas in the southeastern portion of the mitigation area, and annual non-native grasses and forbs currently dominate the understory.

Native Plant Conditions

The plant cover rating indicated further below in



Table 1 applies where vegetation is dominant in the southeastern portion of the mitigation area. Vegetation cover is moderate in the southeastern portion of the mitigation area and sparse along the upper slopes where rocky and eroded soil conditions occur, and in the northern portion of the mitigation area due to problematic soil conditions. As a result, most of the northern and upper portions of the mitigation area continue to have minimal coverage. Native vegetation coverage is good in vegetated areas and non-native plant cover is relatively low. Bare areas and non-native annual grasses are intermixed; however, as noted the northern and upper areas continue to be mostly bare where erosion and rocks are apparent.

California buckwheat is dominant and California sunflower is sub-dominant. Establishment of vegetation is problematic due to rocky soils with poor soil structure, and Boron toxicity has made plant growth (i.e., seed germination and recruitment) difficult. The species richness is low to medium within vegetated areas; however, species richness is considerably low when considering the entire county-sage mitigation area.

Exotic Plant Conditions

Annual non-native weed species consist primarily of brome grasses, wild oats, and mustards, which are currently flowering and/or setting seed. Additionally, some mid- to late-season non-native plants (e.g., Russian thistle) are currently in their vegetative state. Non-native plant cover is anticipated to remain constant throughout the summer of 2023 and decline in the fall and winter months. Other established weeds that were observed include redstem filaree (*Erodium cicutarium*) and telegraph weed (*Heterotheca grandiflora*; a weedy native plant species).



Table 1 Summary of Native and Exotic Plant Cover in the County-Side Sage Mitigation Area in Quarter 2, 2023

Location	Native Plant Vegetation				Exotic Plant Vegetation	
	Native Plant Cover	Plant Health Issues	Height of Native Species	Native Species Richness	Exotic Plant Cover	Phenological State
County-Side Sage Mitigation Area	Moderate	Drought	12"-36"	Medium	Moderate	vegetative, in flower, and setting seed

Recommendations

The following recommendations within the County-Side Sage Mitigation are suggested based upon the field survey performed in the first quarter of 2023.

- **Create Benches.** Consider creation of several benches throughout the mitigation area to control soil erosion and to improve soil conditions to improve plant establishment and seed dispersal. This technique has been widely used on steep slopes and in areas where soil erosion is problematic. This technique also allows for opportunities to introduce a high-quality soil layer above the poor soils that exist.
- **Reseed and Plant Container Plants With Irrigation.** If creation of benches is feasible, planting methods should include hydroseeding, broadcast seeding, and/or imprinting no more than 10 days prior to a forecasted rain event, unless an irrigation system is installed. Planting with container plants with supplemental irrigation should also be considered.
- **Use Soil Amendments.** Incorporate a soil amendment or mulch with high organic content in select areas as determined by a restoration specialist.
- **Signage.** Install signs indicating that the area is undergoing revegetation.
- **Weed Control.** Continue weed control program as needed on a quarterly basis.
- **Prohibit Access.** Prohibit equipment access to mitigation area.

Thank you for the opportunity to work with you on this important project. Please contact Greg Ainsworth if you have questions concerning the contents of this report. He may be reached by telephone at (818) 564-5544, or by email at gainsworth@rinconconsultants.com.

Sincerely,

Rincon Consultants, Inc.

Greg Ainsworth
Natural Resources Director

Kyle Gern
Biologist

Attachments

- Attachment A Figure 1. Photograph Locations
Attachment B Site Photographs

Attachment A

Figure 1. Photograph Locations

Figure 1 Photograph Locations



Attachment B

Site Photographs



Photograph 1. Facing southwest at the County-Side Sage Mitigation Area (June 22, 2023).



Photograph 2. Facing northwest at the northern portion of the County-Side Sage Mitigation Area where plant growth has been problematic due to poor soil conditions (June 22, 2023).

ATTACHMENT 3





ARCHITERRA DESIGN GROUP

FIELD OBSERVATION REPORT

DATE OF VISIT:	07/21/23
PROJECT:	Sunshine Canyon Mitigation Sites
PROJECT NUMBER:	1214
PROJECT MANAGER:	Gregg Denson
SITE INSPECTION #:	
PURPOSE OF VISIT:	Review site conditions/Photo Catalog
TIME OF SITE VISIT:	8:20am
WEATHER/TEMPERATURE:	Sunny and warm 88°
ESTIMATED % COMPLETED:	100%
CONFORMANCE WITH SCHEDULE (+, -)	

WORK IN PROGRESS:	Weed abatement / Monitoring Period /Construction Observation
PRESENT ON SITE:	Gregg Denson

A site visit walk and evaluation has been completed to review the Venturan CSS vegetation establishment on the Trial Site (Deck C), Deck B, and Deck A. Additional items noted during the site visit are as follows:

City-Side Sage Mitigation (Trial Site Deck C):

- Oakridge Landscape over the last quarter provided some weed abatement, however much of the deck did not get cleared of the Shortpod Mustard (*Hirschfeldia incana*). As a result, much of the central portion of the deck now has flowered and gone to seed. There are also areas within the deck where Yellow Star Thistle (*Centaurea solstitialis*) has reseeded and continues to become problematic with spreading every year. Russian Thistle (*Salsola* spp.) is now actively growing, but has not yet reached the flowering stage. This species should be the targeted weed for this next month and quarter so that removal can occur prior to flowering and seeding. Along the perimeter edges of the Deck to the north and along the PM10 berm, these weed species listed above have established amongst natives, but should be removed to eliminate any windblown over-seeding onto the deck.
- In the last few reports we have noted that as part of the weed abatement and removal, Creeping Wild Rye (*Leymus triticoides*) and Foothill Needlegrass (*Nassella lepida*) were scalped to the ground. After meeting with the landscape maintenance personnel last quarter, we were able to communicate that these grasses should be allowed to grow and go dormant during the summer and fall months. The grass species was not cut this year and now are helping to shade out some of the weeds establishing in the areas where they were previously scalped. There are still some areas where Horse Weed (*Conyza canadensis*) was able to germinate within the scalped area, and now are stretching

above the grass. This weed should be removed prior to flowering/seeding. Creeping Wild Rye and Foothill Needlegrass should remain untouched at full growth as shown in Photo Station #8.

- Several Venturan Coastal Sage Scrub species are now going through the summer drought deciduous/drought dormant period. Many of the Saltbush species are in full bloom and it is visibly noticeable that new Saltbush plants germinated during this last winter/spring period of excess precipitation. The entire deck for that matter has grown significantly since last year. It was more challenging to navigate the deck, given the healthy growth and canopy now closing. California Bush Sunflower (*Encelia californica*), California Sagebrush (*Artemisia californica*), Deerweed (*Acmispon glaber*) and several Sage species (*Salvia* sp.) are now beginning to defoliate as part of their summer dormancy response. Mexican Elderberry (*Sambucus mexicana*) has previously gone drought deciduous during this time of year, but has not and is flowering and developing fruit; providing a vital resource to many of the birds that visit the deck.
- Since the original planting of Deck C (2013), the establishment of Venturan Coastal Sage Shrub Community has increased in coverage and the diversity of species has evolved over the last nine years. It took several years for the establishment of California Buckwheat (*Eriogonum fasciculatum*) to take hold on this deck in particular. However, more plants are becoming established and are flowering and helping to spread the seed.
- Some larger invasive species are actively growing on the decks and should be removed to prevent the possibility of overturn and cap damage due to high winds. These species include Eucalyptus and Tamarisk Trees.



New Saltbush seedlings where deck was previously void of plants



Mexican Elderberry (*Sambucus mexicana*) flowering and fruiting

Yellow Star Thistle (*Centaurea solstitialis*) with dry seed heads



Shortpod Mustard (*Hirschfeldia incana*) actively growing, flowering and seeding



Shortpod Mustard (*Hirschfeldia incana*) that has gone to seed



Thistle species that went to seed at PM10 Berm





Eucalyptus Tree (to be removed)



Tamarisk Tree (to be removed)

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Phone (909) 484-2800, Fax (909) 484-2802



California Buckwheat (*Eriogonum fasciculatum*) (white/rust flowering)



Saltbush (*Atriplex* species) flowering and growing aggressively



Horse Weed (*Conyza canadensis*) growing within Wild Rye Grass due to scalping maintenance in previous years (This weed should be removed)



City-Side Sage Mitigation (Trial Site Deck B):

- Weed growth on Deck B is less aggressive than Deck C, with the exception of the invasive Slenderleaf Iceplant (*Mesembryanthemum nodiflorum*). There are a few locations where Shortpod Mustard (*Hirschfeldia incana*) and Yellow Star Thistle (*Centaurea solstitialis*) are blooming and taking root.
- Unlike Deck C, Deck B is dominated by California Buckwheat (*Eriogonum fasciculatum*), Jojoba Bladderpod (*Simmondsia chinensis*), Menzie's Goldenbush (*Isocoma menziesii*), Sage species, and California Sagebrush (*Artemisia californica*) help to fill in most of the rest of the deck area.
- Much like Deck C, Deck B has shown an abundance of growth over the last six months. Shrub canopies are beginning to close in some areas.



Slenderleaf Iceplant (*Mesembryanthemum nodiflorum*) in summer dormancy



Yellow Star Thistle (*Centaurea solstitialis*)



View of Deck B looking east

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View of diverse VCSS species at Deck B



Jojoba Bladderpod (*Simmondsia chinensis*) shedding leaves and seedpods

City-Side Sage Mitigation (Deck A):

- Recent grading activity has occurred on Deck A to fill in an area approx. 1 ½ acres in size that has been sinking over the last few years and was holding water this last rainy season. The new grading will help to move rainfall water across the deck and positively drain this area so that standing water no longer exists.
- As part of the establishment of native VCSS, ADG proposes that the following steps take place:
 1. Allow for natural rainfall to germinate any weed seed within the fill dirt (1-2 rain events). Given the prediction of a El Nino rainy season, ample moisture from rainfall should help at this early stage.
 2. Once weeds have established, immediate removal will be important.
 3. After rainfall leaching and weed removal, soils will tested for any deficiencies using a soil and plant lab. Results and recommended soil amendments will be hydraulically applied to the area. Soils will be hydrated either by rainfall or water trucks so that soil imprinting and seeding can occur. Use approved seed mix from Decks B and C. Soils should be loose and free from compaction.
 4. After soil imprinting and seeding, straw wattles shall be placed every 25'-30' feet, set perpendicular to the flowline on the deck.
 5. ADG recommends that the crushed asphalt be placed at the vehicular crossing, north of the area, where the road dips down. This will help to stabilize the crossing, preventing any debris or mud buildup.
 6. The entire perimeter of seeded area should be staked with T-Bar stakes to prevent any vehicular traffic driving onto the exposed soils.
- ADG will establish photo stations at various locations and monitor the area over the fall/winter/spring quarters and report on germination and weed growth and include results in future reports.



Deck A area prior to soil infill and grading



New grading at Deck A to correct drainage issues





New grading at Deck A (view looking east)



New grading at Deck A (view looking south)



Vehicular crossing at north side of project area

Signed: Gregg Denson

Date: 7/26/23

DISTRIBUTION

Republic Services



Contractor



Project Manager (Gregg Denson)



Other _____



ATTACHMENT 4





Rincon Consultants, Inc.

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July 21, 2023

Project No: 21-11086

Paul D. Koster II

Environmental Manager

Republic Services

14747 San Fernando Road

Sylmar, California 91342

Via email: PKoster@republicservices.com

Subject: Coastal Sage Scrub City South C Trial Plot 2nd Quarter 2023 Monitoring Report, Sunshine Canyon Landfill

Dear Mr. Koster,

This monitoring report has been prepared by Rincon Consultants, Inc. (Rincon) to inform Republic Services on the status of coastal sage scrub restoration at the Sunshine Canyon Landfill located at 14747 San Fernando Road, Sylmar, California 91342. Specifically, this letter report serves to document the abundance of vegetation at the Coastal Sage Scrub City South C Trial Plot in the second quarter of 2023.

Methods

On June 22, 2023, Rincon Consultants monitored the Coastal Sage Scrub City South C Trial Plot (trial plot) at the Sunshine Canyon Landfill, which constitutes the second quarter of monitoring for 2023. The sample methodology generally followed the *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* (JMA, April 23, 2014). Quadrat sampling of the Coastal Sage Scrub City South C Trial Plot consists of four 50-meter² quadrats that are randomly sampled within each of the following three seeded areas: hydroseed, imprint, and hand broadcast. The twelve quadrats sampled were randomly selected prior to the first initial monitoring event from a grid that was placed over the entire trial plot, and each quadrat was given a letter (A-L) and delineated in the field with wooden stakes (Attachment A).

As shown in Attachment A, three different seeding methods were used as follows:

- Hydroseed (Quadrats A, B, C, and D)
- Imprint (Quadrats E, F, G, and H)
- Hand broadcast (Quadrats I, J, K, and L)

Absolute Cover

The following qualitative data was collected in each quadrat to determine the absolute cover of native and non-native herbaceous and woody species:



- **Percent basal cover (shrubs).** Visual estimate of the amount of basal cover within each quadrat for all shrub species.
- **Percent basal cover (herbs).** Visual estimate of the amount of basal cover within each quadrat for all herb species.
- **Percent bare ground.** Visual estimate of the amount of available bare ground with no vegetation, but suitable for plant growth.
- **Percent rock or other.** Visual estimate of the amount of unavailable ground for supporting plant growth. Inhibitors generally included rocks and boulders, irrigation lines and valve boxes, and mulch.
- **Percent canopy.** Visual estimate of the percent canopy of each shrub and herbaceous species.
- **Photographs.** A photograph was taken from the southwest corner (facing northeast) of each quadrat.

Percent Cover

The following quantitative data was collected in each quadrat to determine the percent cover of native and non-native species.

- **Point intercept method.** Sampling began at the southwest corner of each quadrat and continued around the quadrat in a clockwise direction. The species located precisely at every meter point was tallied, including areas of bare ground, rock and other.

Field Results

Below are the average data collected for each planting method.

Absolute Cover (Qualitative)

Hydroseed – Quadrats A, B, C, and D (average)

- Percent basal cover (shrubs) – 16%
- Percent basal cover (herbs) – 5%
- Percent bare ground – 45%
- Percent rock or other – 6%
- Percent canopy (shrubs) – 49%
- Percent canopy (herbs) – 11%

Imprint – Quadrats E, F, G, and H (average)

- Percent basal cover (shrubs) – 20%
- Percent basal cover (herbs) – 4%
- Percent bare ground – 41%
- Percent rock or other – 5%
- Percent canopy (shrubs) – 50%
- Percent canopy (herbs) – 9%



Hand broadcast – Quadrats I, J, K, and L (average)

- Percent basal cover (shrubs) – 16%
- Percent basal cover (herbs) – 32%
- Percent bare ground – 26%
- Percent rock or other – 3%
- Percent canopy (shrubs) – 33%
- Percent canopy (herbs) – 52%

Percent Cover (Quantitative)

The representation of each species within a quadrat was estimated by broad cover classes (<1%, 1-5%, 5-25%, 25-50%, 50-75%, and >75%). The percent cover of each species based upon the point intercept method is presented in Table 1 through Table 3 below.



Table 1 Hydroseed – Quadrats A, B, C, and D (Average)

Species	Plot A		Plot B		Plot C		Plot D	
	Number of Hits	Percent Cover	Number of Hits	Percent Cover	Number of Hits	Percent Cover	Number of Hits	Percent Cover
Native Shrubs								
<i>Acmispon glaber</i>					2	4%		
<i>Artemisia californica</i>			1	2%				
<i>Atriplex lentiformis</i>	7	14%	5	10%	5	10%	6	12%
<i>Atriplex polycarpa</i>	2	4%	7	14%	8	16%		
<i>Atriplex spinosa</i>								
<i>Baccharis pilularis</i>								
<i>Diplacus aurantiacus</i>								
<i>Encelia californica</i>	10	20%	10	20%	7	14%	17	34%
<i>Salvia apiana</i>								
<i>Salvia mellifera</i>								
Native Herbs								
<i>Achillea millefolium</i>								
<i>Cryptantha intermedia</i>								
<i>Helianthus annuus</i>							2	4%
<i>Elymus triticoides</i>			12	24%	1	2%		
<i>Erigeron canadensis</i>			3	6%				
<i>Sisyrinchium bellum</i>								
<i>Vulpia microstachys</i>								
Non-Native Herbs								
<i>Bromus diandrus</i>								
<i>Bromus rubens</i>			1	2%	5	10%		
<i>Centaurea melitensis</i>					5	10%	3	6%
<i>Erodium cicutarium</i>								
<i>Hirschfeldia incana</i>	3	6%	2	4%	6	12%	2	4%
<i>Hordeum murinum</i>			3	6%			1	2%
<i>Salsola tragus</i>								
Bare ground	28	56%	6	12%	11	22%	19	38%
		Plot A		Plot B		Plot C		Plot D
Percent Cover Native Shrub		38%		46%		44%		46%
Percent Cover Native Herb		0%		30%		2%		4%
Percent Cover Non-Native Shrub		0%		0%		0%		0%
Percent Cover Non-Native Herb		6%		12%		32%		12%
Percent Bare Ground		56%		12%		22%		38%
								A,B,C,D Percent Cover
								44%
								9%
								0%
								16%
								32%



Table 2 Imprint – Quadrats E, F, G, and H (Average)

Species	Plot E		Plot F		Plot G		Plot H	
	Number of Hits	Percent Cover	Number of Hits	Percent Cover	Number of Hits	Percent Cover	Number of Hits	Percent Cover
Native Shrubs								
<i>Acmispon glaber</i>								
<i>Artemisia californica</i>			1	2%			1	2%
<i>Atriplex lentiformis</i>			7	14%	2	4%		
<i>Atriplex polycarpa</i>	2	4%	15	30%			5	10%
<i>Atriplex spinosa</i>								
<i>Baccharis pilularis</i>								
<i>Diplacus aurantiacus</i>								
<i>Encelia californica</i>	22	44%	5	10%	30	60%	32	64%
<i>Salvia leucophylla</i>							1	2%
<i>Salvia mellifera</i>								
Native Herbs								
<i>Achillea millefolium</i>								
<i>Cryptantha intermedia</i>								
<i>Helianthus annuus</i>								
<i>Elymus triticoides</i>							1	2%
<i>Nasella pulchra</i>								
<i>Sisyrinchium bellum</i>								
<i>Vulpia microstachys</i>								
Non-Native Herbs								
<i>Bromus rubens</i>								
<i>Centaurea melitensis</i>			2	4%				
<i>Echinochloa crus-galli</i>								
<i>Erigeron canadensis</i>								
<i>Erodium cicutarium</i>								
<i>Hirschfeldia incana</i>	1	2%	7	14%	2	4%	6	12%
<i>Hordeum murinum</i>								
<i>Salsola tragus</i>								
Bare ground	25	50%	13	26%	16	32%	4	8%
	Plot E		Plot F		Plot G		Plot H	
Percent Cover Native Shrub	48%		56%		64%		78%	
Percent Cover Native Herb	0%		0%		0%		2%	
Percent Cover Non-Native Shrub	0%		0%		0%		0%	
Percent Cover Non-Native Herb	2%		18%		4%		12%	
Percent Bare Ground	50%		26%		32%		8%	
							E,F,G,H	
							Percent Cover	
Percent Cover Native Shrub	48%		56%		64%		78%	
Percent Cover Native Herb	0%		0%		0%		2%	
Percent Cover Non-Native Shrub	0%		0%		0%		0%	
Percent Cover Non-Native Herb	2%		18%		4%		12%	
Percent Bare Ground	50%		26%		32%		8%	



Table 3 Hand Broadcast – Quadrats I, J, K, and L (Average)

Species	Plot I		Plot J		Plot K		Plot L	
	Number of Hits	Percent Cover	Number of Hits	Percent Cover	Number of Hits	Percent Cover	Number of Hits	Percent Cover
Native Shrubs								
<i>Acmispon glaber</i>								
<i>Artemisia californica</i>			5	10%			2	4%
<i>Atriplex lentiformis</i>	3	6%	4	8%				
<i>Atriplex polycarpa</i>			2	4%			8	16%
<i>Atriplex spinosa</i>								
<i>Baccharis pilularis</i>							1	2%
<i>Encelia californica</i>	31	62%	6	12%			17	34%
<i>Salvia leucophylla</i>	2	4%						
Non-Native Shrubs								
<i>Atriplex semibaccata</i>								
Native Herbs								
<i>Achillia mellifolium</i>								
<i>Cryptantha intermedia</i>								
<i>Helianthus annuus</i>			1	2%				
<i>Elymus triticoides</i>					31	62%	12	24%
<i>Nasella pulchra</i>								
<i>Sisyrinchium bellum</i>								
<i>Vulpia microstachys</i>								
Non-Native Herbs								
<i>Avena barbata</i>								
<i>Bromus diandrus</i>	2	4%						
<i>Bromus rubens</i>			6	12%				
<i>Centaurea melitensis</i>			2	4%				
<i>Hirschfeldia incana</i>	1	2%	9	18%	10	20%	5	10%
<i>Hordeum murinum</i>			6	12%				
<i>Melilotus indica</i>			1	2%				
<i>Salsola tragus</i>	1	2%						
<i>Sonchus oleraceus</i>					2	4%		
Bare ground	10	20%	3	6%	7	14%	5	10%
	Plot I		Plot J		Plot K		Plot L	I,J,K,L Percent Cover
Percent Cover Native Shrub	72%		34%		0%		56%	41%
Percent Cover Native Herb	0%		2%		62%		24%	22%
Percent Cover Non-Native Shrub	0%		0%		0%		0%	0%
Percent Cover Non-Native Herb	8%		58%		24%		10%	25%
Percent Bare Ground	20%		6%		14%		10%	13%



Discussion

Table 4 below provides a summary of the vegetation cover of shrubs and herbs, including areas of bare ground. The percent cover of native and non-native species is summarized above in Tables 1-3.

Table 4 Summary of Vegetation Cover for Each Planting Method at the Coastal Sage Scrub City South C Trial Plot

	Hydroseed (Quadrats A, B, C, and D)		Imprint (Quadrats E, F, G, and H)		Hand Broadcast (Quadrats I, J, K, and L)	
	Qualitative	Quantitative	Qualitative	Quantitative	Qualitative	Quantitative
Percent Cover Shrub	49%	44%	50%	62%	33%	41%
Percent Cover Herb	11%	25%	9%	10%	52%	47%
Percent Bare Ground	45%	32%	41%	29%	26%	13%

As discussed in previous reports, most of the trial plot (except for quadrats A, B, E, F and G) substantially burned during the Saddleridge Fire in October 2019, and much of the vegetation was removed and/or crushed by fire equipment (e.g., bulldozers). Following the fire, non-native species such as brome grasses (*Bromus* spp.), foxtail barley (*Hordeum murinum*), and short podded mustard (*Hirschfeldia incana*) established in areas that were previously dominated by saltbush (*Atriplex* spp.). However, the trial plot has almost fully recovered from the fire, as evidenced by the establishment, growth, and reproduction of native shrub species such as allscale saltbush (*Atriplex polycarpa*), big saltbush (*Atriplex lentiformis*), California sunflower (*Encelia californica*), California sagebrush (*Artemisia californica*), purple sage (*Salvia leucophylla*), black sage (*Salvia mellifera*), and coyote brush (*Baccharis pilularis*) that previously dominated the trial plot prior to the fire.

The quantitative percent cover of native shrub species currently has an average of 44 percent within the hydroseed quadrats, 62 percent within the imprint quadrats, and 41 percent within the hand broadcast quadrats (Tables 1-3). Native shrub quantitative percent cover increased across all treatments from the first quarter monitoring event in 2023. All shrub species within the trial plot were either vegetative or in flower during the first quarter of 2023. As described in previous monitoring reports from 2022, beardless wild rye (*Elymus triticoides*) was trimmed as part of the weeding effort implemented by Republic Services in spring of 2022 (Attachment B, Photograph 11); however, this species has recovered from the trimming efforts, indicated by the increase in native herbaceous cover across all treatment types (hydroseed quadrats: 9 percent cover; imprint quadrats: 1 percent cover; hand broadcast quadrats: 22 percent cover).

Non-native plant cover has not changed substantially within the trial plot between the first and second quarters of 2023. The most abundant non-native herbaceous plant species observed within the trial plot during the second quarter of 2023 include foxtail barley, Mediterranean grass (*Schismus arabicus*), red brome (*Bromus rubens*), and short podded mustard (*Hirschfeldia incana*). Short-podded mustard was flowering during the second quarter of 2023, while most other non-native herbs were either in their vegetative state or had already completed their flowering cycle. Non-native plant species cover is expected to remain constant throughout the summer of 2023, and decline in the fall and winter months. Total non-native herbaceous cover currently has an average of 16 percent within the hydroseed quadrats (up from 13 percent in the first quarter of 2023), 9 percent within the imprint quadrats (down from 12 percent in the first quarter of 2023), and 25 percent (up from 21 percent in the first quarter of 2023) within the hand broadcast quadrats (Tables 1-3).



Recommendations

Successional Growth and Weed Control

Wildfires in Southern California have become more common in recent years and have impacted the native landscape, including established restoration sites. Non-native weed control is essential in establishing post-fire restoration sites and is recommended by such organizations as the California Department of Fish and Wildlife Service and the California Society of Ecological Restoration. Successional regrowth of herbaceous non-native species is to be expected within the first two to three years following a wildfire, which is currently being observed at the trial plot. Native shrubs are expected to recover over a longer period through germination of existing seed within the topsoil and basal growth from charred plants. Native shrubs have shown notable growth following the fire and appear to be well established in the trial plot.

Successional growth of herbaceous species is also important, as native herbaceous species provide natural erosion of topsoil. To control the spread non-native herbaceous species such as foxtail barley, red brome, and short podded mustard, and minimize competition with native herbaceous and woody species for water, nutrients, and sunlight, weed maintenance should occur no less than every four months, and special attention should be afforded to minimizing impacts to native grasses that may appear to be non-native (i.e., beardless wild rye), native seedlings, and native shrub resprouts. Weed maintenance should be scheduled to maximize removal of non-native species prior to seed set, which typically occurs in spring between the months of February and April, but may also occur throughout the growing season based upon precipitation events.

Supplemental Irrigation

While southern California received above-average rainfall in the winter of 2022 and spring of 2023, supplemental irrigation is a valuable restoration technique to promote re-establishment of native vegetation, particularly during the dry months of the year (i.e., summer and fall). If native herbaceous vegetation continues to be sparse throughout the trial plot, and/or if native shrubs senesce or show indicators of drought stress, the irrigation system within the trial plot should be re-installed to increase water availability and promote seed germination and re-establishment of native vegetation.



References

John Minch and Associates, Inc. (JMA). 2014. 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.

Thank you for the opportunity to work with you on this important project. Please contact Greg Ainsworth if you have questions concerning the contents of this report. He may be reached by telephone at (818) 564-5544, or by email at gainsworth@rinconconsultants.com.

Sincerely,
Rincon Consultants, Inc.

A handwritten signature in black ink, appearing to read "G. Ainsworth".

Greg Ainsworth
Natural Resources Director

A handwritten signature in black ink, appearing to read "Kyle Gern".

Kyle Gern
Biologist

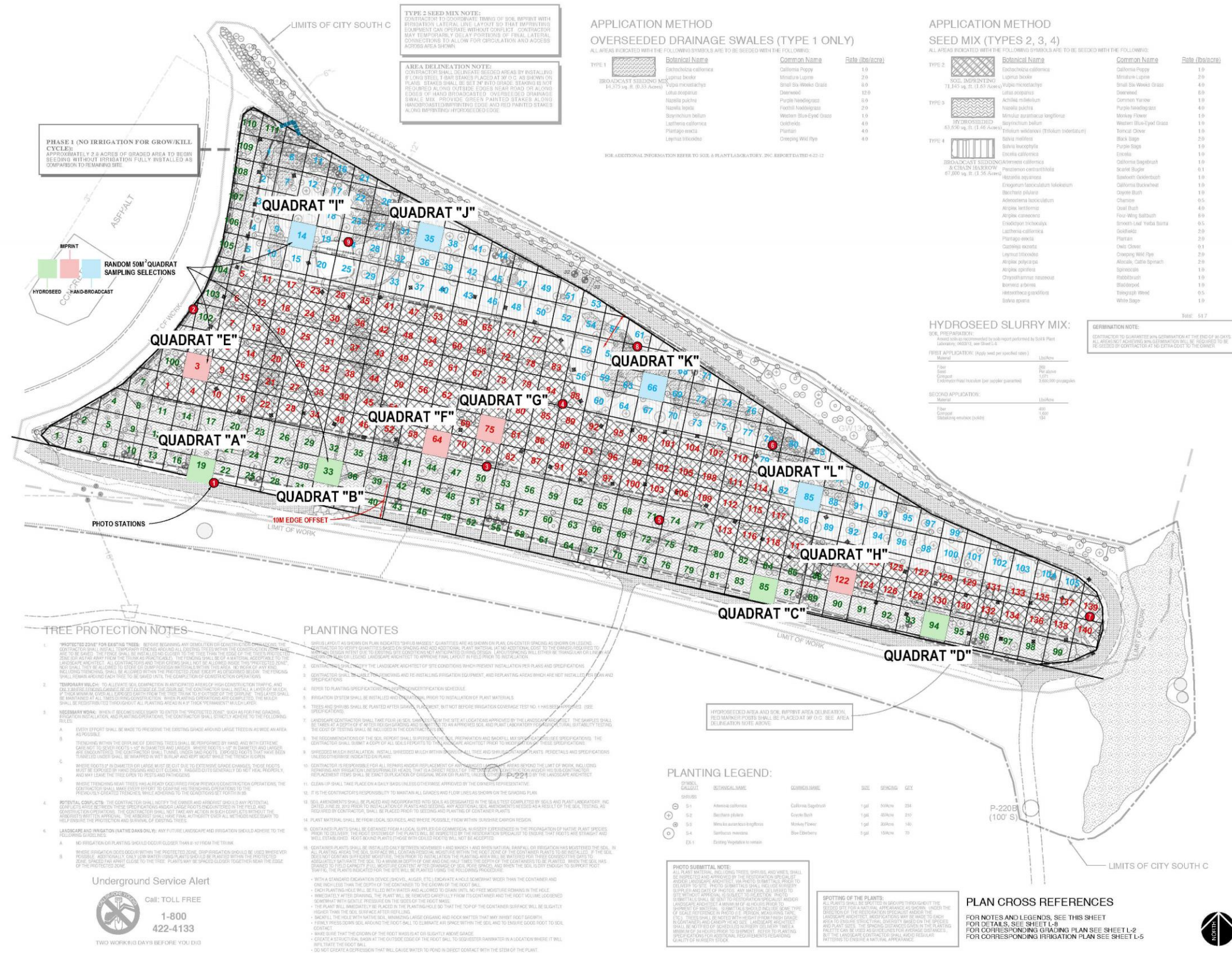
Attachments

- Attachment A Deck C Revegetation Area Quadrat Layout and Planting Plan
- Attachment B Representative Site Photographs

Attachment A

Deck C Revegetation Area Quadrat Layout and Planting Plan

Deck C Revegetation Area Quadrat Layout and Planting Plan



Attachment B

Photographs of Sample Plots



Photograph 1. Quadrat A facing northeast from southwest corner (June 22, 2023).



Photograph 2. Quadrat B facing northeast from southwest corner (June 22, 2023).



Photograph 3. Quadrat C facing northeast from southwest corner (June 22, 2023).



Photograph 4. Quadrat D facing northeast from southwest corner (June 22, 2023).



Photograph 5. Quadrat E facing northeast from southwest corner (June 22, 2023).



Photograph 6. Quadrat F facing northeast from southwest corner (June 22, 2023).



Photograph 7. Quadrat G facing northeast from southwest corner (June 22, 2023).



Photograph 8. Quadrat H facing northeast from southwest corner (June 22, 2023).



Photograph 9. Quadrat I facing northeast from southwest corner (June 22, 2023).



Photograph 10. Quadrat J facing northeast from southwest corner (June 22, 2023).



Photograph 11. Quadrat K facing northeast from southwest corner (June 22, 2023).



Photograph 12. Quadrat L facing northeast from southwest corner (June 22, 2023).

ATTACHMENT 5





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July 20, 2023
Project No: 21-11086

Paul D. Koster II
Environmental Manager
Republic Services
14747 San Fernando Road
Sylmar, California 91342
Via email: PKoster@republicservices.com

Subject: Coastal Sage Scrub City South B Trial Plot 2nd Quarter 2023 Monitoring Report, Sunshine Canyon Landfill

Dear Mr. Koster,

This monitoring report has been prepared by Rincon Consultants, Inc. (Rincon) to inform Republic Services on the status of coastal sage scrub restoration at the Sunshine Canyon Landfill located at 14747 San Fernando Road, Sylmar, California 91342. Specifically, this letter report serves to document the abundance of vegetation at the Coastal Sage Scrub City South B Trial Plot in the second quarter of 2023.

Methods

On June 22, 2023, Rincon Consultants monitored the Coastal Sage Scrub City South B Trial Plot (trial plot) at the Sunshine Canyon Landfill, which constitutes the first quarter of monitoring for 2023. The sample methodology generally followed the *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* (JMA, April 23, 2014). Quadrat sampling of the revegetation area consists of nine 50-meter² quadrats that are randomly located throughout the revegetation area. The quadrats were randomly selected prior to the first initial monitoring event from a grid that was placed over the entire trial plot, and each quadrat was given a letter (A-I) and delineated in the field with wooden stakes. As shown in Attachment A, five different planting methods were used as follows:

- Soil imprinting with hand broadcast overseeded drainage swales (Quadrats A and G)
- Soil imprinting (Quadrats B, F and H)
- Broadcast seeding (Quadrat C)
- Broadcast seeding with soil imprinting (Quadrat D and I)
- Soil imprinting and hand broadcast (Quadrat E)

Absolute Cover

The following qualitative data was collected in each quadrat to determine the absolute cover of native and non-native herbaceous and woody species:

- **Percent basal cover (shrubs).** Visual estimate of the amount of basal cover within each quadrat for all shrub species.



- **Percent basal cover (herbs).** Visual estimate of the amount of basal cover within each quadrat for all herbaceous species.
- **Percent bare ground.** Visual estimate of the amount of available bare ground with no vegetation.
- **Percent rock or other.** Visual estimate of the amount of unavailable ground for supporting plant growth. Inhibitors generally included rocks and boulders, irrigation lines and valve boxes, and mulch.
- **Percent canopy.** Visual estimate of the percent canopy of each shrub and herbaceous species.
- **Photographs.** A photograph was taken from the southwest corner (facing northeast) of each quadrat.

Percent Cover

The following quantitative data was collected in each quadrat to determine the percent cover of native and non-native species.

- **Point intercept method.** Sampling began at the southwest corner of each quadrat and continued around the quadrat in a clockwise direction. The species located precisely at every meter point was tallied, including areas of bare ground, rock and other.

Field Results

Below are the average data collected for each planting method.

Absolute Cover (Qualitative)

Soil imprinting with hand broadcast overseeded drainage swales – Quadrats A and G (average)

- Percent basal cover (shrubs) – 3%
- Percent basal cover (herbs) – 13%
- Percent bare ground – 58%
- Percent rock or other – 3%
- Percent canopy (shrubs) – 22%
- Percent canopy (herbs) – 21%

Soil imprinting – Quadrats B, F, and H (average)

- Percent basal cover (shrubs) – 13%
- Percent basal cover (herbs) – 10%
- Percent bare ground – 48%
- Percent rock or other – 3%
- Percent canopy (shrubs) – 32%
- Percent canopy (herbs) – 25%

Broadcast seeding – Quadrat C

- Percent basal cover (shrubs) – 30%



- Percent basal cover (herbs) – 10%
- Percent bare ground – 15%
- Percent rock or other – 3%
- Percent canopy (shrubs) – 93%
- Percent canopy (herbs) – 22%

Broadcast seeding with soil imprinting – Quadrats D and I (average)

- Percent basal cover (shrubs) – 5%
- Percent basal cover (herbs) – 11%
- Percent bare ground – 65%
- Percent rock or other – 7%
- Percent canopy (shrubs) – 17%
- Percent canopy (herbs) – 27%

Soil Imprinting and hand broadcast – Quadrat E

- Percent basal cover (shrubs) – 7%
- Percent basal cover (herbs) – 3%
- Percent bare ground – 75%
- Percent rock or other – 1%
- Percent canopy (shrubs) – 15%
- Percent canopy (herbs) – 11%

Percent Cover (Quantitative)

The representation of each species within each quadrat was estimated by broad cover classes (<1%, 1-5%, 5-25%, 25-50%, 50-75%, and >75%). The percent cover of each species based upon the point intercept method is presented in Table 1 through Table 5 below.



Table 1 Soil Imprinting with Hand Broadcast Overseeded Drainage Swales – Quadrats A and G (Average)

Species	Quadrat A		Quadrat G	
	Number of Hits	Percent Cover	Number of Hits	Percent Cover
Native Shrubs				
<i>Acmispon glaber</i>	2	4%	2	4%
<i>Artemisia californica</i>				
<i>Atriplex lentiformis</i>			10	20%
<i>Atriplex polycarpa</i>			6	12%
<i>Atriplex spinosa</i>				
<i>Baccharis pilularis</i>	1	2%		
<i>Baccharis salicifolia</i>				
<i>Encelia californica</i>				
<i>Salvia apiana</i>				
<i>Salvia mellifera</i>				
Non-Native Shrubs				
<i>Atriplex semibaccata</i>	2	4%	4	8%
Native Herbs				
<i>Achillea millefolium</i>				
<i>Eschscholzia californica</i>				
<i>Elymus triticoides</i>	4	8%	5	10%
<i>Nasella pulchra</i>				
<i>Sisyrinchium bellum</i>				
Non-Native Herbs				
<i>Centaurea melitensis</i>	8	16%	1	2%
<i>Erodium cicutarium</i>				
<i>Hirschfeldia incana</i>	2	4%	2	4%
<i>Hordeum murinum</i>				
<i>Salsola tragus</i>	1	2%		
Bare ground	30	60%	20	40%
	Quadrat A	Quadrat G	A and G (% Cover)	
Percent Cover Native Shrub	10%	36%	23%	
Percent Cover Native Herb	8%	10%	9%	
Percent Cover Non-Native Shrub	0%	8%	4%	
Percent Cover Non-Native Herb	22%	6%	14%	
Percent Bare Ground	60%	40%	50%	



Table 2 Soil Imprinting – Quadrats B, F, and H (Average)

Species	Quadrat B		Quadrat F		Quadrat H	
	Number of Hits	Percent Cover	Number of Hits	Percent Cover	Number of Hits	Percent Cover
Native Shrubs						
<i>Acmispon glaber</i>					2	4%
<i>Artemisia californica</i>	14	28%				
<i>Atriplex lentiformis</i>			4	8%	4	8%
<i>Atriplex polycarpa</i>						
<i>Baccharis pilularis</i>	10	20%				
<i>Encelia californica</i>	3	6%				
<i>Encelia farinosa</i>	2	4%				
<i>Eriogonum fasciculatum</i>			4	8%	3	6%
<i>Hesperoyucca whipplei</i>						
<i>Isocoma menziesii</i>	7	14%				
<i>Salvia apiana</i>	1	2%				
<i>Salvia mellifera</i>	7	14%				
<i>Sambucus nigra</i> ssp. <i>caerulea</i>					1	2%
Non-Native Shrubs						
<i>Atriplex semibaccata</i>					2	4%
Native Herbs						
<i>Elymus triticoides</i>					1	2%
<i>Helianthus annuus</i>						
Non-Native Herbs						
<i>Bromus diandrus</i>			1	2%		
<i>Bromus rubens</i>			4	8%	3	6%
<i>Centaurea melitensis</i>	1	2%				
<i>Festuca myuros</i>					1	2%
<i>Chenopodium album</i>					1	2%
<i>Hordeum murinum</i>						
<i>Mesembryanthemum nodiflorum</i>			20	40%		
<i>Polygonum aviculare</i>			1	2%	1	2%
<i>Salsola tragus</i>					1	2%
Bare ground	5	10%	16	32%	30	60%
	Quadrat B		Quadrat F		Quadrat H	
Percent Cover Native Shrub	88%		16%		20%	41%
Percent Cover Native Herb	0%		0%		6%	2%
Percent Cover Non-Native Shrub	0%		0%		0%	0%
Percent Cover Non-Native Herb	2%		52%		14%	23%
Percent Bare Ground	10%		32%		60%	34%



Table 3 Broadcast Seeding – Quadrat C

Species	Quadrat C	
	Number of Hits	Percent Cover
Native Shrubs		
<i>Acmispon glaber</i>	17	34%
<i>Artemisia californica</i>	14	30%
<i>Atriplex lentiformis</i>		
<i>Atriplex polycarpa</i>		
<i>Atriplex spinosa</i>		
<i>Baccharis pilularis</i>	1	2%
<i>Encelia californica</i>		
<i>Encelia farinosa</i>	2	4%
<i>Eriogonum fasciculatum</i>	2	4%
<i>Lepidospartum squamatum</i>		
<i>Salvia apiana</i>		
Native Herbs		
<i>Achillea millefolium</i>		
<i>Eschscholzia californica</i>		
<i>Elymus triticoides</i>		
<i>Nasella pulchra</i>		
<i>Sisyrinchium bellum</i>		
<i>Vulpia microstachys</i>		
Non-Native Herbs		
<i>Centaurea melitensis</i>	8	16%
<i>Echinochloa crus-galli</i>		
<i>Erodium cicutarium</i>		
<i>Hirschfeldia incana</i>	4	8%
<i>Hordeum vulgare</i>		
<i>Marrubium vulgare</i>		
Bare ground	0	0%
Quadrat C (% cover)		
Percent Cover Native Shrub	72%	
Percent Cover Native Herb	0%	
Percent Cover Non-Native Shrub	0%	
Percent Cover Non-Native Herb	28%	
Percent Bare Ground	0%	



Table 4 Broadcast Seeding with Soil Imprinting – Quadrats D and I (Average)

Species	Quadrat D		Quadrat I	
	Number of Hits	Percent Cover	Number of Hits	Percent Cover
Native Shrubs				
<i>Acmispon glaber</i>	2	4%		
<i>Artemisia californica</i>				
<i>Atriplex lentiformis</i>	14	28%		
<i>Atriplex polycarpa</i>			5	10%
<i>Eriogonum fasciculatum</i>			3	6%
<i>Isocoma menziesii</i>			2	4%
<i>Opuntia littoralis</i>				
Non-Native Shrubs				
<i>Atriplex semibaccata</i>			5	10%
Native Herbs				
<i>Achillea millefolium</i>				
<i>Descurainia pinnata</i>				
<i>Elymus triticoides</i>	2	4%	3	6%
<i>Nasella pulchra</i>				
<i>Sisyrinchium bellum</i>				
<i>Vulpia microstachys</i>				
Non-Native Herbs				
<i>Amaranthus albus</i>			1	2%
<i>Avena barbata</i>			2	4%
<i>Bromus diandrus</i>			2	4%
<i>Bromus rubens</i>	3	6%	9	18%
<i>Centaurea melitensis</i>	2	4%		
<i>Festuca myuros</i>			2	4%
<i>Hirschfeldia incana</i>				
<i>Hordeum murinum</i>			5	10%
<i>Mesembryanthemum nodiflorum</i>	11	22%		
<i>Polygonum aviculare</i>	1	2%		
<i>Salsola tragus</i>				
Bare ground	15	30%	16	32%
	Quadrat D		Quadrat I	D and I (% cover)
Percent Cover Native Shrub	32%		20%	26%
Percent Cover Native Herb	4%		6%	5%
Percent Cover Non-Native Shrub	0%		10%	5%
Percent Cover Non-Native Herb	34%		32%	33%
Percent Bare Ground	30%		32%	31%



Table 5 Soil Imprinting and Hand Broadcast – Quadrat E

Species	Quadrat E	
	Number of Hits	Percent Cover
Native Shrubs		
<i>Acmispon glaber</i>		
<i>Artemisia californica</i>	3	6%
<i>Atriplex lentiformis</i>	5	10%
<i>Atriplex polycarpa</i>	5	10%
<i>Atriplex spinosa</i>		
<i>Baccharis pilularis</i>		
<i>Encelia californica</i>		
<i>Encelia farinosa</i>	1	2%
<i>Eriodictyon californicum</i>	2	4%
<i>Eriogonum fasciculatum</i>	5	10%
<i>Isocoma menziesii</i>	3	6%
<i>Opuntia littoralis</i>		
<i>Salvia apiana</i>	1	2%
<i>Salvia mellifera</i>		
Non-Native Shrubs		
<i>Atriplex semibaccata</i>	1	4%
Native Herbs		
<i>Achillia mellifolium</i>		
<i>Eschscholzia californica</i>		
<i>Elymus triticoides</i>	2	4%
Non-Native Herbs		
<i>Bromus diandrus</i>		
<i>Centaurea melitensis</i>		
<i>Hirschfeldia incana</i>	1	2%
<i>Hordeum vulgare</i>		
<i>Mesembryanthemum nodiflorum</i>	4	8%
Bare ground	16	32%
Quadrat E (% cover)		
Percent Cover Native Shrub	50%	
Percent Cover Native Herb	4%	
Percent Cover Non-Native Shrub	4%	
Percent Cover Non-Native Herb	10%	
Percent Bare Ground	32%	

Discussion

Table 6 below provides a summary of the percent cover of native and non-native shrubs and herbs, including areas of bare ground within the Coastal Sage Scrub City South B Trial Plot.

Table 6 Summary of Percent Cover for Each Planting Method Using the Point Intercept Method

	Soil Imprinting with Hand Broadcast Overseeded Drainage Swales (Quadrats A and G)	Soil Imprinting (Quadrats B, F, and H)	Broadcast Seeding (Quadrat C)	Broadcast Seeding with Soil Imprinting (Quadrats D and I)	Soil Imprinting and Hand Broadcast (Quadrat E)
Percent Cover Native Shrub	23%	41%	72%	26%	50%
Percent Cover Native Herb	9%	2%	0%	5%	4%
Percent Cover Non-Native Shrub	4%	0%	0%	5%	4%
Percent Cover Non-Native Herb	14%	23%	28%	33%	10%
Percent Bare Ground	50%	34%	0%	31%	32%

The trial plot was established in November 2018. As described in previous monitoring reports, the 2019 Saddleridge Fire burned a large portion of the trial plot, but mostly spared the sample plots. The fire damaged the irrigation system, which is no longer functioning.

As discussed in previous reports, native species have established since the fire, and primarily include shrub species such as brittlebush (*Encelia farinosa*), coast prickly pear (*Opuntia littoralis*), big saltbush (*Atriplex lentiformis*), deerweed (*Acmispon glaber*), California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), white sage (*Salvia apiana*), and coastal goldenbush (*Isocoma menziesii*). Native shrub species resprouted from burned stumps following the Saddleridge Fire, from the pre-existing seedbank, and from seeds installed during the seeding treatments performed during creation of the trial plot. The trial plot appears to have mostly recovered from the fire, evidenced by substantial native shrub establishment and growth within the trial plot. As discussed in previous reports, below-average rainfall in 2021 and 2022 throughout southern California negatively impacted native species growth in the trial plot. In particular, native herbaceous species quantitative cover remained at or below five percent cover in 2021 and 2022. In the winter of 2022 and spring of 2023, above-average rainfall was observed throughout southern California. This above-average rainfall appears to have positively influenced native shrub and herbaceous species cover (Table 6). Native shrub species that showed a notable increase in cover include California sagebrush, California buckwheat, coyote brush (*Baccharis pilularis*), blue elderberry (*Sambucus nigra* ssp. *caerulea*), black sage (*Salvia mellifera*), deerweed, big saltbush, and allscale saltbush (*Atriplex polycarpa*). Additionally, beardless wild rye (*Elymus triticoides*; a native herbaceous grass species) showed a notable increase in cover.

Non-native plant cover, which increased in all of the treatment types between the fourth quarter of 2022 and the first quarter of 2023, has remained relatively stable since between the first and second quarters of 2023 (Table 6). Commonly occurring non-native plant species observed in the trial plot include small flowered iceplant (*Mesembryanthemum nodiflorum*), redstem filaree (*Erodium cicutarium*), tocalote (*Centaurea melitensis*), short podded mustard (*Hirschfeldia incana*), foxtail barley (*Hordeum murinum*), and red brome (*Bromus rubens*). Non-native plant species in flower during the second quarter of 2023 include tocalote, short podded mustard, and small flowered iceplant. Most



notably, small flowered iceplant was at 40 percent cover in Quadrat F (using the point intercept method) in the second quarter of 2023. Non-native plant species cover is expected to remain constant throughout the summer of 2023, and begin to decline in the fall and winter months.

Broadcast seeding (Quadrat C) had the highest percent cover of native shrubs using the point intercept method (72 percent) and represents an increase in cover (8 percent) since the fourth quarter of 2022. This increase is likely a result of the aforementioned above-average rainfall that southern California received in the months prior to the monitoring event. Deerweed, which is one of the most dominant species in Quadrat C, is an early-successional shrub species that is extremely beneficial for restoration purposes, as it fixes nitrogen into the soil and thereby increases soil fertility for other native plant species. The second highest percent cover of native shrubs was in the soil imprinting and hand broadcast treatment (Quadrat E; 50 percent), and the third highest was the soil imprinting treatment (Quadrats B, F, and H; 41 percent; Table 6). Both of these treatment types saw increases in native shrub cover between the first and second quarters of 2023. The percent cover of native herbaceous plant species was low in all planting methods, ranging between zero and nine percent in the second quarter of 2023. This is consistent with observations made in previous sampling events.

Recommendations

Successional Growth and Weed Control

Wildfires in Southern California have become more common in recent years and have impacted on the native landscape. Non-native weed control is essential in establishing post-fire restoration sites and is recommended by organizations such as the California Department of Fish and Wildlife Service and the California Society of Ecological Restoration. Successional regrowth of herbaceous non-native species is to be expected within the first two to three years following a wildfire, which is currently occurring at the trial plot. Native shrubs are expected to recover over a longer period through germination of existing seed within the topsoil and basal growth from charred plants. Native shrubs have shown notable growth in the past two years, and now appear to be well established in the trial plot.

Successional growth of herbaceous species is also important, as native herbaceous species provide natural erosion of topsoil. To promote establishment and growth of native herbaceous species, controlling the spread of non-native herbaceous species such as foxtail barley, red brome, and short podded mustard is essential. Reducing non-native herbaceous species growth minimizes negative competitive effects on native herbaceous and woody species for water, nutrients, and sunlight. Weed maintenance should occur no less than every four months, and special attention should be afforded to minimizing impacts to native grasses that may appear to be non-native (i.e., beardless wild rye), native seedlings, and native shrub resprouts. Weed maintenance should be scheduled to maximize removal of non-native species prior to seed set, which typically occurs in spring between the months of February and April, but may also occur throughout the growing season based upon water availability.

Supplemental Irrigation

While southern California received above-average rainfall in the winter of 2022 and spring of 2023, supplemental irrigation is a valuable restoration technique to promote re-establishment of native vegetation, particularly during the dry months of the year (i.e., summer and fall). As described above, native herbaceous vegetation has continued to be notably low throughout all planting methods. If native herbaceous vegetation continues to be sparse throughout the trial plot, and/or if native shrubs senesce



or show indicators of drought stress, the irrigation system within the trial plot should be re-installed to increase water availability and promote seed germination and re-establishment of native vegetation.



References

John Minch and Associates, Inc. (JMA). 2014. 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.

Thank you for the opportunity to work with you on this important Project. Please contact Greg Ainsworth if you have questions concerning the contents of this report. He may be reached by telephone at (818) 564-5544, or by email at gainsworth@rinconconsultants.com.

Sincerely,
Rincon Consultants, Inc.

A handwritten signature in black ink, appearing to read "Greg Ainsworth", written over a light blue horizontal line.

Greg Ainsworth
Natural Resources Director

A handwritten signature in black ink, appearing to read "Kyle Gern", written over a light blue horizontal line.

Kyle Gern
Biologist

Attachments

- Attachment A Deck B Revegetation Area Quadrat Layout
- Attachment B Representative Site Photographs

Attachment A

Deck B Revegetation Area Quadrat Layout

Deck B Revegetation Area Quadrat Layout



Attachment B

Photographs of Sample Plots



Photograph 1. Quadrat A facing northeast from southwest corner (June 22, 2023).



Photograph 2. Quadrat B facing northeast from southwest corner (June 22, 2023).



Photograph 3. Quadrat C facing northeast from southwest corner (June 22, 2023).



Photograph 4. Quadrat D facing northeast from southwest corner (June 22, 2023).



Photograph 5. Quadrat E facing northeast from southwest corner (June 22, 2023).



Photograph 6. Quadrat F facing northeast from southwest corner (June 22, 2023).



Photograph 7. Quadrat G facing northeast from southwest corner (June 22, 2023).



Photograph 8. Quadrat H facing northeast from southwest corner (June 22, 2023).



Photograph 9. Quadrat I facing northeast from southwest corner (June 22, 2023).

ATTACHMENT 6





Rincon Consultants, Inc.

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March 22, 2021
Project No: 21-11086

Tuong-phu Ngo
Republic Services
14747 San Fernando Road
Sylmar, California 91342
Via email: [email address](#)

**Subject: Sunshine Canyon Landfill Ultimate Entry Improvement Project, Oak Tree Survey
14747 San Fernando Road, Sylmar, California, 91342**

Dear Mr. Ngo:

Rincon Consultants, Inc. (Rincon) prepared this report for the Ultimate Entry Improvement Project (project) located at the Sunshine Canyon Landfill (landfill) in Sylmar, Los Angeles County, California. This report, prepared by ISA certified arborist Greg Ainsworth, documents the results of an oak tree survey and assessment of impacts to protected oak trees from the project and provides a current tally on the remaining oak trees in the landfills' s oak tree mitigation bank.

Introduction

This oak tree report was prepared to disclose information on native oak (*Quercus sp.*) trees that would be removed by the proposed project.

Pursuant to the Los Angeles County Oak Tree Ordinance, any tree of the oak genus that is 25 inches in circumference (8 inches in diameter) or has a combined trunk circumference of any two trunks of at least 38 inches (12 inches in diameter), as measured 4.5 feet above the mean natural grade (i.e., diameter at breast height [DBH]), is considered a "protected tree" (Ordinance 88-0157 1, 82-0168 2, Section 22.56.2050, 1988). An oak tree that has a trunk DBH equal to or greater than 36 inches is considered a heritage tree, as defined in the Los Angeles County Oak Tree Ordinance. In accordance with the Ordinance, no damage shall occur within the protective zone (the area within the dripline of an oak tree and extending to a point at least 5 feet outside the dripline, or 15 feet from the trunk[s] of the tree, whichever distance is greater) of a protected oak tree. Damage is defined as any act causing or tending to cause injury to the root system or other parts of an oak tree, including, but not limited to, burning, application of toxic substances, operation of equipment or machinery, paving, changing of natural grade, and trenching or excavating.

Sunshine Canyon Landfill Oak Tree Mitigation Bank

In accordance with landfill's Conditional Use Permit (CUP) and Oak Tree Permit (OTP) #86312-(5) (dated February 19, 1991) for the Sunshine Canyon Landfill Extension Project, all native oak trees that will be removed for any project-related impact shall be mitigated at a ratio of 2:1, and heritage-size oak trees (36-inch DBH or greater) shall be mitigated at a ratio of 10:1. All mitigation oaks shall be monitored for 7 years after the tree reaches 0.5 inches in diameter.



A surplus of coast live oak trees was previously planted in the landfill's mitigation areas, which now serves as a mitigation bank for the landfill to draw from for future removals of coast live oak trees. There are currently 48 coast live oaks remaining in the mitigation bank (JMA, Sunshine Canyon Landfill Oak Tree and Bigcone Douglas Fir Monitoring Report No. 28, March 8, 2021).

Project Description

The proposed project involves the development of a landfill termination berm and cut/fill graded entrance roadway that will provide a down-slope buttress and access for a proposed landfill expansion. The nearly 190-foot-high proposed roadway and berm embankment across the mouth of the main canyon of Sunshine Canyon Landfill is designed to buttress the expanded landfill refuse prism that will be situated to the west. This new road embankment includes the associated cut and fill grading, three retaining walls, and a sedimentation basin with stormwater controls.

Methods

All oak trees located within and immediately adjacent to the project footprint that could be impacted by the proposed project were surveyed by certified arborist Greg Ainsworth (I.S.A. Cert# WE-7473A). The tree survey was conducted on March 4, 2021. Using a forester's diameter-equivalent tape, the diameter of all native oak trees having a trunk diameter of 8 inches or greater (or combined trunk diameter of 12 inches or greater) were measured at 4.5 feet above the mean natural grade to obtain the DBH. The location of each tree was recorded from the base of the tree using a Global Positioning System (GPS) with sub-meter accuracy. The following parameters were assessed from the base of each tree (or from the nearest vantage point):

Tree Characteristics

- Trunk diameter (DBH)
- Height
- Crown radius in all directions (north, south, east, and west).
- Balance or symmetry of the tree based on the crown radius measurements and whether the tree leans or is unstable.

Physical Condition

- Identification of damage caused by pathogens or insect pests, by natural causes such as lightning, or by human activity.
- Evaluation of vigor based on such parameters as amount of new growth, leaf color, abnormal bark, dead wood, evidence of wilt, excessive necrosis or leaf chlorosis, thinning of crown, etc.
- Assessment of the overall health of the tree based on the evaluation of vigor, presence of damage, and comparison to the typical archetype tree of the same species.



Health Grade

A subjective alphabetical ranking was assigned for overall health (vigor, aesthetic value, and balance) for each native oak and big cone fir tree based on the criteria described below:

- “A” = Excellent: A healthy and vigorous tree characteristic of its species and reasonably free of any visible signs of stress, disease, or pest infestation.
- “B” = Good: A healthy and vigorous tree with minor visible signs of stress, disease, and/or pest infestation. Some maintenance measures may need to be implemented, such as pruning of dead wood or broken branches.
- “C” = Fair: Although healthy in overall appearance, there is abnormal amount of stress or disease/insect infestation, and a substantial amount of maintenance may be needed.
- “D” = Poor: A tree that may be exhibiting a substantial amount of stress, disease, or insect damage than what the amount that is expected for the species. The tree may be in a state of rapid decline, and may show various signs of dieback, necrosis, or other symptoms caused by pathogens or insect pests.
- “F” = Dead: This tree has no foliage and exhibits no sign of life or vigor.

Results

There are 20 coast live oak trees located within the project footprint, one of which is dead, and all of which would be removed by the proposed project. No other oak trees would be encroached or otherwise impacted by the proposed project. Data on these 20 oak trees is presented in Table 1 below.

Table 1 Oak Tree Survey Data

Tree #	Species	DBH	Canopy Spread				Health	Physical Condition	Impact Status	Reason for Impact
			North	West	South	East				
1	Coast live oak	13	14	3	8	21	Fair		Removal	Grading
2	Coast live oak	--	--	--	--	--	Dead		Removal	Grading
3	Coast live oak	16	3	8	25	35	Poor	fire scar	Removal	Grading
4	Coast live oak	12	12	7	18	15	Good	fire scar	Removal	Grading
5	Coast live oak	18	11	15	30	7	Good	fire scar	Removal	Grading
6	Coast live oak	9	4	8	18	2	Fair	fire scar	Removal	Grading
7	Coast live oak	15	7	16	15	8	Fair	fire scar	Removal	Grading
8	Coast live oak	9	7	3	18	8	Good	fire scar	Removal	Grading
9	Coast live oak	18	30	15	22	10	Good	fire scar	Removal	Grading
10	Coast live oak	16	8	17	15	6	Fair	fire scar	Removal	Grading
11	Coast live oak	10	15	14	1	2	Fair	fire scar	Removal	Grading
12	Coast live oak	10	20	6	4	2	Fair	fire scar	Removal	Grading
13	Coast live oak	22	18	21	16	10	Fair	fire scar	Removal	Grading
14	Coast live oak	10	19	1	1	1	Fair	fire scar	Removal	Grading
15	Coast live oak	21	10	7	18	22	Fair	fire scar	Removal	Grading



Tree #	Species	DBH	Canopy Spread				Health	Physical Condition	Impact Status	Reason for Impact
			North	West	South	East				
16	Coast live oak	18	1	22	19	8	Fair	fire scar, split trunk	Removal	Grading
17	Coast live oak	19	15	11	15	10	Fair	fire scar	Removal	Grading
18	Coast live oak	12	15	7	15	7	Fair	fire scar	Removal	Grading
19	Coast live oak	12	17	10	4	8	Good		Removal	Grading
20	Coast live oak	8	4	12	6	1	Fair		Removal	Grading

Mitigation

There are currently 48 coast live oak trees in the landfill's mitigation bank. As noted in Table 1, 20 coast live oak trees would be removed by the proposed project. Therefore, at a mitigation ratio of 2:1, 40 coast live oak trees will be deducted from the landfill's oak tree mitigation bank, leaving 4 oak trees remaining in the bank for future removals at the landfill.

Please contact Greg Ainsworth at (818) 564-5544 or email at gainsworth@rinconconsultants.com if you have any question or comments regarding the information provided in this report.

Sincerely,
Rincon Consultants, Inc.

Greg Ainsworth, I.S.A. Cert # WE-7473A
Director of Urban Forestry

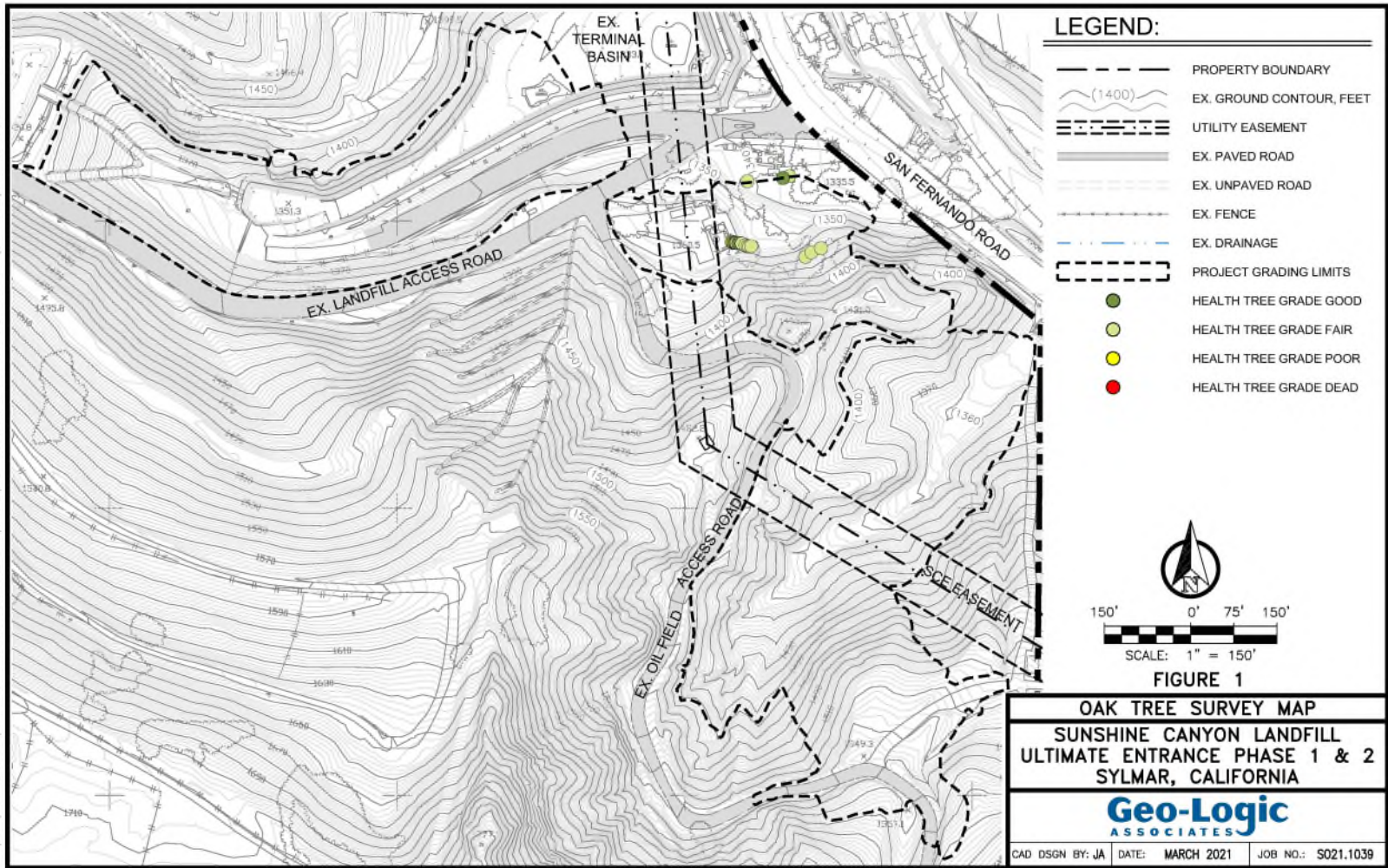
Attachments

Oak Tree Map

DRAWING 1



P:\SITES\SUNSHINE CANYON\ULTIMATE ENTRANCE ROAD CONST PHASE 1-2\EXHIBITS\S021 1039-SCL-VHBT-OAK TREES LOCATIONS-FIG 1-(2021-03-24).DWG March 26, 2021 - 10:30 AM BY: GJA-USER



October 31, 2023

Mr. David Nguyen
County of Los Angeles, Department of Public Works
900 South Fremont Avenue
Alhambra, CA 91803-1331

Subject: Sunshine Canyon Landfill, Quarterly Vegetation Report
Third Quarter 2023 Vegetation Report

Mr. Nguyen,

This report has been prepared in accordance with the following:

- Condition 18B of the Finding of Conformance
- Condition 44A of the Condition Use Permit (CUP)
- Los Angeles City Condition [Q] C.8 of the Ordinance No. 172,933

This report presents the progress of the site's landscaping and revegetation activities for the third quarter of 2023. The intent of these reports is to provide detailed information regarding the site's efforts related to vegetation including vegetation of interim and permanent slopes and activities conducted for the on-site sage mitigation areas.

Architerra Design Group continues to assist site personnel in evaluating current site conditions relating to vegetation and provide recommendations for future efforts. This report includes their assessment of the pilot sage vegetation area as well as recommendations for this area. Architerra's evaluation is in addition to the required quarterly monitoring performed by our consulting biologist.

1.0 Interim Slopes

For the purposes of this report, interim slopes are those defined as slope areas where no activities have taken place for 180 days or longer. CUP Condition 44A requires "a temporary hydroseed vegetation cover on any slope or landfill area that is projected to be inactive for a period of greater than 180 days".

1.1 Hydroseeding Activities

Based on the results of the trial project completed in August 2017, a 57-acre vegetative cover project using the approved seed mix was completed in mid-December 2017. Additionally, the site completed hydroseeding approximately 155 acres; application of the approved seed mix was completed during 2019. The increase in hydroseeding application is a result of our normal winterization efforts along with slope revegetation as a result of the Saddle Ridge Fire that impacted Sylmar, CA on October 2019. These areas had successful vegetation growth after the recent rains.

2.0 Permanent Slopes

Permanent slopes are defined as those where no landfilling activities will be conducted in the future.

As part of our Saddle Ridge Fire recovery efforts both the City and County permanent slopes of the landfill had hydroseed applied as necessary. This application of hydroseed was completed for soil stabilization purposes.

3.0 Non-Permanent Cut Slopes

Prior quarterly vegetation reports have illustrated one area above the front terminal sedimentation basin and one area near the temporary bypass road as “non-permanent cut slopes”. An evaluation of these areas has been conducted and it has been determined that these areas are “permanent slopes” because no landfilling activities will be conducted against these slopes in the future.

4.0 Activities Conducted in Sage Mitigation Areas – 3Q2023

During the third quarter of 2023, the following activities were conducted in the sage mitigation areas at the landfill.

4.1 City South Sage Pilot Project Area – Deck C

The lower Deck C mitigation project area was impacted by the Saddle Ridge fire in October 2019. As noted in Rincon’s (formerly JMA) City-Side Sage Mitigation Area Lower Deck report a substantial amount of the lower deck was burned or scorched. However, in previous reports they note that because this was an established site, they expect natural re-establishment of the native vegetation within the first two to three years. Rincon has noted a substantial amount of regrowth has occurred following the fire and included the most prevalent natives such as California Sunflower, Saltbush, Horseweed, and pockets of Wild Ryegrass. Rincon also noted non-native plant cover has not changed substantially since Q1 and Q2 2023 but is expected to decrease during the fall and winter months.

As reported previously, Architerra Design Group indicates that there has been an abundance of Venturan CSS species germinating and crown-sprouting since the

fire. The species following the rebound include Purple Sage, Coast Sunflower, White Sage, Creeping Wild Rye, Deerweed, Black Sage, and Mexican Elderberry. Surprisingly there are also new species from the original seed mix are now sprouting up in decent numbers and included in the list below:

- Purple Sage (*Salvia leucophylla*)
- Coast Sunflower (*Encelia californica*)
- White Sage (*Salvia apiana*)
- Creeping Wild Rye (*Leymus triticoides*)
- Deerweed (*Lotus scoparius*)
- Black Sage (*Salvia mellifera*)
- Mexican Elderberry (*Sambucus mexicana*)
- Scarlet Bugler (*Penstemon centranthifolia*)
- Telegraph Weed (*Heterotheca grandiflora*)
- Monkey Flower (*Mimulus aurantiacus*)
- Smooth-Leaf Yerba Santa (*Eriodictyon trichocalyx*)
- Thicketleaf Yerba Santa (*Eriodictyon crassifolium*)
- Sunflower (*Helianthus annuus*)
- California Bush Sunflower (*Encelia californica*)
- California Sagebrush (*Artemisia californica*)
- California Buckwheat (*Eriogonum fasciculatum*)
- Quail Bush (*Atriplex lentiformis*)
- Four-Wing Saltbush (*Atriplex canescens*)
- Cattle Spinach (*Atriplex polycarpa*)
- Spinescale (*Atriplex spinifera*)
- Toyon (*Heteromeles arbutifolia*)
- Foothill Needlegrass (*Nassella lepida*)
- Coyote Bush (*Baccharis pilularis*)
- Showy Penstemon (*Penstemon spectabilis*)
- Wright's Cudweed (*Pseudognaphalium microcephalum*)
- White Horehound (*Marrubium vulgare*) Non-Native
- Australian Saltbush (*Atriplex semibaccata*) Non-Native

As reported from Architerra, the abundance of historic level rains last winter and the summer storm Hillary has assisted in the emergence of many of the Ventruan CSS Species. With the warmer temperatures and recent rains, several of the VCSS species have begun emerging several months early. Many species of the Saltbush are in full bloom and new Saltbush plants germinated due to the extensive winter rains. California Bush Sunflower (*Encelia californica*), California Sagebrush (*Artemisia californica*), Deerweed (*Acmispon glaber*) and several Sage species (*Salvia* sp.) are now beginning summer dormancy response. Typically Mexican Elderberry (*Sambucus mexicana*) goes drought deciduous by this time of year, but due to the extended winter rains has not and is flowering and developing fruit thus providing a vital resource to many of the birds that visit the deck.

Also noted were continued growth of several invasive species; Shortpod Mustard (*Hirshfeldia incana*), Yellow Star Thistle (*Centaurea solstitialis*), and Russian Thistle (*Salsola* spp.) continues to be problematic. It was recommended maintenance

personnel work on removing these before they flower and seed. In Q3, minimal maintenance work was done on removing invasive species and it was also noted the interior of the deck still needed to be weeded. Also noted was to identify native species prior to any invasive removals. In addition, the majority of the Coast Live Oaks at the PM 10 berm have recovered from fire damage in 2020.

4.2 City South Deck B

The Deck B sage mitigation project began on April 9, 2018 and planting was completed by the end of the fourth quarter 2018. Soil samples indicated low pH and high salinity, as a result Deck B underwent a leaching schedule. Additional soil amendments and resampling were completed before planting began, which took place during the fourth quarter 2018. Pacific Restoration Group, Inc (PRG) has been working with Architerra for the completion of project. A summary of the progress is included in Attachment 3. The northwest portion of the Middle Deck burned during the Saddle Ridge Fire in October 2019. Architerra Design Group (ADG) indicated previously Deck B was doing quite well and there was evidence of desiccation of the seedlings especially the Common Yarrow and other native species that have recently spouted and are beginning to harden off and defoliate. Architerra has, in the past, also indicated the plant diversity on Deck B is impressive and many of the species in the seed mix have germinated and the containerized plants also are doing well and are blooming or just finished which are the White Sage, Mexican Elderberry, Menzie's Goldenbush, and Prickly Pear.

During Ricon's observation of Deck B, brittlebush (*Encelia farinosa*) coverage was estimated at 4%. Recognizing the concerns of the County Biologist, Republic will work with our mitigation team to recognize this plant and perform the next several quarters. It will also be removed from future seed mixes.

Revegetation efforts have been successful in the establishment of the Venturan Coastal Sage Scrub habitat and evidence of species and age diversity and resprouting of larger species. Architerra also noted Deck B site is similar to those found on Deck C in the growth of the VCSS. Deck B is also dominated by California Buckwheat (*Eriogonum fasciculatum*). However, the downslopes are primarily covered with little to no native species and should be addressed to remove the invasive weeds as soon as possible. The south side of the slope has been overtaken by invasive Slenderleaf Iceplant (*Mesembryanthemum nodiflorum*) and was growing in the revegetation area and has spread northward. Maintenance of the iceplant has been minimal and continues to spread. The northern part of Deck B has been completely filled in and is well established with shading to prevent weed growth. Over all, there is a good species diversity on this deck and planting is responding well with vigorous growth.

4.3 City South Deck A

In December 2022, Conversations with Architerra were started to discuss a plan to address the potential mitigation plans for Deck A. An onsite meeting occurred during May 2023 for an initial assessment of Deck A and determine what will need to be done. We anticipate a tentative schedule to be established in the coming months.

Prior to any mitigation efforts, soil was placed in a large area affected by subsidence and graded for proper drainage. This occurred in June and July 2023 and it is anticipated in quarter four 2023, mitigation plans will commence to address the area.

The Deck A sage mitigation is anticipated to restart late 2023 and early 2024. Recent grading activity on approximately 1.5 acres occurred during the second quarter and into early third quarter 2023. This grading activity was completed in order to fill a low spot resulting from subsidence and which led to ponding during this past winter. The initial plan for Deck A is to partition the approximately 25 acres into more manageable 5-acre plots. The recently graded area will be part of the initial revegetation plot and is expected to start after the first rains to allow the soil to properly leach. Soil sampling was conducted in September, 2023 to determine the viability of the soil. The full report can be found in Attachment 3. Additional details outlining the steps to reseed and mitigate this area are included in Attachment 3.

4.4 County Sage Mitigation Area

The County sage mitigation area is located on the western side of the County portion of Sunshine Canyon Landfill (Drawing 1). As noted in the fourth quarter Rincon County-Side Sage Mitigation Area report the upper half of the mitigation site was burned in the Saddle Ridge fire in October of 2019. No revegetation activities were conducted in this area during the third quarter 2023, and as noted in multiple Rincon progress reports, the conditions in this mitigation area have remained unchanged for some time. Rincon notes in their attached 2023 third quarter vegetation report that this area remains problematic for establishment of vegetation due to barren soil. Soil samples from this location indicate low pH, high salinity, and Boron present in native soils.

5.0 Assessments of Sage Mitigation Areas

Assessments of the site's sage mitigation areas are conducted by a qualified biologist on a quarterly basis. The following sections present a summary of the recommendations for the sage mitigation areas from Rincon (City and County sage mitigation areas) and Architerra (City South Sage Pilot Project Area (Deck C) and Middle Deck (Deck B) and the proposed actions in response to the recommendations.

5.1 Rincon Recommendations for City Sage Mitigation Areas

Rincon's progress reports for the City Sage Mitigation Areas for the second quarter of 2023 are provided in Attachment 1. These reports include recommendations based on the assessments. Table 1 presents a summary of these recommendations and the proposed actions.

- The booster pump and power that was destroyed in the Saddleridge Fire will need to be replaced for irrigation to deck A. Architerra's initial recommendation is to get a team on site to walk the deck and determine best strategy moving forwards to tackle the approximately 25 acres.

Table 1 – Rincon Recommendations and Proposed Actions – City Sage Mitigation Areas, Third Quarter 2023

AREA		RECOMMENDATION	PROPOSED ACTION
Lower, Middle, and Upper Decks (Decks C, B, and A)	1	Weed Control – Implement a year-round weed control program to control non-native species.	A weed control program is already in place on Deck C and B as part of the pilot project and will continue. A weed control program on A will be implemented along with the mitigation plans for these areas.
Lower, Middle Decks (Decks C, B)	2	Irrigation – Reinstall irrigation system if drought conditions continue to the areas to alleviate stress on regrowth	Even with above average rainfall this winter, supplemental irrigation systems may be reinstalled to promote germination and growth of native plants if signs of desiccation appear.
Lower, Middle, and Upper Decks (Decks C, B, and A)	3	Prohibit Access – Continue to prohibit vehicle access to mitigation areas.	Repairs to the T-post fencing will be made as needed.
Upper Deck (Deck A)	3	Improve root zone and soil conditions	This will be addressed when the plans for Deck A is developed. Actions were taken to address improving the root zone in Decks B & C; it is expected that similar actions will be incorporated into the plans for Deck A.
Upper Deck (Deck A)	4	Plant natives in areas dominated with non-natives	This will be addressed when the plans for Deck A are developed. Various planting methods were used for the construction of the pilot project on Decks B & C; it is expected that similar actions will be incorporated into the plans for Deck A.
Upper Deck (Deck A)	5	Reseeding – apply native seeds during the rainy season after soil mounds have been established	Deck A was partially regraded to fill in ponding locations. Reseeding will start in graded section in Q4 2023 or Q1 2024

Rincon also recommended that a monitoring biologist should be present during weed control activities or the native plants should be flagged to ensure only non-native species are removed. A monitoring biologist will be consulted prior to any weed control activities to ensure native plants are protected.

Architerra and Rincon continue to provide support to the Oakridge maintenance personnel to assist in removal of the invasive weeds on both Deck B and C. Architerra has pointed out some of the more aggressive weeds that have flourished since the Saddle Ridge Fire. Architerra provided them with images of the invasive weeds to help identify and target these invasive species. Oakridge Landscape have been diligently removing Russian Thistle, Wild Oat, Shortpod Mustard, Red Brome Grass, False Barley, Tree Tobabcco, and Yellow Star Thistle that took hold in the burned barren areas. During May 2023, An Architerra biologist was present during weeding activities to ensure native species are properly identified within the heavily non-native vegetation.

5.2 Rincon Recommendations for County Sage Mitigation Area

Table 2 presents a summary of the recommendations proposed by Rincon based on the assessment of the County Sage Mitigation Area and the proposed actions. Please refer to the full recommendations in the Rincon reports in Attachment 2.

Table 2 – Rincon Recommendations and Proposed Actions – County Sage Mitigation Area, Third Quarter 2023

AREA	RECOMMENDATION		PROPOSED ACTION
County Sage Mitigation Area	1	Create benches to control soil erosion and improve soil conditions to improve plant establishment and seed dispersal	Rincon and ADG continue to evaluate recommendations from the County Task Force and UltraSystems.
County Sage Mitigation Area	2	Reseed and plant container plants	A trail test pilot plan will be discussed with California Native shrubs.
County Sage Mitigation Area	3	Use soil amendments	A trial test plot would need to be developed. This recommendation will be considered at a later date.
County Sage Mitigation Area	5	Signage – Install signage indicating revegetation efforts.	Due to the slopes, stormwater channel and overall difficulty to access this area, personnel are limited to access this area.

County Sage Mitigation Area	6	Weed Control – Continue weeding as needed on a quarterly basis.	Personnel continues to evaluate the current status.
County Sage Mitigation Area	7	Prohibit Access – continue to prohibit vehicle access to mitigation deck.	Upper entrance has a locked gate, no further action is required.

5.3 Architerra Inspection for City South Sage Mitigation Pilot Project Area – Second Quarter 2023

The inspection report is included in Attachment 3 along with photos of the area taken at the photo stations.

5.4 Quarterly Assessment of City South Sage Pilot Project Area

The methodology for assessment of the City South Sage Pilot Project Area developed by Rincon (formerly JMA) was included in the first quarter 2015 Vegetation Report. The evaluation report for the first quarter of 2023 based on this methodology is included in Attachment 4 and Attachment 5 for Deck C and Deck B, respectively. Concerns for the county-side stability for soil erosion will be addressed in the coming months. Current plans require some regrading and infrastructure repairs due to the extremely heavy rains over this past winter.

6.0 Status of Other Vegetated Areas

Big Cone Douglas Fir Tree Mitigation

As reported in the vegetation report for the first quarter of 2015, 200 Big Cone Douglas fir tree saplings were planted the third week of March 2015. These big cone Douglas fir pine trees continue to be monitored and maintenance activities were conducted in this mitigation area for 2022 and into the future.

A meeting with Rincon biologist was conducted on November 18, 2022 at the Big Cone Mitigation area. We will begin to work with local nurseries to help replace and replant some of the existing dead big cone pine and canyon oak. We are also evaluating a new location for planting more big cone pines and canyon oak in this area, and finally to establish healthy big cone pine and canyon oak in a timely established schedule. We look forward to working with the LA County forester, local nurseries in 2023. Plans to replenish the mitigation bank will commence with seed collection in the fall of 2023. Once the seeds are collected and stratified, seed will then be potted in the spring of 2024 whereas they will be allowed to germinate for a year at a nursery. Once saplings are viable, they will be brought to site to be planted in the mitigation area on site. This planting is anticipated the fall of 2025.

PM10 Berm

Republic Services hosted an Adopt-A-Tree event for employees and their family members. On Saturday, November 14th, 2020, at 2:00 pm, Fourteen (14) Coast Live Oak trees were planted in critical areas of the PM10 Berm that was damaged during the Saddleridge Fire. Architerra and JMA (i.e. Rincon) assisted in the planting efforts with their expertise and knowledge of tree growth and ideal planting locations. Republic Services is actively working on hosting another Adopt-A-Tree event in Q2 of 2024 for Arbor day.



Front Entrance Toe Berm

The proposed project involves the development of a landfill termination berm and construction of a roadway. There were 20 coast live oak trees surveyed within the project footprint by Rincon and project leads. One of the oak trees was dead, and all of them would be removed by the project activities. There are currently 48 coast live oak trees in the landfill's mitigation bank. As noted, the 20 coast live oak trees would be removed by the proposed project, therefore at a mitigation ratio of 2:1, a total of 40 coast live oak trees will be deducted from the landfill's oak tree mitigation bank, leaving 8 oak trees remaining in the bank for future removals at the landfill, if needed. A report detailing the survey is located in Attachment 6.

Donation to Local Community

As part of community outreach, a rancher in the area asked if he could plant some oak trees on his ranch nearby, and Sunshine Canyon agreed it would be a great idea. Thereafter on September 9th 2021, twenty-two (22) coast live oaks and two sycamores were donated from the Sunshine Canyon nursery and given to the rancher. The rancher mentioned the oak trees shall provide shade for his livestock and beautify the surrounding private property and was very pleased with the trees.



Please do not hesitate to contact me at (818) 200-3016 if you have any questions.

Regards,

A handwritten signature in black ink that reads "Paul D. Koster II".

Paul D. Koster II
Environmental Manager
Sunshine Canyon Landfill

Cc: Ms. Dorcas Dee Hanson-Lugo, SCL LEA
Mr. David Thompson, SCL LEA
Ms. Tiffany Butler, City of Los Angeles, Department of City Planning
Ms. Devon Zatorski, City of Los Angeles Department of City Planning
Ms. Ly Lam, City of Los Angeles, Department of City Planning
Mr. Nicholas Hendricks, City of Los Angeles, Department of City Planning
Dr. Wen Yang, Los Angeles Regional Water Quality Control Board

Ms. Maria Masis, County of Los Angeles, Department of Regional Planning
Mr. Wayde Hunter, SCL CAC
Mr. Jim Aidukus, UltraSystems
County DPW Landfill Unit

Attachments

Attachment 1	Rincon Progress Report, 3Q2023 City-Side Sage Mitigation Area
Attachment 2	Rincon Progress Report, 3Q2023 County-Side Sage Mitigation Area
Attachment 3	Architerra Design Group, Field Observation Report, South City Sage Mitigation Pilot Project – 3Q2023 with Photo Log
Attachment 4	Rincon Quarterly Monitoring Report - Coastal Sage Scrub Deck C Pilot Study, 3Q2023
Attachment 5	Rincon Quarterly Monitoring Report - Coastal Sage Scrub Deck B Pilot Study, 3Q2023
Attachment 6	Rincon Sunshine Canyon Landfill Ultimate Entry Improvement Project, Oak Tree Survey Report

Drawing

Drawing 1	Site Vegetation Status and Activity
-----------	-------------------------------------

ATTACHMENT 1





Rincon Consultants, Inc.

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October 19, 2023

Project No: 21-11086

Paul D. Koster II

Environmental Manager

Republic Services

14747 San Fernando Road

Sylmar, California 91342

Via email: PKoster@republicservices.com

**Subject: Qualitative Monitoring Report for the City-Side Sage Mitigation Area – 3rd Quarter 2023
Sunshine Canyon Landfill, Sylmar, California**

Dear Mr. Koster,

On September 27, 2023, Rincon Consultants performed the third quarter qualitative monitoring of 2023 for the Republic Services City-Side Sage Mitigation Area. This report qualitatively documents the current conditions of the City-Side Sage Mitigation Area with regards to the Landfill's coastal sage scrub restoration efforts. The City-Side Sage Mitigation Area consists of the Lower Deck, Middle Deck, and Upper Deck (including slope between middle and upper decks), which are discussed in detail below.

General Conditions

Lower Deck

In 2014, the Landfill initiated a pilot study at the Lower Deck (Deck C) to assess three different seeding applications of native species that included hand broadcasting, imprinting, and hydroseeding. Some container plants were also planted at the Lower Deck, but in low quantities. Germination, establishment, and natural recruitment of native plants ensued; however, the Lower Deck and surrounding area burned during the Saddleridge Fire in October 2019. The fire burned a substantial amount of the Lower Deck, scorching some of the vegetation entirely and partially burning some of the vegetation. The fire also burned the irrigation system, and the vegetation has been without supplemental water ever since.

A substantial amount of regrowth has occurred following the fire, including germination from the seed bank in the soil and resprouting of below- and above-ground plant parts. The Lower Deck appears to have almost fully recovered from the fire. The most prevalent native plant species observed within the Lower Deck in the third quarter of 2023 was California sunflower (*Encelia californica*), followed by big saltbush (*Atriplex lentiformis*), allscale saltbush (*Atriplex polycarpa*), and beardless wild rye (*Elymus triticoides*). Immediately following the Saddleridge Fire, areas that were previously dominated with saltbush species were largely replaced by mats of non-native grasses such as red brome (*Bromus rubens*), ripgut brome (*Bromus diandrus*), foxtail barley (*Hordeum murinum*), and non-native forbs such as redstem filaree (*Erodium cicutarium*). Native shrub species have resprouted and are almost fully re-established, and have shown signs of continuous growth since the fire.



Exotic annual plant species, which increased slightly between the fourth quarter of 2022 and first quarter of 2023, have remained relatively constant between the first and third quarters of 2023, likely as a result of reduced water availability in the summer and fall months. A majority of exotic annual plant species were observed in their vegetative state or setting seed in the Lower Deck in the second quarter of 2023, with a few mid- to late-season non-native plants (e.g., Russian thistle [*Salsola tragus*]) observed in flower. Exotic annual plants appear to be successfully managed through hand pulling and ongoing weed control activities. However, some native grass species (i.e., beardless wild rye) have also been inadvertently cut and may have been misidentified as non-native species during the weed control activities. Beardless wild rye has shown notable increases in cover between the first and third quarters of 2023, indicating that it is recovering from weeding activities. Non-native plant species cover is anticipated to decrease in the fall and winter months, and increase again in the spring of 2024. The majority of non-native vegetation observed at the Lower Deck in the third quarter of 2023 consisted of non-native annual grasses, short podded mustard (*Hirschfeldia incana*), redstem filaree, totalote (*Centaurea melitensis*), and Russian thistle.

Middle Deck

In 2019, the Landfill initiated a pilot study at the Middle Deck (Deck B) to assess germination and establishment rates (e.g., percent cover) of soil imprinting and broadcast seeding methods. Some container plants were also planted at the Middle Deck, but in low quantities. Germination and establishment of native plants ensued; however, there was not much evidence of natural recruitment due to the short timeframe from when the deck was seeded to when it burned during the Saddleridge Fire, which also decimated the irrigation system.

As described in previous monitoring reports, the vegetation composition at the Middle Deck before the Saddleridge Fire was approximately 35 percent of sage scrub plantings/seedlings and 30 percent non-native grasses. The remainder of the area was comprised of bare ground and/or rock substrate. A substantial amount of the planted vegetation on the Middle Deck burned in the fire; however, a large amount has resprouted and appears to have mostly recovered. Native vegetation observed at the Middle Deck consists of woody species such as brittlebush (*Encelia farinosa*), California sunflower (*Encelia californica*), scarlet bugler (*Penstemon centranthifolius*), deerweed (*Acmispon glaber*), California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), coastal goldenbush (*Isocoma menziesii*), white sage (*Salvia apiana*), coyote brush (*Baccharis pilularis*), and herbaceous species such as beardless wild rye. Of all the observed native species, brittlebush, coastal goldenbush, California sagebrush, and deerweed have shown the greatest increase in abundance since the fire. Almost all native shrub species were in their vegetative state, with the exception of California buckwheat, which was in late-flower.

Non-native plant establishment was also observed within the Middle Deck; however, this establishment is lower than what has been observed within the Lower Deck. Non-native plants observed include exotic grasses such as foxtail barley, Mediterranean grass (*Schismus arabicus*), red brome, and forbs such as short podded mustard, totalote, redstem filaree, and small flowered iceplant (*Mesembryanthemum nodiflorum*). These species were observed in their vegetative state or setting seed flowering during the third quarter of 2023. In general, non-native weed cover is low to moderate, and has remained constant since the second quarter of 2023. Small flowered iceplant saw the greatest increase in cover of all non-native species. Non-native plants are anticipated to decline in the fall and winter months, and increase again in the spring of 2024.



Upper Deck

Overall, the Upper Deck (Deck A) continues to be sparsely covered with native vegetation, and total vegetation coverage (native and non-native) is generally sparse due to compacted and poor soil conditions. However, in the southern-center of the Upper Deck, vegetation cover is higher than in other areas and includes native species such as California buckwheat, as well as non-native species such as foxtail barley, redstem filaree, and Australian saltbush (*Atriplex semibaccata*). California goldfields (*Lasthenia californica*), which were observed in flower during the first quarter of 2023, have since set seed (Attachment B, Photograph 6). The presence of vegetation in the southern-center portion of the Upper Deck generally demonstrates that the soils in this area are suitable for supporting vegetation, both native and exotic. However, the soils elsewhere on the Upper Deck appear to be heavily compacted and gravelly, and vegetation coverage in these areas is sparse. Evidence of previous seeding is no longer discernible within the portions of the Upper Deck where plant establishment is visibly poor.

Non-native herbaceous species that dominate the Upper Deck currently include wild oats (*Avena fatua*), Russian thistle, ripgut brome, red brome, short podded mustard, and redstem filaree. California buckwheat is the most dominant native perennial woody plant species on the Upper Deck, and it is currently flowering. However, as described in previous monitoring reports, overall natural recruitment of native plant species within the Upper Deck is low due to poor and dry soil conditions.

Additionally, ground-disturbing activities occurred in the upper deck between the second and third quarters of 2023. An approximately 300-foot-long, 250-foot-wide area was cleared in the southeastern portion of the upper deck (Attachment B, Photographs 8-9). This area is now mostly unvegetated, with some scattered establishment of non-native species such as short podded mustard.

Table 1 Summary of Observations in the Lower, Middle, and Upper Decks in Quarter 3, 2023

Location	Native Plant Vegetation				Exotic Plant Vegetation	
	Native Plant Cover	Plant Health Issues	Height of Native Species	Native Species Richness	Exotic Plant Cover	Phenological State
Lower Deck	Moderate-High	Recovering from fire, drought	12"-48"	Shrubs: Moderate Herbs: Low	Moderate	Vegetative and setting seed
Middle Deck	Moderate	Recovering from fire, drought	12"-48"	Shrubs: Moderate Herbs: Low	Low to Moderate	Vegetative and setting seed
Upper Deck	Minimal	Poor soils, drought	12"-24"	Shrubs: Low Herbs: Low	High	Vegetative and setting seed

Recommendations

Lower and Middle Decks

Weed Control

- Implement a year-round weed control program to control non-native species. The weed control program should incorporate both chemical and mechanical control practices and should be



initiated in the late winter to early spring prior to seed set, which typically occurs between the months of February and April. This will prevent further dispersal of exotic plants within the Lower and Middle Decks.

- Following weed control, any dead material harboring seeds should be removed to an off-site location to the extent feasible. Dense areas covered with red brome, ripgut brome, foxtail barley, and short podded mustard should be controlled by removing flowers and immature seeds heads before they drop. These areas should be reseeded with native herbaceous species that are known to grow well in the Lower (and Middle) Decks, such as beardless wild rye and yarrow (*Achillea millefolium*).
- A qualified biologist should be present during weed control activities or flag the native plants that should remain prior to weed control activities to ensure only non-native species are removed and to minimize damage to native plant species to the greatest extent feasible. If a contractor is responsible for weed control, the contractor should verify with the Landfill that all personnel are experienced in native and non-native plant identification.
- Weeding is best performed just before, or at the onset of flowering, but before seed set. If seeds are already present, additional care should be taken to remove the plants with the seeds attached, or the seeds should be removed from the plants prior to the plant removal. A consistent weed abatement schedule will reduce the potential for non-natives to set seed. Soil disturbance should be limited by hand weeding, wherever possible, and weeds should be disposed of off-site to avoid any reinfestation through reseeding or from plant propagules. If hand weeding is not possible, the monitoring biologist should be consulted regarding the appropriate method of weed removal. For example, using mechanical equipment to remove flowers and immature seed heads may be appropriate where dense mats of non-native grasses have established. If there continues to be high incidence of weed infestation, weed control may need to be increased to every four to six weeks. Otherwise, weeds should continue to be monitored and controlled on a quarterly basis.

Irrigation

- The Lower and Middle Decks burned during the Saddleridge Fire in October 2019. The fire burned the irrigation system that was installed prior to the fire, and the vegetation has been without supplemental water ever since. While southern California received above-average rainfall in the winter of 2022 and spring of 2023, supplemental irrigation may be necessary if native plants show signs of desiccation stress. If indicators of drought stress are observed, it is recommended that the irrigation system within the Lower and Middle Decks are re-installed to promote germination and growth of native plant species.

Prohibit Access

- Continue to prohibit vehicle access to mitigation areas.



Upper Deck

Improve Root Zone and Soil Conditions

- Continue to investigate ways to import the soil layer to improve the root penetration and saturation zone to enable plant growth in heavily compacted areas. Consider applying soil in random undulations or uneven mounds to improve soil porosity and filtration and to control soluble salts from leaching from existing layer.
- Prior to seeding (broadcast, hydroseeding, or drilling) of native species, incorporate a soil amendment or mulch with high organic content by tilling it into the top 12 inches of the existing compacted soils to improve soil texture, drainage, porosity, and aerobic conditions. If an organic mulch or soil amendment is not feasible or available, incorporate available soil from borrow sites within the landfill that have the appropriate soil properties, so long as these borrowed soils have been determined to not have toxic conditions, such as boron or high salinity.

Plant Natives in Areas Dominated with Non-Natives

- The vegetated areas on the Upper Deck that are currently dominated with non-native annual species have decent soil-texture conditions. These areas are less compacted than adjacent areas that are gravelly and mostly devoid of vegetation. In general, the soil texture within the vegetated areas with non-native vegetation is friable down to approximately 8-12 inches in depth. Various planting methods (i.e., planting container plants and hydroseeding) may be used to re-establish native plants on the Upper Deck where non-natives currently dominate.

Weed Control

- Implement a year-round weed control program to control non-native species. The weed control program should incorporate both chemical and mechanical control practices. Following weed control, any dead material harboring seeds should be removed to an off-site location to the extent feasible.
- A qualified biologist should be present during weed control activities or flag the native plants that should remain prior to weed control activities to ensure only non-native species are removed and to minimize damage to native plant species to the greatest extent feasible. A biologist should verify that the weed removal methodology does not encourage re-colonizing of non-native plant species.
- Weeding is best performed just before, or at the onset of flowering, but before seed set. If seeds are already present, additional care should be taken to remove the plants with the seeds attached, or the seeds should be removed from the plants prior to the plant removal. A consistent weed abatement schedule will reduce the potential for non-natives to set seed. Soil disturbance should be limited by hand weeding, wherever possible, and weeds should be disposed of off-site to avoid any reinfestation through reseeding or from plant propagules. If hand weeding is not possible, the monitoring biologist should be consulted regarding the appropriate method of weed removal. For example, using mechanical equipment to remove flowers and immature seed heads may be appropriate where dense mats of non-native grasses have established. If there continues to be high incidence of weed infestation, weed control



frequency may need to be increased. Otherwise, weeds should continue to be monitored and controlled on a quarterly basis.

Reseeding

- Following the application of soil mounds as previously described, apply native seed (by means of broadcast seeding, hydroseeding or drilling) during the rainy season, between December and March, or prior to a forecasted rain event.

Prohibit Access

- Continue to prohibit vehicle access to mitigation areas.

Thank you for the opportunity to work with you on this important project. Please contact Greg Ainsworth if you have questions concerning the contents of this report. He may be reached by telephone at (818) 564-5544, or by email at gainsworth@rinconconsultants.com.

Sincerely,

Rincon Consultants, Inc.

A handwritten signature in black ink, appearing to read 'Greg Ainsworth', with a stylized flourish at the end.

Greg Ainsworth
Natural Resources Director

A handwritten signature in black ink, appearing to read 'Kyle Gern', with a stylized flourish at the end.

Kyle Gern
Biologist

Attachments

- Attachment A Figure 1. Photograph Locations
Attachment B Site Photographs

Attachment A

Figure 1. Photograph Locations

Figure 1 Photograph Locations



Imagery provided by Microsoft Bing and its licensors © 2023.
Photo Locations have been georeferenced and are approximate locations.

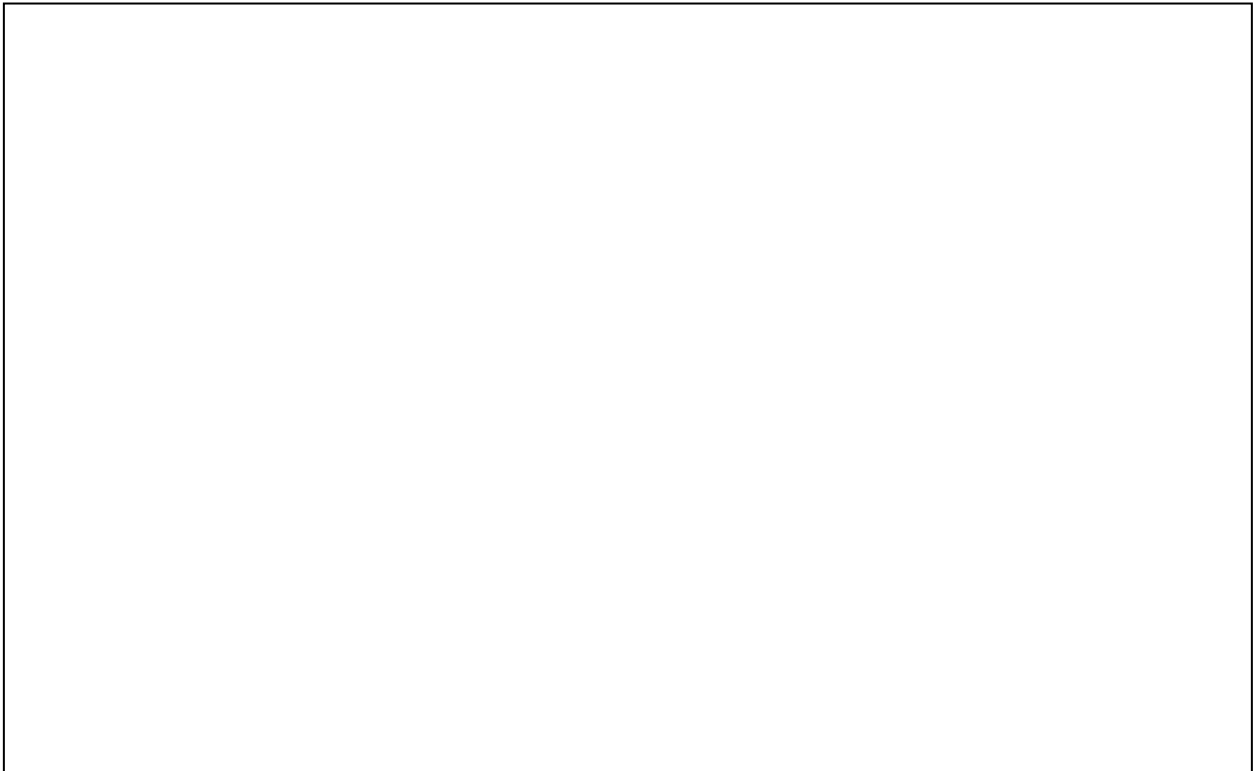
21-11086 BHO
Fig 2 City Sage - Photo Locations

Attachment B

Site Photographs



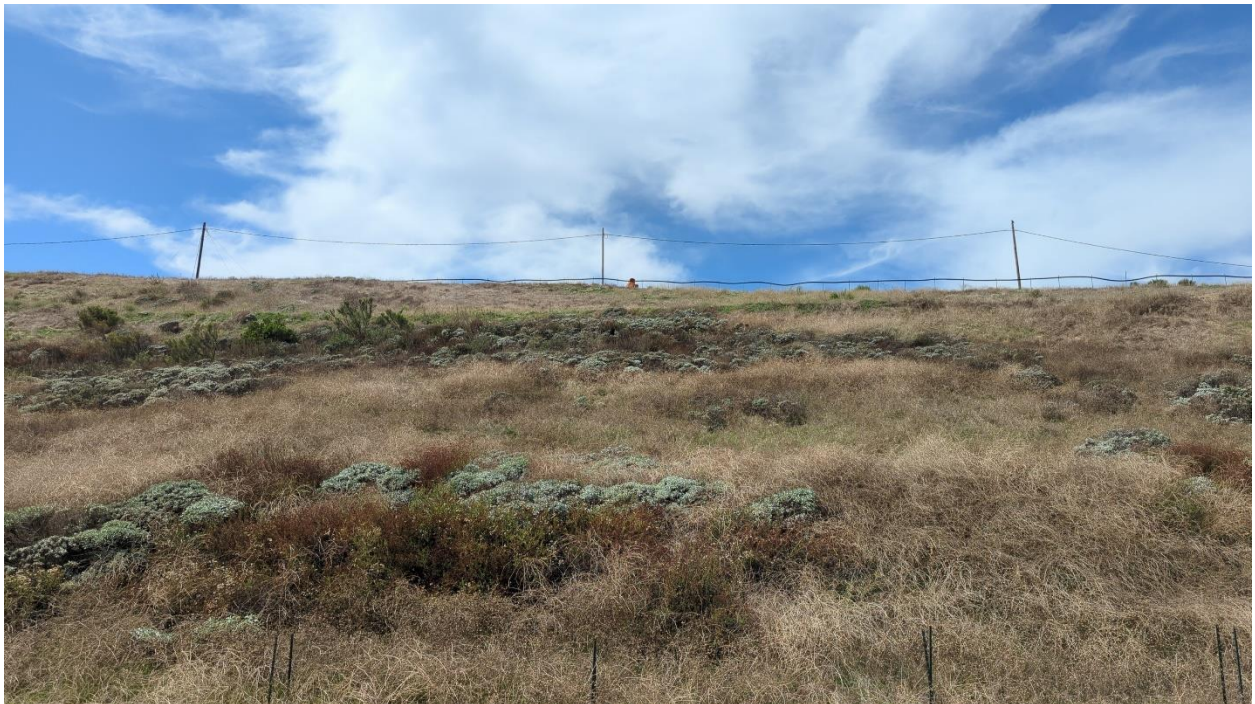
Photograph 1. Facing west at Lower Deck. View of eastern limits dominated by *Atriplex* spp. and California sunflower (September 27, 2023).



Photograph 2. Lower Deck from western boundary. Photograph was corrupted; therefore, no photograph is provided (September 27, 2023).



Photograph 3. Facing east at the Middle Deck from western boundary (September 27, 2023).



Photograph 4. Facing west at the easterly-facing slope located between the Middle and Upper Decks. The vegetation on the slopes between the Upper Deck is dominated by California buckwheat (currently vegetative) and non-native annual grasses (September 27, 2023).



Photograph 5. Facing northeast at the Upper Deck. This area is compacted and gravelly and continues to be problematic for supporting vegetation. Non-native annual grasses and forbs, and California buckwheat shrubs are evident in the background (September 27, 2023).



Photograph 6. Facing southwest at the Upper Deck. This area is primarily dominated by wild oats, brome grasses, redstem filaree, and short podded mustard (September 27, 2023).



Photograph 7. Facing southeast at the western portion of the Upper Deck. This area is dominated by short podded mustard, Australian saltbush, and Russian thistle (September 27, 2023).



Photograph 8. Portion of Upper Deck where ground-disturbing activities occurred between the second and third quarters of 2023, facing south. This is located in the southeastern portion of the Upper Deck (September 27, 2023).



Photograph 9. Portion of Upper Deck where ground-disturbing activities occurred between the second and third quarters of 2023, facing north. This is located in the southeastern portion of the Upper Deck (September 27, 2023).

ATTACHMENT 2





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October 19, 2023
Project No: 21-11086

Paul D. Koster II
Environmental Manager
Republic Services
14747 San Fernando Road
Sylmar, California 91342

Via email: PKoster@republicservices.com

**Subject: Qualitative Monitoring Report for the County-Side Sage Mitigation Area – 3rd Quarter 2023
Sunshine Canyon Landfill, Sylmar, California**

Dear Mr. Koster,

On September 27, 2023, Rincon Consultants performed the third quarter qualitative monitoring of 2023 for the County-Side Sage Mitigation Area (mitigation area). This report documents the current conditions of the mitigation area.

General Conditions

Hydroseeded Areas

Germination and plant growth from hydroseeding that occurred several years ago is not discernible in some portions of the mitigation area. Conditions in the mitigation area remain relatively unchanged since the second quarter of 2023. Areas that are moderately covered with native and non-native vegetation are concentrated in the southeastern portion of the mitigation area. The northern and upper portions of the mitigation area continue to be bare and problematic for establishment of vegetation, primarily because of highly eroded soils, steep slopes, and Boron-toxic soils (See *Recommendations* section). However, there are some small patches of vegetation that have established in the northern-central portion of the mitigation area and include shrubs such as California buckwheat (*Eriogonum fasciculatum*), deerweed (*Acmispon glaber*), and California sagebrush (*Artemisia californica*).

Native plant coverage is similar to the previous quarterly monitoring reports. The southern half of the mitigation area has relatively good coverage of native species, mostly California buckwheat and California sunflower (*Encelia californica*). Established laurel sumac (*Malosma laurina*) individuals are present as well. A majority of native shrub species had already set seed, while California buckwheat was flowering during the monitoring event. The native vegetation coverage is assumed to be a direct result of seeding; however, some natural recruitment of native plant species is apparent based on the various sizes of shrubs and the presence of native shrub seedlings within the understory. Due to rocky (hydrophobic) soil conditions, soil erosion and Boron-toxic soils on the northern-half and upper portions of the mitigation area, minimal plant growth is present. Due to the lack of plant establishment in these areas, erosional features have become prominent, especially following above-average rainfall events during the winter of 2022 and spring of 2023.

Annual non-native grasses and forbs currently dominate the understory and serve as ground cover in most of the vegetated areas. Brome grasses (*Bromus* spp.), wild oats (*Avena fatua*), short podded



mustard (*Hirschfeldia incana*), Russian thistle (*Salsola tragus*), and tocalote (*Centaurea melitensis*) are the most dominant non-native species present, and comprise approximately 25 to 30 percent of the total cover. California buckwheat dominates the native vegetation coverage with California sagebrush and California sunflower present as co-dominants. Native species comprise of approximately 75 to 80 percent of the native vegetation cover in areas where vegetation is present. Other less dominant native species observed include golden bush (*Ericameria linearifolia*), coyote brush (*Baccharis pilularis*), black sage (*Salvia mellifera*), deerweed, and laurel sumac.

Seed Mix Areas

Like the hydroseeded areas, germination and plant growth from the seed mix areas that occurred several years ago is not discernible. As described in previous monitoring reports, a substantial portion of the mitigation area continues to be bare and problematic, which has inhibited the establishment and growth of vegetation. However, in areas where vegetation is present, there is a moderate coverage of native species (e.g., California buckwheat and California sunflower).

As described in the *Hydroseeded Areas* discussion above, a moderate cover of native plants exists within vegetated areas in the southeastern portion of the mitigation area, and annual non-native grasses and forbs currently dominate the understory.

Native Plant Conditions

The plant cover rating indicated further below in



Table 1 applies where vegetation is dominant in the southeastern portion of the mitigation area. Vegetation cover is moderate in the southeastern portion of the mitigation area and sparse along the upper slopes where rocky and eroded soil conditions occur, and in the northern portion of the mitigation area due to problematic soil conditions. As a result, most of the northern and upper portions of the mitigation area continue to have minimal coverage. Native vegetation coverage is good in vegetated areas and non-native plant cover is relatively low. Bare areas and non-native annual grasses are intermixed; however, as noted the northern and upper areas continue to be mostly bare where erosion and rocks are apparent.

California buckwheat is dominant and California sunflower is sub-dominant. Establishment of vegetation is problematic due to rocky soils with poor soil structure, and Boron toxicity has made plant growth (i.e., seed germination and recruitment) difficult. The species richness is low to medium within vegetated areas; however, species richness is considerably low when considering the entire county-sage mitigation area.

Exotic Plant Conditions

Annual non-native weed species consist primarily of brome grasses, wild oats, and mustards, which are mostly in their vegetative state and/or setting seed. Additionally, some mid- to late-season non-native plants (e.g., Russian thistle) are currently in their flowering state. Non-native plant cover is anticipated to decline in the fall and winter months, and increase again in the spring of 2024. Other established weeds that were observed include redstem filaree (*Erodium cicutarium*) and telegraph weed (*Heterotheca grandiflora*; a weedy native plant species).



Table 1 Summary of Native and Exotic Plant Cover in the County-Side Sage Mitigation Area in Quarter 3, 2023

Location	Native Plant Vegetation				Exotic Plant Vegetation	
	Native Plant Cover	Plant Health Issues	Height of Native Species	Native Species Richness	Exotic Plant Cover	Phenological State
County-Side Sage Mitigation Area	Moderate	Drought	12"-36"	Medium	Moderate	vegetative, in flower, and setting seed

Recommendations

The following recommendations within the County-Side Sage Mitigation are suggested based upon the field survey performed in the third quarter of 2023.

- **Create Benches.** Consider creation of several benches throughout the mitigation area to control soil erosion and to improve soil conditions to improve plant establishment and seed dispersal. This technique has been widely used on steep slopes and in areas where soil erosion is problematic. This technique also allows for opportunities to introduce a high-quality soil layer above the poor soils that exist.
- **Reseed and Plant Container Plants With Irrigation.** If creation of benches is feasible, planting methods should include hydroseeding, broadcast seeding, and/or imprinting no more than 10 days prior to a forecasted rain event, unless an irrigation system is installed. Planting with container plants with supplemental irrigation should also be considered.
- **Use Soil Amendments.** Incorporate a soil amendment or mulch with high organic content in select areas as determined by a restoration specialist.
- **Signage.** Install signs indicating that the area is undergoing revegetation.
- **Weed Control.** Continue weed control program as needed on a quarterly basis.
- **Prohibit Access.** Prohibit equipment access to mitigation area.

Thank you for the opportunity to work with you on this important project. Please contact Greg Ainsworth if you have questions concerning the contents of this report. He may be reached by telephone at (818) 564-5544, or by email at gainsworth@rinconconsultants.com.

Sincerely,

Rincon Consultants, Inc.

Greg Ainsworth
Natural Resources Director

Kyle Gern
Biologist

Attachments

- Attachment A Figure 1. Photograph Locations
Attachment B Site Photographs

Attachment A

Figure 1. Photograph Locations

[illegible]

Imagery provided by Microsoft Bing and its licensors © 2023.
Photo Locations have been georeferenced and are approximate locations.

21-11086 BIO
Fig 1 County Sage - Photo Locations

Attachment B

Site Photographs



Photograph 1. Facing southwest at the County-Side Sage Mitigation Area (September 27, 2023).



Photograph 2. Facing northwest at the northern portion of the County-Side Sage Mitigation Area where plant growth has been problematic due to poor soil conditions (September 27, 2023).

ATTACHMENT 3





ARCHITERRA DESIGN GROUP

FIELD OBSERVATION REPORT

DATE OF VISIT:	10/18/22
PROJECT:	Sunshine Canyon Mitigation Sites
PROJECT NUMBER:	1214
PROJECT MANAGER:	Gregg Denson
SITE INSPECTION #:	
PURPOSE OF VISIT:	Review site conditions/Photo Catalog
TIME OF SITE VISIT:	11:40pm
WEATHER/TEMPERATURE:	Sunny 90° - Winds 5-10 mph
ESTIMATED % COMPLETED:	100%
CONFORMANCE WITH SCHEDULE (+, -)	

WORK IN PROGRESS:	Weed abatement / Monitoring Period /Construction Observation
PRESENT ON SITE:	Gregg Denson

A site visit walk and evaluation has been completed to review the Venturan CSS vegetation establishment on the Trial Site (Deck C), Deck B and County Mitigation Slopes. Additional items noted during the site visit are as follows:

City-Side Sage Mitigation (Trial Site Deck C):

- The weeding abatement over the last quarter has been minimal at best. It is obvious that many of the targeted weeds noted in the last report were not removed from the deck. That fact, combined with the unusual abundance of rain during the late summer months catapulted weed growth, with weeds the opportunity to flower a season earlier than they normally would. Russian Thistle (*Salsola* spp.), Horseweed (*Erigeron canadensis*), Tree Tobacco (*Nicotiana glauca*), and Shortpod Mustard (*Hirschfeldia incana*) are the most actively growing invasive weeds on Deck C. Typically flowering of Shortpod Mustard occurs in late winter after the arrival of precipitation. Conversely, the native Venturan Coastal Sage Scrub (VCSS) has also grown during a normally dormant period of the growing season.
- It is imperative that the deck be cleaned of these invasive weeds as soon as possible to minimize early season seeding. It is also vital that the surrounding PM10 Berm and other perimeter edges receive a similar treatment in the removal of these weeds. Eucalyptus (*Eucalyptus* sp.), California Pepper Trees (*Schinus molle*), and Saltcedar (*Tamarisk* sp.) seedlings have established on the deck. This grass should be removed immediately before it becomes an issue.
- Cooler temperatures, along with heavier summer storms (Tropical Storm Hilary), have provided additional soil moisture to support native plants and have allowed them to wake up from that dormancy period a few months earlier than usual. Emerging growth is

evident amongst the groupings of Coast Sunflower (*Encelia californica*), Mexican Elderberry (*Sambucus mexicana*), California Sagebrush (*Artemisia californica*), Saltbush (*Atriplex* sp.), and Deerweed (*Acmispon glaber*). When comparing photos from the Photo Stations of 2022, it is obvious that there has been increased growth of many of the VCSS species. VCSS canopy closure of the open barren portions of the deck has improved greatly.

- Past maintenance of scalping the dormant native Creeping Rye Grass (*Leymus triticoides*) has allowed an increase of Horseweed (*Erigeron canadensis*) to establish. This weed should be removed as soon as possible. The native Creeping Rye Grass should be left to reestablish without cutting so that it will shade out potential weeds.
- Upon inspection of the PM10 Coast Live Oak trees, many are established with canopies extending up to 15'-20'. Those that died or that were severely damaged by the Saddleridge Fire, have not recovered.
- Recent grading efforts at the north west corner of Deck C should be stabilized with crushed recycled asphalt or graded roadbed to minimize ponding and rutting at the vehicular access road.



Shortpod Mustard (*Hirschfeldia incana*)



Established Russian Thistle (*Salsola* ssp.) at flowering stage



Shortpod Mustard (*Hirschfeldia incana*) intermixed with new seedlings of Coast Sunflower (*Encelia californica*),



Tree Tobacco (*Nicotiana glauca*)





Horseweed (*Erigeron canadensis*) established and flowering within the swales where Creeping Wild Rye previously existed.





Shortpod Mustard (*Hirschfeldia incana*) seedlings



Shortpod Mustard (*Hirschfeldia incana*) at east end of Deck C



Eucalyptus (*Eucalyptus* sp.) seedling at Deck C



New pad location for mobile weathering station trailer



Coast Sunflower (*Encelia californica*) seedlings established under dead Saltbush



New growth emerges from Coast Sunflower (*Encelia californica*)



New Saltbush (*Atriplex* sp.) seedlings



Recently graded areas surrounding Deck C



Recent grading near new mobile weather station trailer





Newly graded road and slopes as part of Phase 3 Entrance Improvement Project



City-Side Sage Mitigation (Trial Site Deck B):

- Weed growth on Deck B is in better shape than Deck C. However, there has been no effort to remove the expansion of Slenderleaf Iceplant (*Mesembryanthemum nodiflorum*). Currently this invasive groundcover is dormant, but soon will begin actively growing and spreading throughout the deck. Treatment of control may require application of herbicides, cultivation or a combination of both.
- The Venturan Coastal Sage Scrub has quickly established and the trail site is filling in with less barren portions of the deck. There is a good species diversity and the planting is responding well with vigorous growth, flowering and seeding.



Flowering Menzie's Goldenbush (*Isocoma menziesii*)



Establishment of VCSS on previous access road



Invasive California Pepper Tree (*Schinus molle*)



Invasive Smilo Grass (*Piptatherum miliaceum*)



Invasive Salt Cedar (*Tamarix* species)



New Black Sage (*Salvia mellifera*) seedling



Butterfly resting on flowering Coyote Bush (*Baccharis pilularis*)

City-Side Sage Mitigation (Deck A):

- Soils testing was recently completed for the fill dirt area of Deck A. Results are favorable for seeding of VCSS native species with some minor soil amendment recommendations. Below are images of the fill-dirt site; Soils testing is included at end of report.



Existing conditions of Deck A





Anaheim Office
Lab No: 23-262-0010
September 26, 2023

Architerra Design Group, Inc.
10221-A Trademark St.
Rancho Cucamonga, CA 91730

Attn: Gregg Denson

Project: Sunshine Canyon – Sylmar Job# 1214

Attached are the results of the analysis performed on 3 soil samples that were collected from the above mentioned project site by the client from a 6-12-inch depth and received by our laboratory on 09/19/2023. These samples were analyzed for nutrient levels, agricultural suitability, and physical characteristics in preparation for seeding.

Analytical Results and Comments

The reaction of sample #1 is neutral at 7.0, which is within the preferred range for most plants and no pH adjustment is recommended. Sample #2 is moderately alkaline at 7.7 and #3 is slightly alkaline at 7.5 on the pH scale. Qualitative lime is high in #3 indicating that the pH is strongly buffered in the alkaline range. Free lime is favorably low in #1 and #2. Most CA natives have some tolerance for alkaline soil conditions; however, incorporation of soil sulfur in the #2 location would adjust the pH downward toward the preferred near neutral range to the depth of incorporation. Sulfur can also be incorporated in the #3 location but sulfur is expected to be less effective due to the high level of free lime present.

Salinity (ECe), soluble sodium, and soluble boron are favorably low. The sodium adsorption ratios (SAR) are favorably low, indicating that the sodium in this sample is properly balanced by calcium and magnesium.

In terms of fertility, potassium is sufficient in #3. Calcium and magnesium are sufficient in all samples. In the minor element group, copper, zinc, and iron are well supplied in #1. The remaining nutrients are low.

The texture of the less than 2mm fraction of the #1, #2, and #3 samples is 'loamy sand', 'sandy clay loam', and 'sandy loam' respectively according to the USDA classification system. Gravel in the 2-12 mm range comprises 25% of the #2 soil by dry weight classifying the material as 'gravelly'. Gravel in the 2-12 mm range comprises 37.6% of the #3 soil by dry weight classifying the material as 'very gravelly'. Elevated gravel content, in combination with a relatively wide distribution of particle sizes in the sand category, indicates that the #2 and #3 soils will have a tendency to consolidate and compact. This can impede drainage, aeration, and root development. Also keep in mind that the gravel will decrease rooting space. Soil physical properties can be improved by incorporating organic amendment at the provided rate and depth but only to a point. The estimated water infiltration rate of the #1 material is 0.44 inches per hour. The estimated water infiltration rate of the #2 and #3 materials is 0.23 inches per hour. The actual rates of water infiltration may vary with the degree of soil compaction. Organic content is low in the range of 0.94-1.24% on a dry weight basis.



Page 2
Architerra Design Group, Inc.
September 26, 2023

Recommendations

California native plants are often installed without the use of fertilizers and amendments, since they are well adapted to low fertility soils. However, a slow release form of nitrogen can be broadcast over the area of concern and incorporated into the upper 6 inches of existing soil or included in the hydroseed slurry in order to aid establishment. A slow release nitrogen source such as Nitroform (39-0-0,28%, WIN) would be a good option at the rate of 8 lbs. per 1000 sq. ft.

Organic content can be improved through the incorporation of 2 cu. yards of nitrogen fortified organic amendment per 1000 sq. ft. to a depth of 6 inches. Although these plants do have some tolerance for alkaline soil conditions, a downward pH adjustment would improve nutrient availability. If a downward pH adjustment is desired in the #2 and #3 locations, this can be accomplished by incorporating soil sulfur at a rate of 10 lbs. per 1000 sq. ft. to a depth of 6 inches. No additional amendments are suggested for these types of plants.

Maintenance Fertilization for California Native Plants

Uniformly broadcast a complete, but low phosphorous, fertilizer. One option is Apex® 21-5-6 Super Iron Topdress which can be applied at the rate of 5 lbs. per 1000 sq. ft. This application should occur 60-90 days after planting if the plants are installed this fall or winter. Afterwards, fertilizer applications can be based entirely on color and growth performance. When needed thereafter, native plants can be maintained by broadcasting sulfur coated urea at the rate of 2.5 lbs. per 1000 sq. ft..

As noted above, some of the micronutrients are below optimum. When these nutrients are low, especially in an alkaline soil, deficiencies can sometimes show in the plants. If deficiencies show once plants have become established, they may be addressed upon the first sign of deficiency. Symptoms of manganese deficiency may be seen as a general loss of color in the young leaves, followed by yellowing between veins and brownish-black spots appearing. Iron and zinc deficiency symptoms are often characterized by yellow, almost white, interveinal chlorosis on the youngest growth. If these symptoms are apparent once plants are established, then application of iron, zinc, and/or manganese chelate at the manufacturer's label rate may improve appearance. Chelates are generally more effective on alkaline soils than some of the other forms of trace elements.

If we can be of any further assistance, please feel free to contact us.

A handwritten signature in dark ink, appearing to read "J. Kiefer", is written over a light blue horizontal line.

Joe Kiefer, CCA

Architerra Design Group, Inc.
10221-A Trademark Street
Rancho Cucamonga CA 91730



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Project : Sunshine Canyon - Sylmar
Job# 1214

COMPREHENSIVE SOIL ANALYSIS

Report No : 23-262-0010
Purchase Order :
Date Recd : 09/19/2023
Date Printed : 09/22/2023
Page : 1 of 1

Sample Description - Sample ID	Half Sat %	pH	ECe dS/m	NO ₃ -N ppm	NH ₄ -N ppm	PO ₄ -P ppm	K ppm	Ca ppm	Mg ppm	Cu ppm	Zn ppm	Mn ppm	Fe ppm	Organic % dry wt.	Lab No.
	TEC	Qual Lime		Sufficiency Factors											
Deck A #1	13	7.0	0.7	4	3	5	23	543	133	0.9	3.8	1	20	0.94	01500
	38	Low		0.3		0.3	0.3	0.8	1.5	1.8	2.0	0.2	1.1		
Deck A #2	19	7.7	1.3	8	5	2	91	2580	805	0.9	1.4	1	7	1.03	01501
	199	Low		0.3		0.1	0.4	0.9	2.2	0.4	0.2	0.1	0.1		
Deck A #3	17	7.5	2.3	5	5	2	141	1690	345	0.8	2.5	1	8	1.24	01502
	108	High		0.3		0.1	1.0	1.0	1.5	0.6	0.5	0.1	0.2		

Saturation Extract Values						SAR	Gravel %		Percent of Sample Passing 2 mm Screen					USDA Soil Classification	Lab No.	
Ca meq/L	Mg meq/L	Na meq/L	K meq/L	B ppm	SO ₄ meq/L		Coarse 5 - 12	Fine 2 - 5	Very Coarse 1 - 2	Sand Coarse 0.5 - 1	Med. to Very Fine 0.05 - 0.5	Silt .002-.05	Clay 0-.002			
3.5	2.4	3.1	0	0.26	0.6	1.8		0.2	0.6	1.8	28.4	55.2	8.7	5.8	Loamy Sand	01500
6.4	5.5	6.1	0	0.36	7.3	2.5		11.4	13.6	9.6	9.6	36.2	22.7	21.8	Gravelly Sandy Clay Loam	01501
21	9.7	6.1	0.1	0.26	21	1.6		19.8	17.8	12.0	11.4	42	16.7	17.8	Very Gravelly Sandy Loam	01502

Signed: Gregg Denson

Date: 10/24/23

DISTRIBUTION

Republic Services



Contractor



Project Manager (Gregg Denson)



Other ☐



Photo Station #1 - October 2022 (North)



Photo Station #1 - October 2023 (North)



Photo Station #1 - October 2022 (East)



Photo Station #1 - October 2023 (East)



Photo Station #1 - October 2022 (West)



Photo Station #1 - October 2023 (West)



Photo Station #2 - October 2022 (North)



Photo Station #2 - October 2023 (North)



Photo Station #2 - October 2022 (North)



Photo Station #2 - October 2023 (North)



Photo Station #2 - October 2022 (West)



Photo Station #2 - October 2023 (West)



Photo Station #3 - October 2022 (North)



Photo Station #3 - October 2023 (North)



Photo Station #3 - October 2022 (East)



Photo Station #3 - October 2023 (East)



Photo Station #3 - October 2022 (South)



Photo Station #3 - October 2023 (South)



Photo Station #4 - October 2022 (North)



Photo Station #4 - October 2023 (North)



Photo Station #4 - October 2022 (East)



Photo Station #4 - October 2023 (East)



Photo Station #4 - October (West)

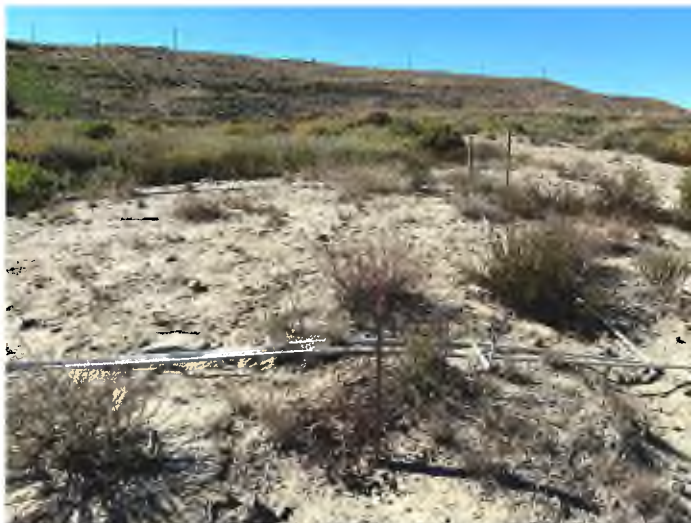


Photo Station #4 - October (West)



Photo Station #5 - October 2022 (North)



Photo Station #5 - October 2023 (North)



Photo Station #5 - October 2022 (East)



Photo Station #5 - October 2023 (East)



Photo Station #5 - October 2022 (West)

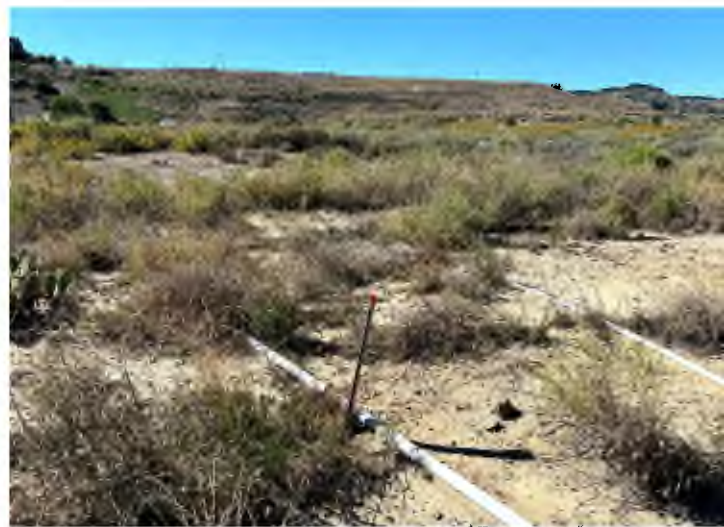


Photo Station #5 - October 2023 (West)



Photo Station #6 - October 2022 (North)



Photo Station #6 - October 2023 (North)



Photo Station #6 - October 2022 (East)



Photo Station #6 - October 2023 (East)



Photo Station #6 - October 2022 (West)



Photo Station #6 - October 2023 (West)



Photo Station #1 - October 2022 (East)



Photo Station #1 - October 2023 (East)



Photo Station #1 - October 2022 (North)



Photo Station #1 - October 2023 (North)



Photo Station #1 - October 2022 (West)



Photo Station #1 - October 2023 (West)



Photo Station #2 - October 2022 (East)



Photo Station #2 - October 2023 (East)



Photo Station #2 - October 2022 (North)



Photo Station #2 - October 2023 (North)



Photo Station #2 - October 2022 (South)



Photo Station #2 - October 2023 (South)



Photo Station #3 - October 2022 (East)



Photo Station #3 - October 2023 (East)



Photo Station #3 - October 2022 (North)



Photo Station #3 - October 2023 (North)



Photo Station #3 - October 2022 (West)



Photo Station #3 - October 2023 (West)



Photo Station #4 - October 2022 (South)



Photo Station #4 - October 2023 (South)



Photo Station #4 - October 2022 (East)



Photo Station #4 - October 2023 (East)



Photo Station #4 - October 2022 (West)



Photo Station #4 - October 2023 (West)



Photo Station #5 - October 2022 (East)



Photo Station #5 - October 2023 (East)

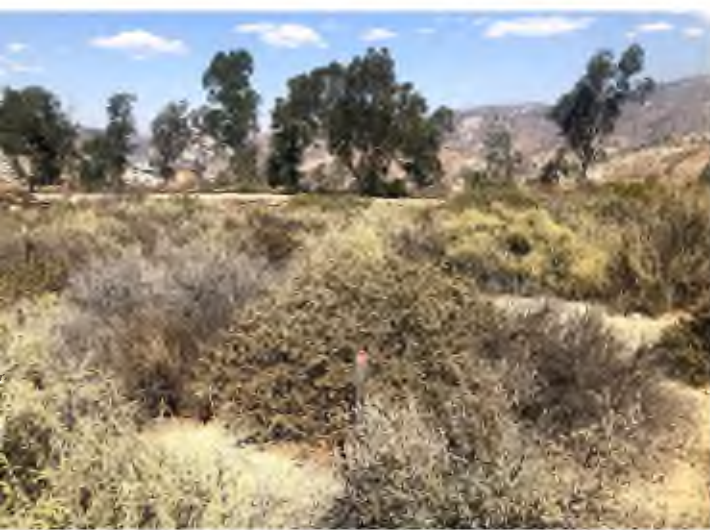


Photo Station #5 - October 2022 (North)



Photo Station #5 - October 2023 (North)



Photo Station #5 - October 2022 (West)



Photo Station #5 - October 2023 (West)



Photo Station #6 - October 2022 (East)



Photo Station #6 - October 2023 (East)



Photo Station #6 - October 2022 (North)



Photo Station #6 - October 2023 (North)



Photo Station #6 - October 2022 (West)



Photo Station #6 - October 2023 (West)



Photo Station #7 - October 2022 (South)



Photo Station #7 - October 2023 (South)



Photo Station #7 - October 2022 (West)



Photo Station #7 - October 2023 (West)



Photo Station #7 - October 2022 (North)



Photo Station #7 - October 2023 (North)



Photo Station #9 - October 2022 (East)



Photo Station #8 - October 2023 (East)



Photo Station #9 - October 2022 (North)



Photo Station #9 - October 2023 (North)



Photo Station #9 - October 2022 (West)

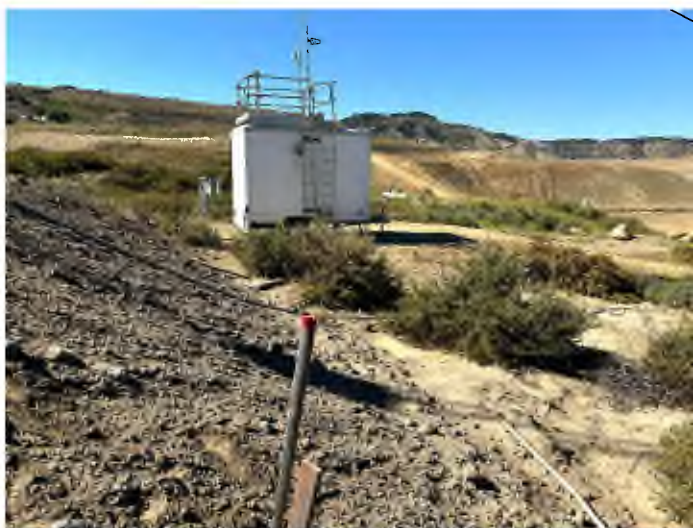


Photo Station #9 - October 2023 (West)

ATTACHMENT 4





Rincon Consultants, Inc.

180 North Ashwood Avenue
Ventura, California 93003

805 644 4455 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

October 20, 2023
Project No: 21-11086

Paul D. Koster II
Environmental Manager
Republic Services
14747 San Fernando Road
Sylmar, California 91342
Via email: PKoster@republicservices.com

Subject: Coastal Sage Scrub City South C Trial Plot 3rd Quarter 2023 Monitoring Report, Sunshine Canyon Landfill

Dear Mr. Koster,

This monitoring report has been prepared by Rincon Consultants, Inc. (Rincon) to inform Republic Services on the status of coastal sage scrub restoration at the Sunshine Canyon Landfill located at 14747 San Fernando Road, Sylmar, California 91342. Specifically, this letter report serves to document the abundance of vegetation at the Coastal Sage Scrub City South C Trial Plot in the third quarter of 2023.

Methods

On September 27, 2023, Rincon Consultants monitored the Coastal Sage Scrub City South C Trial Plot (trial plot) at the Sunshine Canyon Landfill, which constitutes the third quarter of monitoring for 2023. The sample methodology generally followed the *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* (JMA, April 23, 2014). Quadrat sampling of the Coastal Sage Scrub City South C Trial Plot consists of four 50-meter² quadrats that are randomly sampled within each of the following three seeded areas: hydroseed, imprint, and hand broadcast. The twelve quadrats sampled were randomly selected prior to the first initial monitoring event from a grid that was placed over the entire trial plot, and each quadrat was given a letter (A-L) and delineated in the field with wooden stakes (Attachment A).

As shown in Attachment A, three different seeding methods were used as follows:

- Hydroseed (Quadrats A, B, C, and D)
- Imprint (Quadrats E, F, G, and H)
- Hand broadcast (Quadrats I, J, K, and L)

Absolute Cover

The following qualitative data was collected in each quadrat to determine the absolute cover of native and non-native herbaceous and woody species:



- **Percent basal cover (shrubs).** Visual estimate of the amount of basal cover within each quadrat for all shrub species.
- **Percent basal cover (herbs).** Visual estimate of the amount of basal cover within each quadrat for all herb species.
- **Percent bare ground.** Visual estimate of the amount of available bare ground with no vegetation, but suitable for plant growth.
- **Percent rock or other.** Visual estimate of the amount of unavailable ground for supporting plant growth. Inhibitors generally included rocks and boulders, irrigation lines and valve boxes, and mulch.
- **Percent canopy.** Visual estimate of the percent canopy of each shrub and herbaceous species.
- **Photographs.** A photograph was taken from the southwest corner (facing northeast) of each quadrat.

Percent Cover

The following quantitative data was collected in each quadrat to determine the percent cover of native and non-native species.

- **Point intercept method.** Sampling began at the southwest corner of each quadrat and continued around the quadrat in a clockwise direction. The species located precisely at every meter point was tallied, including areas of bare ground, rock and other.

Field Results

Below are the average data collected for each planting method.

Absolute Cover (Qualitative)

Hydroseed – Quadrats A, B, C, and D (average)

- Percent basal cover (shrubs) – 20%
- Percent basal cover (herbs) – 5%
- Percent bare ground – 31%
- Percent rock or other – 3%
- Percent canopy (shrubs) – 58%
- Percent canopy (herbs) – 20%

Imprint – Quadrats E, F, G, and H (average)

- Percent basal cover (shrubs) – 20%
- Percent basal cover (herbs) – 5%
- Percent bare ground – 41%
- Percent rock or other – 5%
- Percent canopy (shrubs) – 53%
- Percent canopy (herbs) – 8%



Hand broadcast – Quadrats I, J, K, and L (average)

- Percent basal cover (shrubs) – 16%
- Percent basal cover (herbs) – 35%
- Percent bare ground – 26%
- Percent rock or other – 3%
- Percent canopy (shrubs) – 35%
- Percent canopy (herbs) – 55%

Percent Cover (Quantitative)

The representation of each species within a quadrat was estimated by broad cover classes (<1%, 1-5%, 5-25%, 25-50%, 50-75%, and >75%). The percent cover of each species based upon the point intercept method is presented in Table 1 through Table 3 below.



Table 1 Hydroseed – Quadrats A, B, C, and D (Average)

Species	Plot A		Plot B		Plot C		Plot D	
	Number of Hits	Percent Cover	Number of Hits	Percent Cover	Number of Hits	Percent Cover	Number of Hits	Percent Cover
Native Shrubs								
<i>Acmispon glaber</i>					2	4%		
<i>Artemisia californica</i>								
<i>Atriplex lentiformis</i>	7	14%	3	6%	8	16%	10	20%
<i>Atriplex polycarpa</i>	5	10%	11	22%	3	6%		
<i>Atriplex spinosa</i>					6	12%		
<i>Baccharis pilularis</i>								
<i>Diplacus aurantiacus</i>								
<i>Encelia californica</i>	10	20%	15	30%	8	16%	13	26%
<i>Salvia apiana</i>								
<i>Salvia mellifera</i>								
Native Herbs								
<i>Achillea millefolium</i>								
<i>Cryptantha intermedia</i>								
<i>Helianthus annuus</i>							6	12%
<i>Elymus triticoides</i>			7	14%				
<i>Erigeron canadensis</i>			8	16%				
<i>Sisyrinchium bellum</i>								
<i>Vulpia microstachys</i>								
Non-Native Herbs								
<i>Amaranthus albus</i>	1	2%						
<i>Bromus rubens</i>					4	8%		
<i>Centaurea melitensis</i>					6	12%		
<i>Erodium cicutarium</i>	1	2%						
<i>Hirschfeldia incana</i>	8	16%			1	2%	6	12%
<i>Hordeum murinum</i>							1	2%
<i>Salsola tragus</i>			2	4%	1	2%		
Bare ground	18	36%	4	8%	11	22%	14	28%
		Plot A		Plot B		Plot C		Plot D
Percent Cover Native Shrub		44%		58%		54%		46%
Percent Cover Native Herb		0%		30%		0%		12%
Percent Cover Non-Native Shrub		0%		0%		0%		0%
Percent Cover Non-Native Herb		20%		4%		24%		14%
Percent Bare Ground		36%		8%		22%		28%
								A,B,C,D Percent Cover



Table 2 Imprint – Quadrats E, F, G, and H (Average)

Species	Plot E		Plot F		Plot G		Plot H	
	Number of Hits	Percent Cover	Number of Hits	Percent Cover	Number of Hits	Percent Cover	Number of Hits	Percent Cover
Native Shrubs								
<i>Acmispon glaber</i>								
<i>Artemisia californica</i>								
<i>Atriplex lentiformis</i>			9	18%	2	4%		
<i>Atriplex polycarpa</i>	6	12%	5	10%			5	10%
<i>Atriplex spinosa</i>			7	14%				
<i>Baccharis pilularis</i>								
<i>Diplacus aurantiacus</i>								
<i>Encelia californica</i>	18	36%	11	22%	30	60%	30	60%
<i>Salvia leucophylla</i>							1	2%
<i>Salvia mellifera</i>								
Native Herbs								
<i>Achillea millefolium</i>								
<i>Cryptantha intermedia</i>								
<i>Helianthus annuus</i>								
<i>Elymus triticoides</i>							1	2%
<i>Nasella pulchra</i>								
<i>Sisyrinchium bellum</i>								
<i>Vulpia microstachys</i>								
Non-Native Herbs								
<i>Amaranthus albus</i>	1	2%						
<i>Bromus rubens</i>								
<i>Centaurea melitensis</i>								
<i>Erigeron canadensis</i>								
<i>Erodium cicutarium</i>								
<i>Hirschfeldia incana</i>	4	8%	2	4%	2	4%		
<i>Hordeum murinum</i>								
<i>Salsola tragus</i>								
Bare ground	21	42%	16	32%	17	34%	13	26%
	Plot E		Plot F		Plot G		Plot H	
Percent Cover Native Shrub	48%		64%		62%		72%	
Percent Cover Native Herb	0%		0%		0%		2%	
Percent Cover Non-Native Shrub	0%		0%		0%		0%	
Percent Cover Non-Native Herb	10%		4%		4%		0%	
Percent Bare Ground	42%		32%		34%		26%	



Table 3 Hand Broadcast – Quadrats I, J, K, and L (Average)

Species	Plot I		Plot J		Plot K		Plot L	
	Number of Hits	Percent Cover	Number of Hits	Percent Cover	Number of Hits	Percent Cover	Number of Hits	Percent Cover
Native Shrubs								
Acmispon glaber								
Artemisia californica			3	6%			2	4%
Atriplex lentiformis	2	4%	6	12%				
Atriplex polycarpa	3	6%	2	4%			6	12%
Atriplex spinosa	7	14%						
Baccharis pilularis							3	6%
Encelia californica	15	30%	5	10%			16	32%
Salvia leucophylla								
Non-Native Shrubs								
Atriplex semibaccata								
Native Herbs								
Achillia mellifolium								
Cryptantha intermedia								
Helianthus annuus	4	8%	3	6%				
Elymus triticoides					28	56%	10	20%
Nasella pulchra								
Sisyrinchium bellum								
Vulpia microstachys								
Non-Native Herbs								
Amaranthus albus	1	2%						
Bromus rubens			14	28%				
Centaurea melitensis			1	2%				
Dittrichia graveolens			2	4%				
Hirschfeldia incana	2	4%	10	20%	12	24%	3	6%
Hordeum murinum								
Salsola tragus			1	2%				
Sonchus oleraceus								
Bare ground	16	32%	3	6%	10	20%	10	10%
I,J,K,L Percent Cover								
Percent Cover Native Shrub		54%	32%		0%		54%	35%
Percent Cover Native Herb		8%	6%		56%		20%	23%
Percent Cover Non-Native Shrub		0%	0%		0%		0%	0%
Percent Cover Non-Native Herb		6%	56%		24%		6%	23%
Percent Bare Ground		32%	6%		20%		20%	20%



Discussion

Table 4 below provides a summary of the vegetation cover of shrubs and herbs, including areas of bare ground. The percent cover of native and non-native species is summarized above in Tables 1-3.

Table 4 Summary of Vegetation Cover for Each Planting Method at the Coastal Sage Scrub City South C Trial Plot

	Hydroseed (Quadrats A, B, C, and D)		Imprint (Quadrats E, F, G, and H)		Hand Broadcast (Quadrats I, J, K, and L)	
	Qualitative	Quantitative	Qualitative	Quantitative	Qualitative	Quantitative
Percent Cover Shrub	58%	51%	53%	62%	35%	35%
Percent Cover Herb	20%	27%	8%	6%	55%	46%
Percent Bare Ground	31%	24%	41%	34%	26%	20%

As discussed in previous reports, most of the trial plot (except for quadrats A, B, E, F, and G) substantially burned during the Saddleridge Fire in October 2019, and much of the vegetation was removed and/or crushed by fire equipment (e.g., bulldozers). Following the fire, non-native species such as brome grasses (*Bromus* spp.), foxtail barley (*Hordeum murinum*), and short podded mustard (*Hirschfeldia incana*) established in areas that were previously dominated by saltbush (*Atriplex* spp.). However, the trial plot has almost fully recovered from the fire, as evidenced by the establishment, growth, and reproduction of native shrub species such as allscale saltbush (*Atriplex polycarpa*), big saltbush (*Atriplex lentiformis*), California sunflower (*Encelia californica*), California sagebrush (*Artemisia californica*), purple sage (*Salvia leucophylla*), black sage (*Salvia mellifera*), and coyote brush (*Baccharis pilularis*) that previously dominated the trial plot prior to the fire.

The quantitative percent cover of native shrub species currently has an average of 51 percent within the hydroseed quadrats, 62 percent within the imprint quadrats, and 35 percent within the hand broadcast quadrats (Tables 1-3). Native shrub quantitative percent cover increased across all treatments from the first quarter monitoring event in 2023, and have not substantially changed since the second quarter of 2023. All shrub species within the trial plot were either at the end of flowering (e.g., California buckwheat [*Eriogonum fasciculatum*]), or had already set seed (e.g., California sunflower, big saltbush, and allscale saltbush) during the third quarter of 2023. As described in previous monitoring reports from 2022, beardless wild rye (*Elymus triticoides*) was trimmed as part of the weeding effort implemented by Republic Services in spring of 2022; however, this species has recovered from the trimming efforts, indicated by the increase in native herbaceous cover across all treatment types (hydroseed quadrats: 11 percent cover; imprint quadrats: 1 percent cover; hand broadcast quadrats: 23 percent cover).

Non-native plant cover has not changed substantially within the trial plot between the second and third quarters of 2023. The most abundant non-native herbaceous plants observed within the trial plot during the third quarter of 2023 include foxtail barley, Mediterranean grass (*Schismus arabicus*), red brome (*Bromus rubens*), and short podded mustard. Short-podded mustard and Russian thistle (*Salsola tragus*) were flowering during the third quarter of 2023, while most other non-native herbs were either in their vegetative state or had already completed their flowering cycle. Non-native plant species cover is expected to decline in the fall and winter months, and increase again during the spring of 2023. Total non-native herbaceous cover currently has an average of 16 percent within the hydroseed quadrats (no change from the second quarter of 2023), 5 percent within the imprint quadrats (down from 9 percent



in the second quarter of 2023), and 23 percent (down from 25 percent in the second quarter of 2023) within the hand broadcast quadrats (Tables 1-3).

Recommendations

Successional Growth and Weed Control

Wildfires in Southern California have become more common in recent years and have impacted the native landscape, including established restoration sites. Non-native weed control is essential in establishing post-fire restoration sites and is recommended by such organizations as the California Department of Fish and Wildlife Service and the California Society of Ecological Restoration. Successional regrowth of herbaceous non-native species is to be expected within the first two to three years following a wildfire, which is currently being observed at the trial plot. Native shrubs are expected to recover over a longer period through germination of existing seed within the topsoil and basal growth from charred plants. Native shrubs have shown notable growth following the fire and appear to be well established in the trial plot.

Successional growth of herbaceous species is also important, as native herbaceous species provide natural erosion of topsoil. To control the spread non-native herbaceous species such as foxtail barley, red brome, and short podded mustard, and minimize competition with native herbaceous and woody species for water, nutrients, and sunlight, weed maintenance should occur no less than every four months, and special attention should be afforded to minimizing impacts to native grasses that may appear to be non-native (i.e., beardless wild rye), native seedlings, and native shrub resprouts. Weed maintenance should be scheduled to maximize removal of non-native species prior to seed set, which typically occurs in spring between the months of February and April, but may also occur throughout the growing season based upon precipitation events.

Supplemental Irrigation

While southern California received above-average rainfall in the winter of 2022 and spring of 2023, supplemental irrigation is a valuable restoration technique to promote re-establishment of native vegetation, particularly during the dry months of the year (i.e., summer and fall). If native herbaceous vegetation continues to be sparse throughout the trial plot, and/or if native shrubs senesce or show indicators of drought stress, the irrigation system within the trial plot should be re-installed to increase water availability and promote seed germination and re-establishment of native vegetation.



References

John Minch and Associates, Inc. (JMA). 2014. 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.

Thank you for the opportunity to work with you on this important project. Please contact Greg Ainsworth if you have questions concerning the contents of this report. He may be reached by telephone at (818) 564-5544, or by email at gainsworth@rinconconsultants.com.

Sincerely,
Rincon Consultants, Inc.

A handwritten signature in black ink, appearing to read "G. Ainsworth".

Greg Ainsworth
Natural Resources Director

A handwritten signature in black ink, appearing to read "Kyle Gern".

Kyle Gern
Biologist

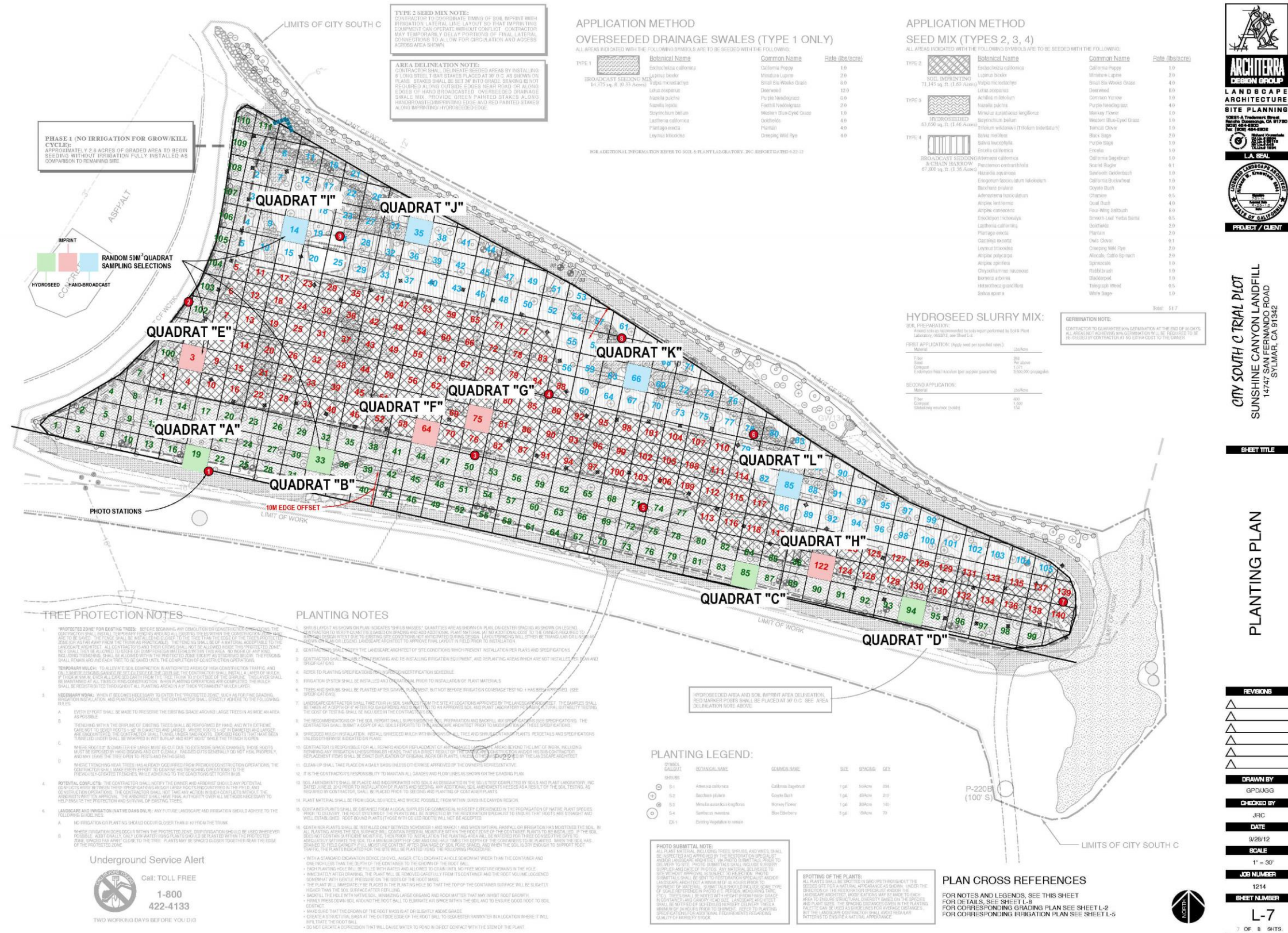
Attachments

- Attachment A Deck C Revegetation Area Quadrat Layout and Planting Plan
- Attachment B Representative Site Photographs

Attachment A

Deck C Revegetation Area Quadrat Layout and Planting Plan

Deck C Revegetation Area Quadrat Layout and Planting Plan



Attachment B

Photographs of Sample Plots



Photograph 1. Quadrat A facing northeast from southwest corner (September 27, 2023).



Photograph 2. Quadrat B facing northeast from southwest corner (September 27, 2023).



Photograph 3. Quadrat C facing northeast from southwest corner (September 27, 2023).



Photograph 4. Quadrat D facing northeast from southwest corner (September 27, 2023).



Photograph 5. Quadrat E facing northeast from southwest corner (September 27, 2023).



Photograph 6. Quadrat F facing northeast from southwest corner (September 27, 2023).



Photograph 7. Quadrat G facing northeast from southwest corner (September 27, 2023).



Photograph 8. Quadrat H facing northeast from southwest corner (September 27, 2023).



Photograph 9. Quadrat I facing northeast from southwest corner (September 27, 2023).



Photograph 10. Quadrat J facing northeast from southwest corner (September 27, 2023).



Photograph 11. Quadrat K facing northeast from southwest corner (September 27, 2023).



Photograph 12. Quadrat L facing northeast from southwest corner (September 27, 2023).

ATTACHMENT 5





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October 20, 2023
Project No: 21-11086

Paul D. Koster II
Environmental Manager
Republic Services
14747 San Fernando Road
Sylmar, California 91342
Via email: PKoster@republicservices.com

Subject: Coastal Sage Scrub City South B Trial Plot 3rd Quarter 2023 Monitoring Report, Sunshine Canyon Landfill

Dear Mr. Koster,

This monitoring report has been prepared by Rincon Consultants, Inc. (Rincon) to inform Republic Services on the status of coastal sage scrub restoration at the Sunshine Canyon Landfill located at 14747 San Fernando Road, Sylmar, California 91342. Specifically, this letter report serves to document the abundance of vegetation at the Coastal Sage Scrub City South B Trial Plot in the third quarter of 2023.

Methods

On September 27, 2023, Rincon Consultants monitored the Coastal Sage Scrub City South B Trial Plot (trial plot) at the Sunshine Canyon Landfill, which constitutes the third quarter of monitoring for 2023. The sample methodology generally followed the *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* (JMA, April 23, 2014). Quadrat sampling of the revegetation area consists of nine 50-meter² quadrats that are randomly located throughout the revegetation area. The quadrats were randomly selected prior to the first initial monitoring event from a grid that was placed over the entire trial plot, and each quadrat was given a letter (A-I) and delineated in the field with wooden stakes. As shown in Attachment A, five different planting methods were used as follows:

- Soil imprinting with hand broadcast overseeded drainage swales (Quadrats A and G)
- Soil imprinting (Quadrats B, F and H)
- Broadcast seeding (Quadrat C)
- Broadcast seeding with soil imprinting (Quadrat D and I)
- Soil imprinting and hand broadcast (Quadrat E)

Absolute Cover

The following qualitative data was collected in each quadrat to determine the absolute cover of native and non-native herbaceous and woody species:

- **Percent basal cover (shrubs).** Visual estimate of the amount of basal cover within each quadrat for all shrub species.



- **Percent basal cover (herbs).** Visual estimate of the amount of basal cover within each quadrat for all herbaceous species.
- **Percent bare ground.** Visual estimate of the amount of available bare ground with no vegetation.
- **Percent rock or other.** Visual estimate of the amount of unavailable ground for supporting plant growth. Inhibitors generally included rocks and boulders, irrigation lines and valve boxes, and mulch.
- **Percent canopy.** Visual estimate of the percent canopy of each shrub and herbaceous species.
- **Photographs.** A photograph was taken from the southwest corner (facing northeast) of each quadrat.

Percent Cover

The following quantitative data was collected in each quadrat to determine the percent cover of native and non-native species.

- **Point intercept method.** Sampling began at the southwest corner of each quadrat and continued around the quadrat in a clockwise direction. The species located precisely at every meter point was tallied, including areas of bare ground, rock and other.

Field Results

Below are the average data collected for each planting method.

Absolute Cover (Qualitative)

Soil imprinting with hand broadcast overseeded drainage swales – Quadrats A and G (average)

- Percent basal cover (shrubs) – 3%
- Percent basal cover (herbs) – 13%
- Percent bare ground – 58%
- Percent rock or other – 3%
- Percent canopy (shrubs) – 27%
- Percent canopy (herbs) – 22%

Soil imprinting – Quadrats B, F, and H (average)

- Percent basal cover (shrubs) – 14%
- Percent basal cover (herbs) – 10%
- Percent bare ground – 47%
- Percent rock or other – 3%
- Percent canopy (shrubs) – 32%
- Percent canopy (herbs) – 24%

Broadcast seeding – Quadrat C

- Percent basal cover (shrubs) – 30%



- Percent basal cover (herbs) – 10%
- Percent bare ground – 15%
- Percent rock or other – 3%
- Percent canopy (shrubs) – 100%
- Percent canopy (herbs) – 15%

Broadcast seeding with soil imprinting – Quadrats D and I (average)

- Percent basal cover (shrubs) – 5%
- Percent basal cover (herbs) – 11%
- Percent bare ground – 65%
- Percent rock or other – 7%
- Percent canopy (shrubs) – 19%
- Percent canopy (herbs) – 21%

Soil Imprinting and hand broadcast – Quadrat E

- Percent basal cover (shrubs) – 10%
- Percent basal cover (herbs) – 3%
- Percent bare ground – 75%
- Percent rock or other – 1%
- Percent canopy (shrubs) – 133%
- Percent canopy (herbs) – 10%

Percent Cover (Quantitative)

The representation of each species within each quadrat was estimated by broad cover classes (<1%, 1-5%, 5-25%, 25-50%, 50-75%, and >75%). The percent cover of each species based upon the point intercept method is presented in Table 1 through Table 5 below.



Table 1 Soil Imprinting with Hand Broadcast Overseeded Drainage Swales – Quadrats A and G (Average)

Species	Quadrat A		Quadrat G	
	Number of Hits	Percent Cover	Number of Hits	Percent Cover
Native Shrubs				
<i>Acmispon glaber</i>	1	2%		
<i>Artemisia californica</i>				
<i>Atriplex lentiformis</i>			10	20%
<i>Atriplex polycarpa</i>			6	12%
<i>Atriplex spinosa</i>				
<i>Baccharis pilularis</i>	2	4%		
<i>Baccharis salicifolia</i>				
<i>Encelia californica</i>				
<i>Salvia apiana</i>				
<i>Salvia mellifera</i>				
Non-Native Shrubs				
<i>Atriplex semibaccata</i>			4	8%
Native Herbs				
<i>Achillea millefolium</i>				
<i>Eschscholzia californica</i>				
<i>Elymus triticoides</i>	3	6%	8	16%
<i>Nasella pulchra</i>				
<i>Sisyrinchium bellum</i>				
Non-Native Herbs				
<i>Centaurea melitensis</i>	7	14%		
<i>Erodium cicutarium</i>				
<i>Hirschfeldia incana</i>			1	2%
<i>Hordeum murinum</i>				
<i>Salsola tragus</i>	1	2%		
Bare ground	36	72%	21	42%
	Quadrat A	Quadrat G	A and G (% Cover)	
Percent Cover Native Shrub	6%	32%	19%	
Percent Cover Native Herb	6%	16%	11%	
Percent Cover Non-Native Shrub	0%	8%	4%	
Percent Cover Non-Native Herb	16%	2%	9%	
Percent Bare Ground	72%	42%	57%	



Table 2 Soil Imprinting – Quadrats B, F, and H (Average)

Species	Quadrat B		Quadrat F		Quadrat H	
	Number of Hits	Percent Cover	Number of Hits	Percent Cover	Number of Hits	Percent Cover
Native Shrubs						
<i>Acmispon glaber</i>	1	2%				
<i>Artemisia californica</i>	13	26%			1	2%
<i>Atriplex lentiformis</i>			3	6%	3	6%
<i>Atriplex polycarpa</i>						
<i>Baccharis pilularis</i>	9	18%				
<i>Encelia californica</i>						
<i>Encelia farinosa</i>	2	4%				
<i>Eriogonum fasciculatum</i>	4	8%	8	16%	7	14%
<i>Hesperoyucca whipplei</i>	2	4%				
<i>Isocoma menziesii</i>	6	12%				
<i>Salvia apiana</i>	2	4%				
<i>Salvia mellifera</i>	7	14%				
<i>Sambucus mexicana</i>						
Non-Native Shrubs						
<i>Atriplex semibaccata</i>					1	2%
Native Herbs						
<i>Elymus triticoides</i>					2	4%
<i>Helianthus annuus</i>						
Non-Native Herbs						
<i>Bromus diandrus</i>						
<i>Bromus rubens</i>			8	16%	6	12%
<i>Centaurea melitensis</i>	3	6%			1	2%
<i>Festuca myuros</i>						
<i>Chenopodium album</i>						
<i>Hordeum murinum</i>						
<i>Mesembryanthemum nodiflorum</i>			22	44%	1	2%
<i>Polygonum aviculare</i>						
<i>Salsola tragus</i>					2	4%
Bare ground	1	2%	9	18%	26	52%
	Quadrat B		Quadrat F		Quadrat H	
Percent Cover Native Shrub	92%		22%		22%	
Percent Cover Native Herb	0%		0%		6%	
Percent Cover Non-Native Shrub	0%		0%		0%	
Percent Cover Non-Native Herb	6%		60%		20%	
Percent Bare Ground	2%		18%		52%	



Table 3 Broadcast Seeding – Quadrat C

Species	Quadrat C	
	Number of Hits	Percent Cover
Native Shrubs		
<i>Acmispon glaber</i>	4	8%
<i>Artemisia californica</i>	29	58%
<i>Atriplex lentiformis</i>		
<i>Atriplex polycarpa</i>		
<i>Atriplex spinosa</i>		
<i>Baccharis pilularis</i>		
<i>Encelia californica</i>		
<i>Encelia farinosa</i>	3	6%
<i>Eriogonum fasciculatum</i>	2	4%
<i>Isocoma menziesii</i>	2	4%
<i>Salvia apiana</i>	1	2%
Native Herbs		
<i>Achillea millefolium</i>		
<i>Eschscholzia californica</i>		
<i>Elymus triticoides</i>		
<i>Nasella pulchra</i>		
<i>Sisyrinchium bellum</i>		
<i>Vulpia microstachys</i>		
Non-Native Herbs		
<i>Centaurea melitensis</i>	7	14%
<i>Echinochloa crus-galli</i>		
<i>Erodium cicutarium</i>		
<i>Hirschfeldia incana</i>	1	2%
<i>Hordeum vulgare</i>		
<i>Marrubium vulgare</i>		
Bare ground	1	2%
Quadrat C (% cover)		
Percent Cover Native Shrub	82%	
Percent Cover Native Herb	0%	
Percent Cover Non-Native Shrub	0%	
Percent Cover Non-Native Herb	16%	
Percent Bare Ground	2%	



Table 4 Broadcast Seeding with Soil Imprinting – Quadrats D and I (Average)

Species	Quadrat D		Quadrat I	
	Number of Hits	Percent Cover	Number of Hits	Percent Cover
Native Shrubs				
<i>Acmispon glaber</i>			1	2%
<i>Artemisia californica</i>	5	10%		
<i>Atriplex lentiformis</i>	4	8%		
<i>Atriplex polycarpa</i>			5	10%
<i>Eriogonum fasciculatum</i>			4	8%
<i>Isocoma menziesii</i>			2	4%
<i>Opuntia littoralis</i>				
Non-Native Shrubs				
<i>Atriplex semibaccata</i>			4	8%
Native Herbs				
<i>Achillea millefolium</i>				
<i>Descurainia pinnata</i>				
<i>Elymus triticoides</i>	6	12%	4	8%
<i>Nasella pulchra</i>				
<i>Sisyrinchium bellum</i>				
<i>Vulpia microstachys</i>				
Non-Native Herbs				
<i>Amaranthus albus</i>			1	2%
<i>Avena barbata</i>				
<i>Bromus diandrus</i>				
<i>Bromus rubens</i>	4	8%	8	16%
<i>Centaurea melitensis</i>	3	6%	3	6%
<i>Festuca myuros</i>			2	4%
<i>Hirschfeldia incana</i>	1	2%		
<i>Hordeum murinum</i>				
<i>Mesembryanthemum nodiflorum</i>	11	22%		
<i>Polygonum aviculare</i>				
<i>Salsola tragus</i>			4	8%
Bare ground	16	32%	12	24%
	Quadrat D		Quadrat I	D and I (% cover)
Percent Cover Native Shrub	18%		20%	21%
Percent Cover Native Herb	12%		6%	10%
Percent Cover Non-Native Shrub	0%		10%	4%
Percent Cover Non-Native Herb	38%		32%	37%
Percent Bare Ground	32%		32%	28%



Table 5 Soil Imprinting and Hand Broadcast – Quadrat E

Species	Quadrat E	
	Number of Hits	Percent Cover
Native Shrubs		
<i>Acmispon glaber</i>		
<i>Artemisia californica</i>	2	4%
<i>Atriplex lentiformis</i>	6	12%
<i>Atriplex polycarpa</i>	2	4%
<i>Atriplex spinosa</i>		
<i>Baccharis pilularis</i>		
<i>Encelia californica</i>		
<i>Encelia farinosa</i>		
<i>Eriodictyon californicum</i>	6	12%
<i>Eriogonum fasciculatum</i>	4	8%
<i>Isocoma menziesii</i>	3	6%
<i>Opuntia littoralis</i>		
<i>Salvia apiana</i>	1	2%
<i>Salvia mellifera</i>		
Non-Native Shrubs		
<i>Atriplex semibaccata</i>		
Native Herbs		
<i>Achillia mellifolium</i>		
<i>Eschscholzia californica</i>		
<i>Elymus triticoides</i>	1	2%
Non-Native Herbs		
<i>Bromus diandrus</i>		
<i>Centaurea melitensis</i>	2	4%
<i>Hirschfeldia incana</i>	1	2%
<i>Hordeum vulgare</i>		
<i>Mesembryanthemum nodiflorum</i>	6	12%
Bare ground	16	32%
Quadrat E (% cover)		
Percent Cover Native Shrub	48%	
Percent Cover Native Herb	2%	
Percent Cover Non-Native Shrub	0%	
Percent Cover Non-Native Herb	18%	
Percent Bare Ground	32%	

Discussion

Table 6 below provides a summary of the percent cover of native and non-native shrubs and herbs, including areas of bare ground within the Coastal Sage Scrub City South B Trial Plot.

Table 6 Summary of Percent Cover for Each Planting Method Using the Point Intercept Method

	Soil Imprinting with Hand Broadcast Overseeded Drainage Swales (Quadrats A and G)	Soil Imprinting (Quadrats B, F, and H)	Broadcast Seeding (Quadrat C)	Broadcast Seeding with Soil Imprinting (Quadrats D and I)	Soil Imprinting and Hand Broadcast (Quadrat E)
Percent Cover Native Shrub	19%	45%	82%	21%	48%
Percent Cover Native Herb	11%	2%	0%	10%	2%
Percent Cover Non-Native Shrub	4%	0%	0%	4%	0%
Percent Cover Non-Native Herb	9%	29%	16%	37%	18%
Percent Bare Ground	57%	24%	2%	28%	32%

The trial plot was established in November 2018. As described in previous monitoring reports, the 2019 Saddleridge Fire burned a large portion of the trial plot, but mostly spared the sample plots. The fire damaged the irrigation system, which is no longer functioning.

As discussed in previous reports, native species have established since the fire, and primarily include shrub species such as brittlebush (*Encelia farinosa*), coast prickly pear (*Opuntia littoralis*), big saltbush (*Atriplex lentiformis*), deerweed (*Acmispon glaber*), California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), white sage (*Salvia apiana*), and coastal goldenbush (*Isocoma menziesii*). Native shrub species resprouted from burned stumps following the Saddleridge Fire, from the pre-existing seedbank, and from seeds installed during the seeding treatments performed during creation of the trial plot. The trial plot appears to have mostly recovered from the fire, evidenced by substantial native shrub establishment and growth within the trial plot. As discussed in previous reports, below-average rainfall in 2021 and 2022 throughout southern California negatively impacted native species growth in the trial plot. In particular, native herbaceous species quantitative cover remained at or below five percent cover in 2021 and 2022. In the winter of 2022 and spring of 2023, above-average rainfall was observed throughout southern California. This above-average rainfall appears to have positively influenced native shrub and herbaceous species cover (Table 6). Native shrub species that increased in cover include California sagebrush, California buckwheat, coyote brush (*Baccharis pilularis*), blue elderberry (*Sambucus mexicana*), black sage (*Salvia mellifera*), deerweed, big saltbush, allscale saltbush (*Atriplex polycarpa*), and coastal goldenbush. Additionally, beardless wild rye (*Elymus triticoides*; a native herbaceous grass species) showed a notable increase in cover.

Non-native plant cover, which increased in all of the treatment types between the fourth quarter of 2022 and the first quarter of 2023, has remained relatively stable since between the first and third quarters of 2023 (Table 6). Commonly occurring non-native plant species observed in the trial plot include small flowered iceplant (*Mesembryanthemum nodiflorum*), redstem filaree (*Erodium cicutarium*), tocalote (*Centaurea melitensis*), short podded mustard (*Hirschfeldia incana*), foxtail barley (*Hordeum murinum*), and red brome (*Bromus rubens*). Non-native plant species in flower during the third quarter of 2023 include short podded mustard and Russian thistle (*Salsola tragus*). Most notably,



small flowered iceplant was at 44 percent cover in Quadrat F (using the point intercept method) in the third quarter of 2023. Non-native plant species cover is expected to decline throughout the fall and winter months, and increase again in the spring of 2024.

Broadcast seeding (Quadrat C) had the highest percent cover of native shrubs using the point intercept method (82 percent) and represents an increase in cover (18 percent) since the fourth quarter of 2022. This increase is likely a result of the aforementioned above-average rainfall that southern California received in the winter of 2022 and spring of 2023. Deerweed, which is one of the most dominant species in Quadrat C, is an early-successional shrub species that is extremely beneficial for restoration purposes, as it fixes nitrogen into the soil and thereby increases soil fertility for other native plant species. The second highest percent cover of native shrubs was in the soil imprinting and hand broadcast treatment (Quadrat E; 48 percent), and the third highest was the soil imprinting treatment (Quadrats B, F, and H; 45 percent; Table 6). Both of these treatment types saw increases in native shrub cover between the second and third quarters of 2023. The percent cover of native herbaceous plant species was low in all planting methods, ranging between zero and 11 percent in the third quarter of 2023. This is consistent with observations made in previous sampling events.

Recommendations

Successional Growth and Weed Control

Wildfires in Southern California have become more common in recent years and have impacted on the native landscape. Non-native weed control is essential in establishing post-fire restoration sites and is recommended by organizations such as the California Department of Fish and Wildlife Service and the California Society of Ecological Restoration. Successional regrowth of herbaceous non-native species is to be expected within the first two to three years following a wildfire, which is currently occurring at the trial plot. Native shrubs are expected to recover over a longer period through germination of existing seed within the topsoil and basal growth from charred plants. Native shrubs have shown notable growth in the past two years, and now appear to be well established in the trial plot.

Successional growth of herbaceous species is also important, as native herbaceous species provide natural erosion of topsoil. To promote establishment and growth of native herbaceous species, controlling the spread of non-native herbaceous species such as foxtail barley, red brome, and short podded mustard is essential. Reducing non-native herbaceous species growth minimizes negative competitive effects on native herbaceous and woody species for water, nutrients, and sunlight. Weed maintenance should occur no less than every four months, and special attention should be afforded to minimizing impacts to native grasses that may appear to be non-native (i.e., beardless wild rye), native seedlings, and native shrub resprouts. Weed maintenance should be scheduled to maximize removal of non-native species prior to seed set, which typically occurs in spring between the months of February and April, but may also occur throughout the growing season based upon water availability.

Supplemental Irrigation

While southern California received above-average rainfall in the winter of 2022 and spring of 2023, supplemental irrigation is a valuable restoration technique to promote re-establishment of native vegetation, particularly during the dry months of the year (i.e., summer and fall). As described above, native herbaceous vegetation has continued to be notably low throughout all planting methods. If native herbaceous vegetation continues to be sparse throughout the trial plot, and/or if native shrubs senesce



or show indicators of drought stress, the irrigation system within the trial plot should be re-installed to increase water availability and promote seed germination and re-establishment of native vegetation.



References

John Minch and Associates, Inc. (JMA). 2014. 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.

Thank you for the opportunity to work with you on this important Project. Please contact Greg Ainsworth if you have questions concerning the contents of this report. He may be reached by telephone at (818) 564-5544, or by email at gainsworth@rinconconsultants.com.

Sincerely,
Rincon Consultants, Inc.

A handwritten signature in black ink, appearing to read "Greg Ainsworth", written over a light blue horizontal line.

Greg Ainsworth
Natural Resources Director

A handwritten signature in black ink, appearing to read "Kyle Gern", written over a light blue horizontal line.

Kyle Gern
Biologist

Attachments

- Attachment A Deck B Revegetation Area Quadrat Layout
- Attachment B Representative Site Photographs

Attachment A

Deck B Revegetation Area Quadrat Layout

Deck B Revegetation Area Quadrat Layout



Attachment B

Photographs of Sample Plots



Photograph 1. Quadrat A facing northeast from southwest corner (September 27, 2023).



Photograph 2. Quadrat B facing northeast from southwest corner (September 27, 2023).



Photograph 3. Quadrat C facing northeast from southwest corner (September 27, 2023).



Photograph 4. Quadrat D facing northeast from southwest corner (September 27, 2023).



Photograph 5. Quadrat E facing northeast from southwest corner (September 27, 2023).



Photograph 6. Quadrat F facing northeast from southwest corner (September 27, 2023).



Photograph 7. Quadrat G facing northeast from southwest corner (September 27, 2023).



Photograph 8. Quadrat H facing northeast from southwest corner (September 27, 2023).



Photograph 9. Quadrat I facing northeast from southwest corner (September 27, 2023).

ATTACHMENT 6





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March 22, 2021
Project No: 21-11086

Tuong-phu Ngo
Republic Services
14747 San Fernando Road
Sylmar, California 91342
Via email: [email address](#)

**Subject: Sunshine Canyon Landfill Ultimate Entry Improvement Project, Oak Tree Survey
14747 San Fernando Road, Sylmar, California, 91342**

Dear Mr. Ngo:

Rincon Consultants, Inc. (Rincon) prepared this report for the Ultimate Entry Improvement Project (project) located at the Sunshine Canyon Landfill (landfill) in Sylmar, Los Angeles County, California. This report, prepared by ISA certified arborist Greg Ainsworth, documents the results of an oak tree survey and assessment of impacts to protected oak trees from the project and provides a current tally on the remaining oak trees in the landfills' s oak tree mitigation bank.

Introduction

This oak tree report was prepared to disclose information on native oak (*Quercus sp.*) trees that would be removed by the proposed project.

Pursuant to the Los Angeles County Oak Tree Ordinance, any tree of the oak genus that is 25 inches in circumference (8 inches in diameter) or has a combined trunk circumference of any two trunks of at least 38 inches (12 inches in diameter), as measured 4.5 feet above the mean natural grade (i.e., diameter at breast height [DBH]), is considered a "protected tree" (Ordinance 88-0157 1, 82-0168 2, Section 22.56.2050, 1988). An oak tree that has a trunk DBH equal to or greater than 36 inches is considered a heritage tree, as defined in the Los Angeles County Oak Tree Ordinance. In accordance with the Ordinance, no damage shall occur within the protective zone (the area within the dripline of an oak tree and extending to a point at least 5 feet outside the dripline, or 15 feet from the trunk[s] of the tree, whichever distance is greater) of a protected oak tree. Damage is defined as any act causing or tending to cause injury to the root system or other parts of an oak tree, including, but not limited to, burning, application of toxic substances, operation of equipment or machinery, paving, changing of natural grade, and trenching or excavating.

Sunshine Canyon Landfill Oak Tree Mitigation Bank

In accordance with landfill's Conditional Use Permit (CUP) and Oak Tree Permit (OTP) #86312-(5) (dated February 19, 1991) for the Sunshine Canyon Landfill Extension Project, all native oak trees that will be removed for any project-related impact shall be mitigated at a ratio of 2:1, and heritage-size oak trees (36-inch DBH or greater) shall be mitigated at a ratio of 10:1. All mitigation oaks shall be monitored for 7 years after the tree reaches 0.5 inches in diameter.



A surplus of coast live oak trees was previously planted in the landfill's mitigation areas, which now serves as a mitigation bank for the landfill to draw from for future removals of coast live oak trees. There are currently 48 coast live oaks remaining in the mitigation bank (JMA, Sunshine Canyon Landfill Oak Tree and Bigcone Douglas Fir Monitoring Report No. 28, March 8, 2021).

Project Description

The proposed project involves the development of a landfill termination berm and cut/fill graded entrance roadway that will provide a down-slope buttress and access for a proposed landfill expansion. The nearly 190-foot-high proposed roadway and berm embankment across the mouth of the main canyon of Sunshine Canyon Landfill is designed to buttress the expanded landfill refuse prism that will be situated to the west. This new road embankment includes the associated cut and fill grading, three retaining walls, and a sedimentation basin with stormwater controls.

Methods

All oak trees located within and immediately adjacent to the project footprint that could be impacted by the proposed project were surveyed by certified arborist Greg Ainsworth (I.S.A. Cert# WE-7473A). The tree survey was conducted on March 4, 2021. Using a forester's diameter-equivalent tape, the diameter of all native oak trees having a trunk diameter of 8 inches or greater (or combined trunk diameter of 12 inches or greater) were measured at 4.5 feet above the mean natural grade to obtain the DBH. The location of each tree was recorded from the base of the tree using a Global Positioning System (GPS) with sub-meter accuracy. The following parameters were assessed from the base of each tree (or from the nearest vantage point):

Tree Characteristics

- Trunk diameter (DBH)
- Height
- Crown radius in all directions (north, south, east, and west).
- Balance or symmetry of the tree based on the crown radius measurements and whether the tree leans or is unstable.

Physical Condition

- Identification of damage caused by pathogens or insect pests, by natural causes such as lightning, or by human activity.
- Evaluation of vigor based on such parameters as amount of new growth, leaf color, abnormal bark, dead wood, evidence of wilt, excessive necrosis or leaf chlorosis, thinning of crown, etc.
- Assessment of the overall health of the tree based on the evaluation of vigor, presence of damage, and comparison to the typical archetype tree of the same species.



Health Grade

A subjective alphabetical ranking was assigned for overall health (vigor, aesthetic value, and balance) for each native oak and big cone fir tree based on the criteria described below:

- “A” = Excellent: A healthy and vigorous tree characteristic of its species and reasonably free of any visible signs of stress, disease, or pest infestation.
- “B” = Good: A healthy and vigorous tree with minor visible signs of stress, disease, and/or pest infestation. Some maintenance measures may need to be implemented, such as pruning of dead wood or broken branches.
- “C” = Fair: Although healthy in overall appearance, there is abnormal amount of stress or disease/insect infestation, and a substantial amount of maintenance may be needed.
- “D” = Poor: A tree that may be exhibiting a substantial amount of stress, disease, or insect damage than what the amount that is expected for the species. The tree may be in a state of rapid decline, and may show various signs of dieback, necrosis, or other symptoms caused by pathogens or insect pests.
- “F” = Dead: This tree has no foliage and exhibits no sign of life or vigor.

Results

There are 20 coast live oak trees located within the project footprint, one of which is dead, and all of which would be removed by the proposed project. No other oak trees would be encroached or otherwise impacted by the proposed project. Data on these 20 oak trees is presented in Table 1 below.

Table 1 Oak Tree Survey Data

Tree #	Species	DBH	Canopy Spread				Health	Physical Condition	Impact Status	Reason for Impact
			North	West	South	East				
1	Coast live oak	13	14	3	8	21	Fair		Removal	Grading
2	Coast live oak	--	--	--	--	--	Dead		Removal	Grading
3	Coast live oak	16	3	8	25	35	Poor	fire scar	Removal	Grading
4	Coast live oak	12	12	7	18	15	Good	fire scar	Removal	Grading
5	Coast live oak	18	11	15	30	7	Good	fire scar	Removal	Grading
6	Coast live oak	9	4	8	18	2	Fair	fire scar	Removal	Grading
7	Coast live oak	15	7	16	15	8	Fair	fire scar	Removal	Grading
8	Coast live oak	9	7	3	18	8	Good	fire scar	Removal	Grading
9	Coast live oak	18	30	15	22	10	Good	fire scar	Removal	Grading
10	Coast live oak	16	8	17	15	6	Fair	fire scar	Removal	Grading
11	Coast live oak	10	15	14	1	2	Fair	fire scar	Removal	Grading
12	Coast live oak	10	20	6	4	2	Fair	fire scar	Removal	Grading
13	Coast live oak	22	18	21	16	10	Fair	fire scar	Removal	Grading
14	Coast live oak	10	19	1	1	1	Fair	fire scar	Removal	Grading
15	Coast live oak	21	10	7	18	22	Fair	fire scar	Removal	Grading



Tree #	Species	DBH	Canopy Spread				Health	Physical Condition	Impact Status	Reason for Impact
			North	West	South	East				
16	Coast live oak	18	1	22	19	8	Fair	fire scar, split trunk	Removal	Grading
17	Coast live oak	19	15	11	15	10	Fair	fire scar	Removal	Grading
18	Coast live oak	12	15	7	15	7	Fair	fire scar	Removal	Grading
19	Coast live oak	12	17	10	4	8	Good		Removal	Grading
20	Coast live oak	8	4	12	6	1	Fair		Removal	Grading

Mitigation

There are currently 48 coast live oak trees in the landfill's mitigation bank. As noted in Table 1, 20 coast live oak trees would be removed by the proposed project. Therefore, at a mitigation ratio of 2:1, 40 coast live oak trees will be deducted from the landfill's oak tree mitigation bank, leaving 4 oak trees remaining in the bank for future removals at the landfill.

Please contact Greg Ainsworth at (818) 564-5544 or email at gainsworth@rinconconsultants.com if you have any question or comments regarding the information provided in this report.

Sincerely,
Rincon Consultants, Inc.

Greg Ainsworth, I.S.A. Cert # WE-7473A
Director of Urban Forestry

Attachments

Oak Tree Map

DRAWING 1



