SECTION 3 - EARTHWORK

3.1 GENERAL

The work in this section shall include furnishing all labor, supervision, tools, equipment, and materials necessary to complete the required earthwork excavation, hauling, and stockpiling, and accomplish all other related work. This work shall include, but is not limited to: surveying, clearing, grubbing, excavation, hauling, and stockpiling material as shown on the Project Drawings and as required by the Contract Documents.

3.2 EXECUTION

This work may include ripping, breaking, and dozing of previously stockpiled materials using standard earthmoving equipment up to and including CAT D-9 with ripper type equipment. This item shall also include keeping excavation areas neat and orderly and completing the excavation to the satisfaction of the County.

Areas of excavation shall be graded to drain at all times and necessary precautions shall be taken to control dust and erosion. The Contractor's access roads shall be maintained as necessary for the Contractor and the County, including landfill operation access. Excavations and Stockpiles shall not be constructed beyond the limits and design parameters stated in these Special Provisions and Project Drawings, unless otherwise authorized by the County in writing. Unauthorized excavation outside the specified excavation limits shall be immediately corrected by backfilling to grade with engineered fill (as directed by the County) at the Contractor's expense.

Excavated material shall be transported and placed by the Contractor in the designated Daily Cover Stockpile locations as shown on the Project Drawings and as directed by the County. Surface drainage shall be maintained at all times in the excavation and stockpile areas. Surfaces of <u>flat areas</u> shall be graded to ensure positive drainage with a minimum grade of three (3) percent and shall be finish-graded with a motor grader or approved equal. Final surface within each and all work areas shall be smooth graded and left in a uniformly graded condition to prevent or minimize erosion.

Finished <u>side slopes</u> shall be constructed to an inclination not steeper than 1.5:1 (H:V) or as directed otherwise by the County. Slope height within excavation areas must not exceed 40 vertical feet between intermediate benches (or access roads). Maximum slope height for stockpiles must not exceed 25 vertical feet unless otherwise authorized in writing by the County. Access roads or benches shall have a minimum width of 15 feet and shall provide access to the top deck. The Contractor shall observe excavations and stockpiles on a regular basis for signs of instability. Should signs of instability be noted, the Contractor shall notify the County immediately, and shall undertake remedial measures as soon as practicable, subject to the direction and approval of the County. It shall be the Contractor's responsibility to remove all loose materials from the excavated slopes and to maintain the slopes in a safe and stable condition at all times during progress of the work and during any temporary suspension of the work. Cut slopes shall be left in a clean, safe, and stable condition upon completion of the work.

Where necessary, trenches, pits, and other excavations shall be properly sheathed and braced to maintain safe and acceptable working conditions. Any damage occurring from excessive earth pressures, slides, cave-ins, or other causes due to failure to provide proper sheathing or bracing, or

through other negligence or fault of the Contractor, shall be repaired by the Contractor at its expense. The manner of bracing for excavations shall be as set forth in the rules, orders, and regulations of the Division of Industrial Safety of the State of California or OSHA; whichever is more restrictive.

3.3 MEASUREMENT AND PAYMENT

The last available ground topography contours for LCL were generated from a combination of an aerial flight survey conducted on October 21, 2015 and a conventional ground survey method completed on April 26, 2016. The last available ground topography contours for BA were generated from a combination of an aerial flight survey conducted on June 19, 2015 and a conventional ground survey method completed on April 4, 2016. Due to the ongoing landfill operations at both sites, these composite ground topographies will not reflect the actual field conditions at the time of award of this contract. However, in order to generate updated ground topography contour maps which will be used as the base maps (or pre-construction ground) for this project, the County will conduct a ground survey at both sites prior to the issuance of the Notice to Proceed. These surveys will be used to generate updated ground topography contour maps (pre-construction ground contours) that will be used to determine the final pay quantities for this project.

Unless otherwise stated, the final measurement of all earthwork quantities shall be calculated to the nearest cubic yard based only upon comparison of pre-construction and post-construction surfaces of the excavation areas. These surfaces shall be established by a combination of conventional ground surveying done by the County and aerial flight surveys of the project work area. The County shall conduct a ground survey immediately following the completion of each 50,000 cubic yards of excavation. Final volumetric calculation of earthwork quantities for payment purposes shall then be performed by the County based upon the resulting Digital Terrain Models (DTM) using the grid volume method with a grid interval of five (5) feet by five (5) feet. It should be noted that different methods may be used by the County for determining quantities for progress payments. However, the earthwork quantities used for progress payments will be adjusted at the completion of the project based upon the final measurement method stated in this paragraph.

Limits for measurement of the excavations area shall be to the limits shown on the Project Drawings or as directed by the County.

The measurement of the final excavation quantity for Bid Item No. 3 "Excavation, Hauling, and Stockpiling Daily Cover Material at Badlands Landfill" and Bid Item No. 4 "Excavation, Hauling, and Stockpiling Daily Cover Material at Lamb Canyon Landfill" shall be based only on the total excavation quantity as determined by comparing the pre- and post-construction ground surfaces within the specified excavation limits at each site. The pre-construction ground surface shall be established by a combination of conventional ground survey and aerial flight survey, and the post-construction ground surface for this work shall be established by ground surveying. Payment for excavation of all materials and hauling and placing material into soil stockpile areas, and any other work required to reach the specified excavation quantities shall be made based on the unit price per cubic yard for excavation, as stated in the Contractor's Proposal, Bid Item No. 3 and Bid Item No. 4.

END OF SECTION 3

SECTION 4 - AUTHORIZED TIME & MATERIALS WORK

4.1 GENERAL

The County shall have the right to add work of a different character or function, and have the Contractor perform such added work when such work is considered by the County to be appurtenant to the satisfactory completion of the project. "Authorized Time and Materials" shall be made when prior authorization and approval has been provided to the Contractor by the County for work of a different character or function and for which no basis for payment is prescribed in the Contract Documents.

The Contractor shall provide a rate schedule for all labor and equipment that may reasonably be anticipated for use during the project. Labor rates shall be consistent with those required by the prevailing wage rate requirements of the Contract and shall reflect all benefits and employer costs. Once the labor and equipment rates have been approved by the Project Manager, they will become the basis for compensation for any Time and Material work requested by the County. The Contractor is advised, however, that there will be no compensation from the Time and Material Allocation unless the work has been authorized in writing by the Project Manager. Additionally, use of the Time and Material Allocation will be at the sole discretion of the County. All or any portion of the allocation amount may be deleted from the Contract.

The signing of the contract by the Contractor will be deemed to be an agreement on his part to perform the added work, as and when ordered by the County. If the required added work results in delay to the project, the Contractor will be given an appropriate extension of time.

The cost of all work performed by the Contractor on an "Authorized Time and Material" basis will be computed in the manner described in Section 7.3. of the General Provisions in the Contract Documents, and the compensation thus provided shall be full payment to the Contractor related to the authorized time and material work.

END OF SECTION 4



APPENDIX "A"

SCAQMD Form 403-N & Rule 403 Dust Control Requirement Tables 2 & 3

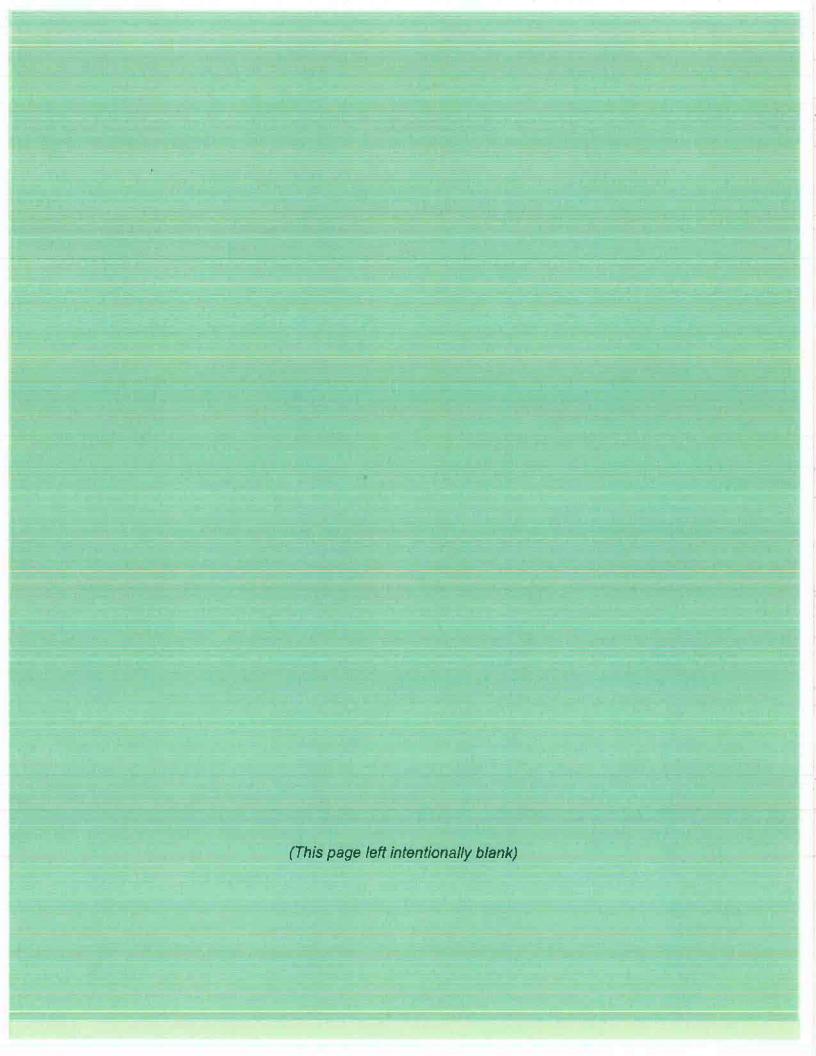


Table 2
DUST CONTROL MEASURES FOR LARGE OPERATIONS

| | IVALUITAL | OURES FOR LARGE OPERATIONS |
|---|-----------|---|
| FUGITIVE DUST SOURCE CATEGORY | | CONTROL ACTIONS |
| Earth-moving (except construction cutting and filling areas, and mining operations) | (1a) | Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; OR |
| | (1a-1) | For any earth-moving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction. |
| Earth-moving: Construction fill areas: | (1b) | Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. For areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM Method 1557 or other equivalent method approved by the Executive Officer and the California Air Resources Board and the U.S. EPA, complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four-hour period of active operations. |

Table 2 (Continued)

| | | 'able 2 (Continued) |
|---|--------------|---|
| FUGITIVE DUST SOURCE CATEGORY | | CONTROL ACTIONS |
| Earth-moving: Construction cut areas and mining operations: | (1c) | Conduct watering as necessary to prevent visible emissions from extending more than 100 feet beyond the active cut or mining area unless the area is inaccessible to watering vehicles due to slope conditions or other safety factors. |
| Disturbed surface areas (except completed grading areas) | (2a/b) | Apply dust suppression in sufficient quantity and frequency to maintain a stabilized surface. Any areas which cannot be stabilized, as evidenced by wind driven fugitive dust must have an application of water at least twice per day to at least 80 percent of the unstabilized area. |
| Disturbed surface areas: Completed grading areas | (2c) | Apply chemical stabilizers within five working days of grading completion; OR Take actions (3a) or (3c) specified for inactive disturbed surface areas. |
| Inactive disturbed surface areas | (3a) | Apply water to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible to watering vehicles due to excessive slope or other safety conditions; OR |
| | (3b) (3c) | Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR Establish a vegetative ground cover within 21 days after active operations have ceased. Ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR Utilize any combination of control actions (3a), (3b), |
| | (3d) | Utilize any combination of control actions (3a), (3b and (3c) such that, in total, these actions apply to a inactive disturbed surface areas. |

Table 2 (Continued)

| | Tau | le 2 (Continued) |
|--------------------|------|--|
| FUGITIVE DUST | | 39 |
| SOURCE CATEGORY | | CONTROL ACTIONS |
| | | |
| Unpaved Roads | (4a) | Water all roads used for any vehicular traffic at least once per every two hours of active operations [3 times per normal 8 hour work day]; OR |
| | (4b) | Water all roads used for any vehicular traffic once daily and restrict vehicle speeds to 15 miles per hour; OR |
| | (4c) | Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface. |
| Open storage piles | (5a) | Apply chemical stabilizers; OR |
| | (5b) | Apply water to at least 80 percent of the surface area of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; OR |
| | (5c) | Install temporary coverings; OR |
| | (5d) | Install a three-sided enclosure with walls with no more than 50 percent porosity which extend, at a minimum, to the top of the pile. This option may only be used at aggregate-related plants or at cement manufacturing facilities. |
| All Categories | (6a) | Any other control measures approved by the Executive Officer and the U.S. EPA as |
| | | equivalent to the methods specified in Table 2 may be used. |

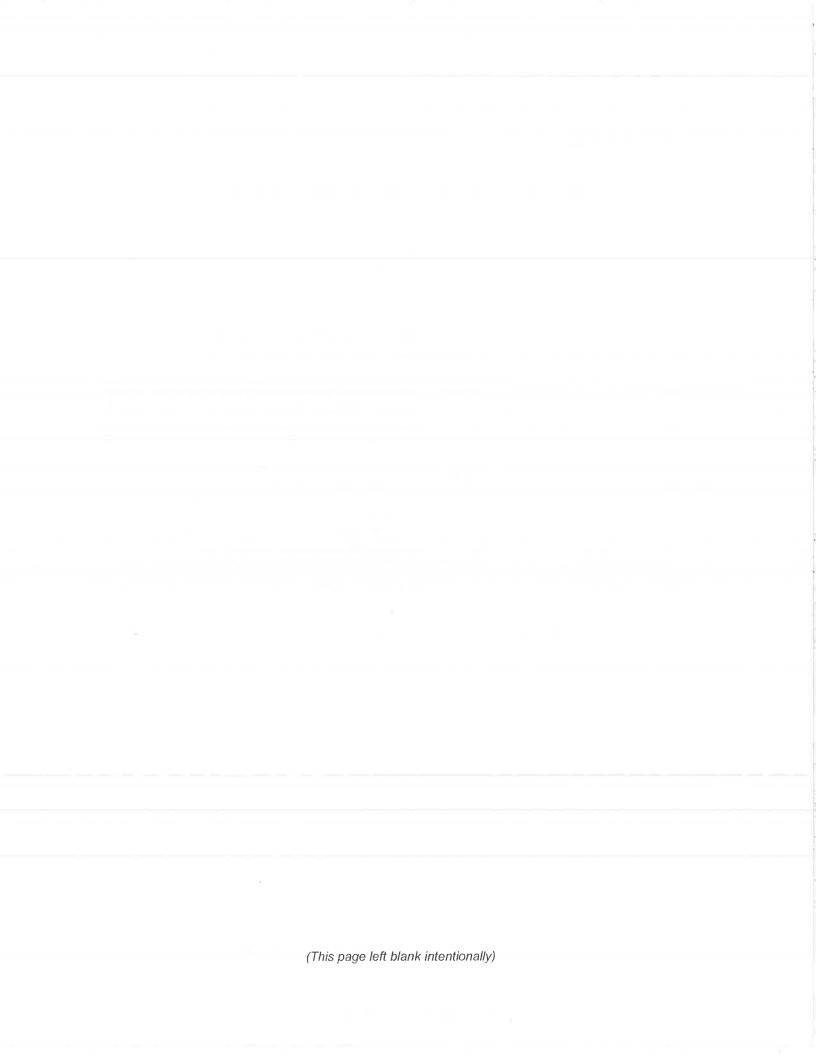
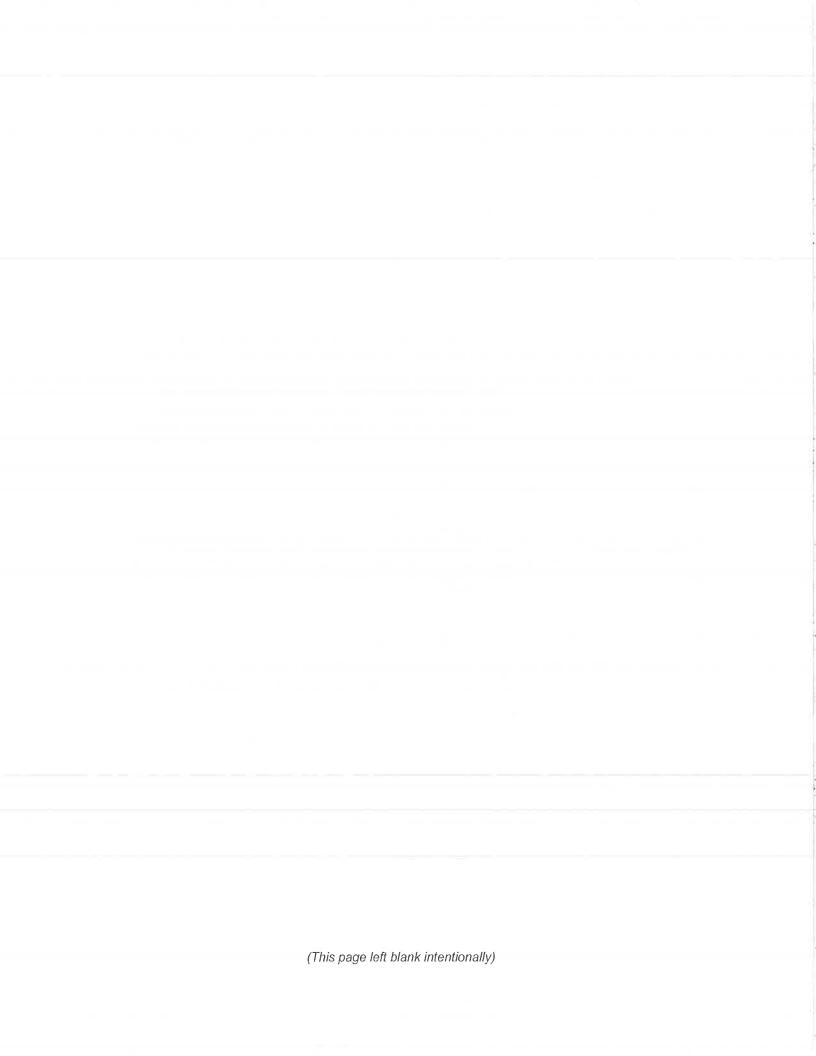


TABLE 3
CONTINGENCY CONTROL MEASURES FOR LARGE OPERATIONS

| | ONTROL MEASURES FOR LARGE OPERATIONS |
|-------------------------|---|
| FUGITIVE DUST | |
| SOURCE | CONTROL MEASURES |
| CATEGORY | |
| Earth-moving | (1A) Cease all active operations; OR |
| | (2A) Apply water to soil not more than 15 minutes prior to moving such soil. |
| Disturbed surface areas | (0B) On the last day of active operations prior to a weekend, holiday, or any other period when active operations will not occur for not more than four consecutive days: apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; OR |
| | (1B) Apply chemical stabilizers prior to wind event; OR (2B) Apply water to all unstabilized disturbed areas 3 times per day. If there is any evidence of wind driven fugitive dust, watering frequency is increased to a minimum of four times per day; OR |
| | (3B) Take the actions specified in Table 2, Item (3c); OR (4B) Utilize any combination of control actions (1B), (2B), and (3B) such that, in total, these actions apply to all disturbed surface areas. |
| Unpaved roads | (1C) Apply chemical stabilizers prior to wind event; OR (2C) Apply water twice per hour during active operation; OR |
| | (3C) Stop all vehicular traffic. |
| Open storage piles | (1D) Apply water twice per hour; OR |
| | (2D) Install temporary coverings. |
| Paved road track-out | (1E) Cover all haul vehicles; OR |
| | (2E) Comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for both public and private roads. |
| All Categories | (1F) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 3 may be used. |

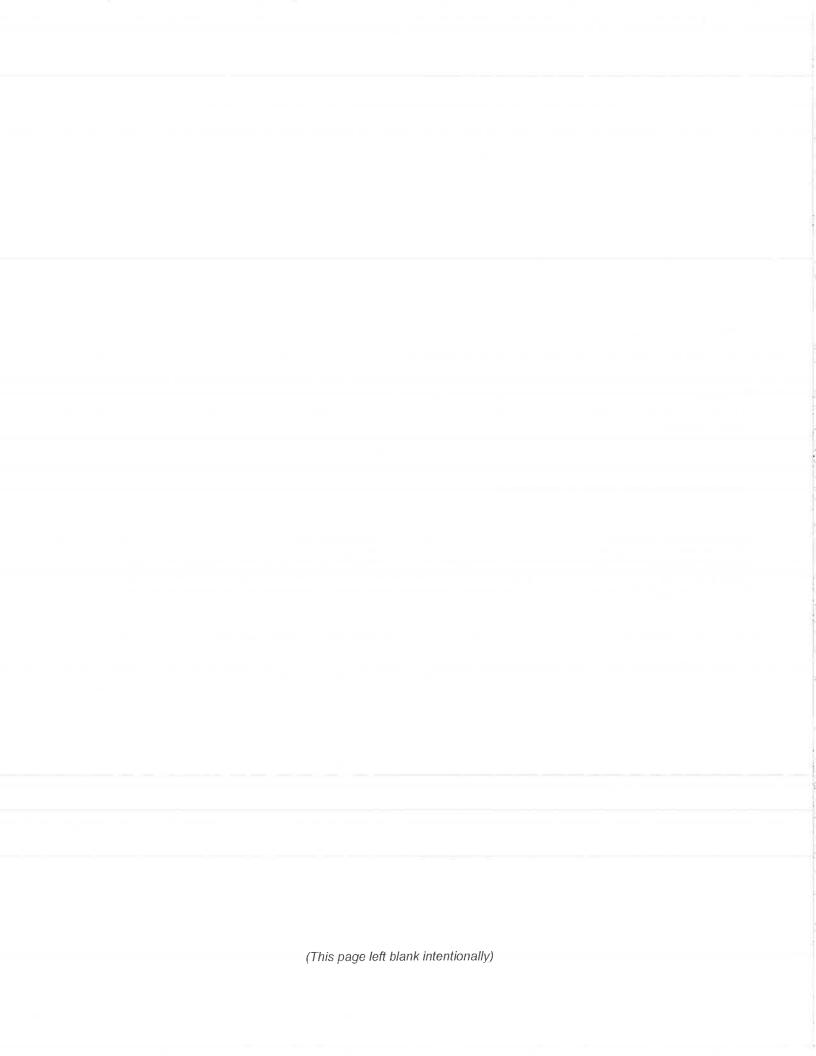


RULE 403 - LARGE OPERATION NOTIFICATION

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT 21865 Copley Drive, Diamond Bar, CA 91765

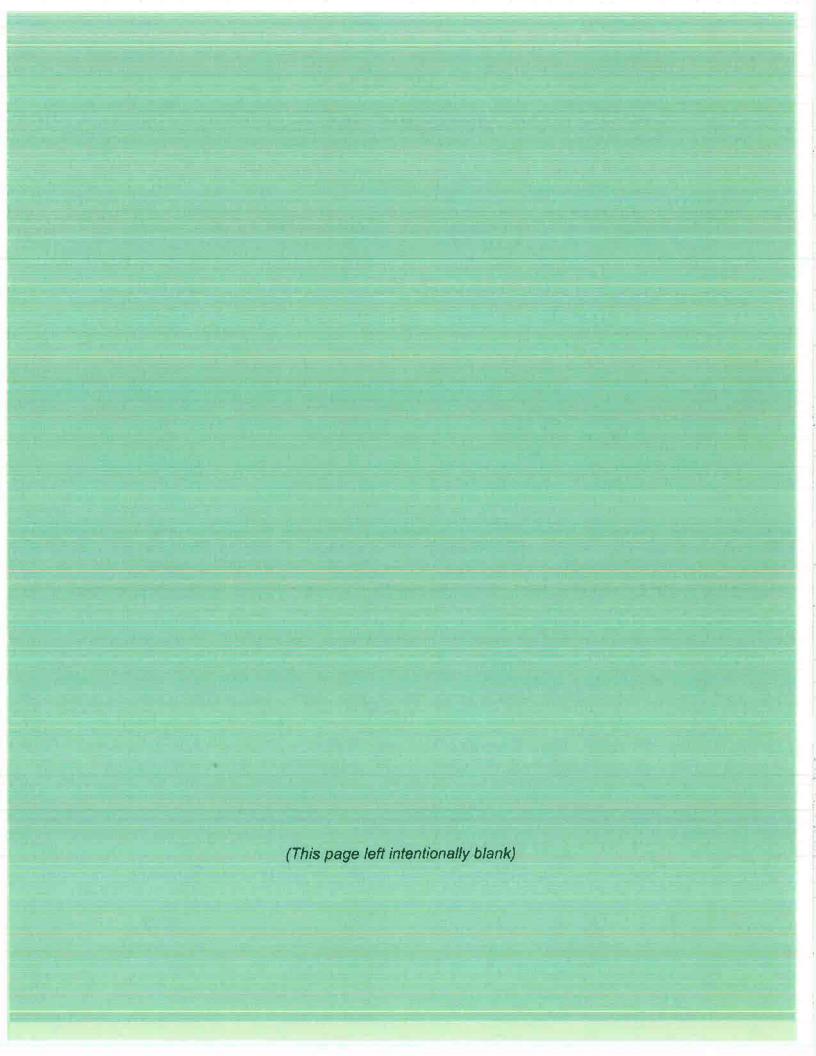
| Is this plan being submitted to comply with Notice Number Please attach cop | the requirement y | s of a Notice to Cor | nply or Notice | of Violation? YES/NO |
|--|----------------------|----------------------|------------------|----------------------------|
| Qualifying Criteria:1. Does this operation contain more than Please indicate the size of the project | 50 acres of distu | rbed surface area as | of the date of s | ubmittal? YES/NO |
| 2. Will the earth moving operation exceed the most recent 365-day period from the | | | t volume of 5,00 | 00 cubic yards three times |
| Please Print or Type | | | | |
| Contractor/ Consultant/ Owner: | | | | |
| (Circle one of the above) | | | Phone Number | |
| Address: | City: | State: | Zip: | |
| Project Name: | | | 14. | |
| Nature of Business: □Construction/Demo | lition □Sand & | Gravel/Mining O | perations □C | ement Manufacturing |
| Name of Responsible Person of Organizati | on: | | | |
| Title: | | Phone N | umber: | |
| Environmental Observer: Date Attended Dust Class: | | Phone N ID Num | | |
| Project Address: (Attach location map) | City: | | State: | Zip: |
| Name of Property Owner: (If different than above) | | | | |
| Anticipated Start Date: | | Anticipa | ted Completion | Date: |
| Telephone Number: | | | | |
| Emergency Phone Number: | | | | |
| In accordance with subparagraph (f) (1) (a will be implemented on-site for each appli pereby certify that all information contains | icable fugitive o | lust source type w | | |
| SIGNATURE OF RESPONSIBLE MEMBER OF ORGANIZATION | | TITLE | | DATE |
| | | | | |

Form403N_2004



APPENDIX "B"

Landfill Site Rules



BADLANDS AND LAMB CANYON LANDFILL FACILITIES

OPEN: 6:00 am to 4:30 pm Monday through Saturday **NEXT HOLIDAY CLOSURE:**

For services/complaints contact the Riverside County Waste Management Department at (951) 486-3200 or via website www.rivcowm.org

LANDFILL RULES

- Obey County personnel and signs. It is for your safety.
- Anyone under 16 years of age and pets must remain in vehicle.
- High visibility safety vest must be worn at all times.
- Stay within 5 feet of your vehicle while unloading and 15 feet away from heavy equipment.
 - No alcohol, drugs, weapons, smoking, salvaging, or loitering.
- Commercial refuse vehicles must have an operational back-up alarm.

STAY ALERT – STAY ALIVE

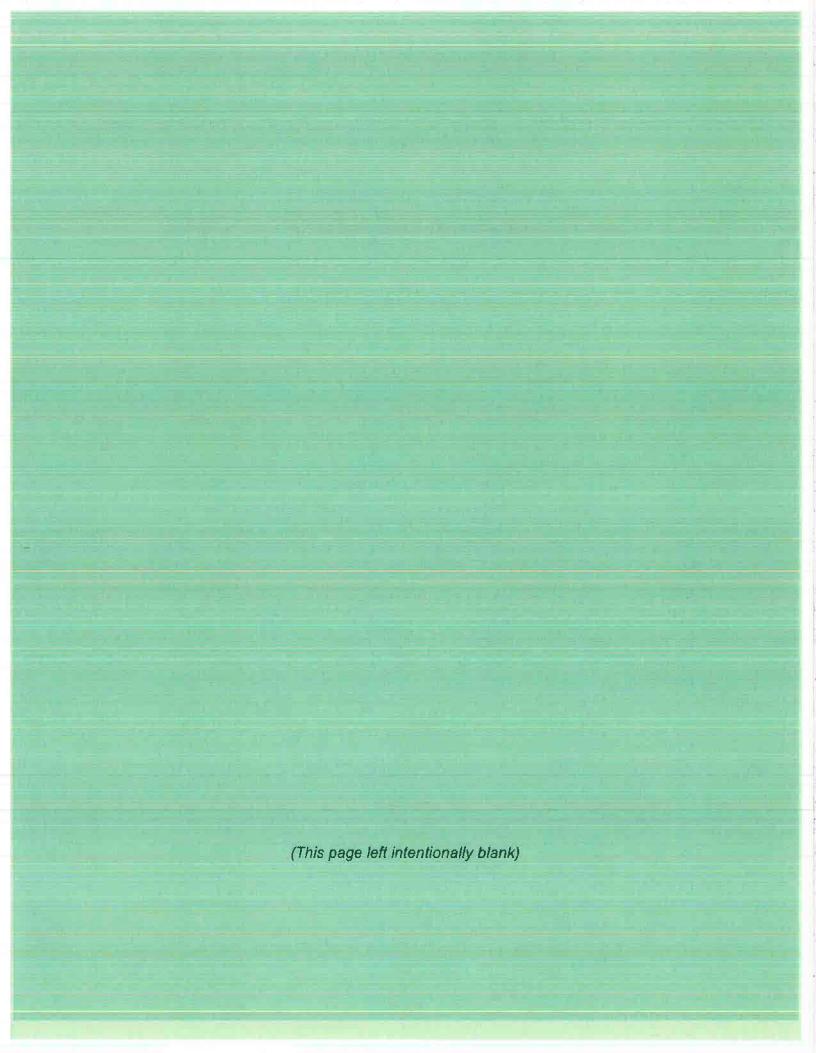
County is not responsible for damage to customer's vehicle and/or equipment due to customer's negligence or failure to follow site rules and reserves the right to deny access to anyone violating said rules or creating safety hazard. Landfills are dangerous construction zones. Disposal is at customer's own risk.

ALL LOADS SUBJECT TO INSPECTION

þe Disposal of hazardous, toxic, flammable, corrosive, explosive and radioactive waste/materials may prosecuted under Health and Safety Code 25189.5 and Penal Code 374.8

APPENDIX "C"

Project Drawings (Reduced Size – 11x17)



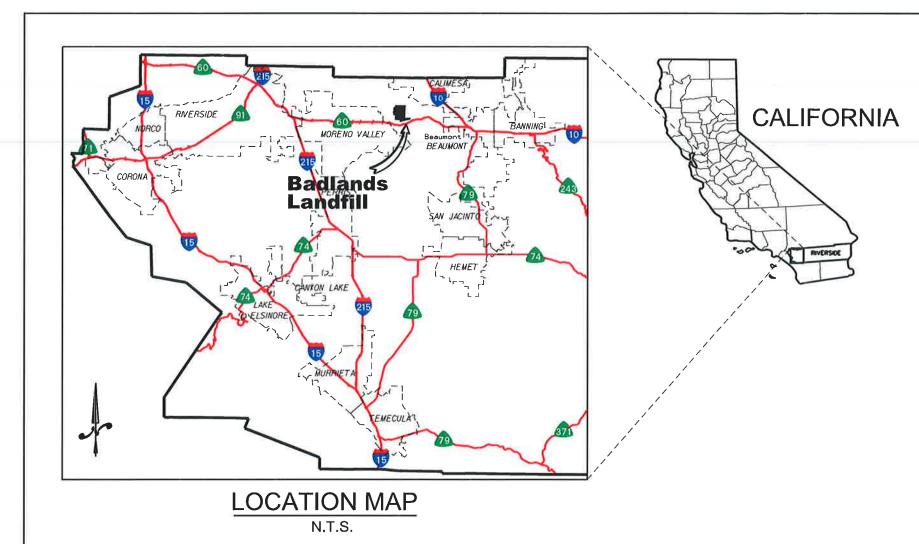
BADLANDS SANITARY LANDFILL

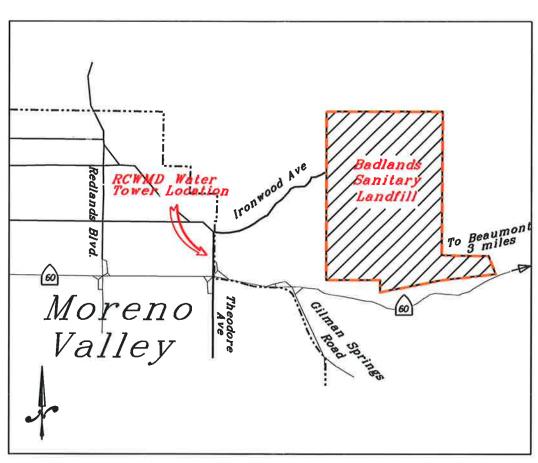
CONSTRUCTION DRAWINGS FOR THE EXCAVATION, HAULING, AND STOCKPILING OF DAILY COVER MATERIAL

MAY 2016

PREPARED BY
DEPARTMENT OF WASTE RESOURCES
HANS KERNKAMP, GENERAL MANAGER/CHIEF ENGINEER
14310 FREDERICK STREET
MORENO VALLEY, CALIFORNIA 92553
TEL. (951) 486-3200 FAX (951) 486-3205







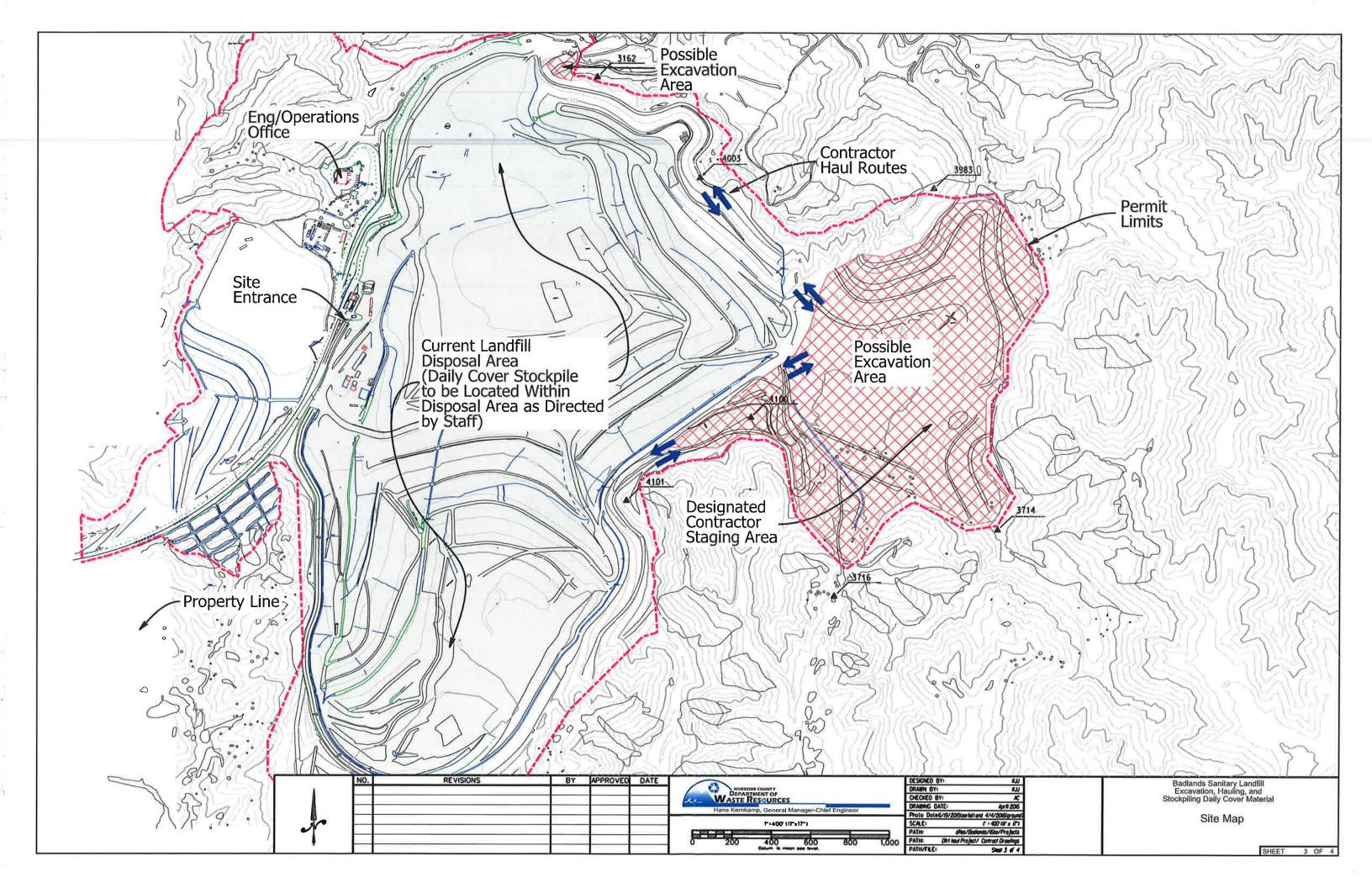
VICINITY MAP

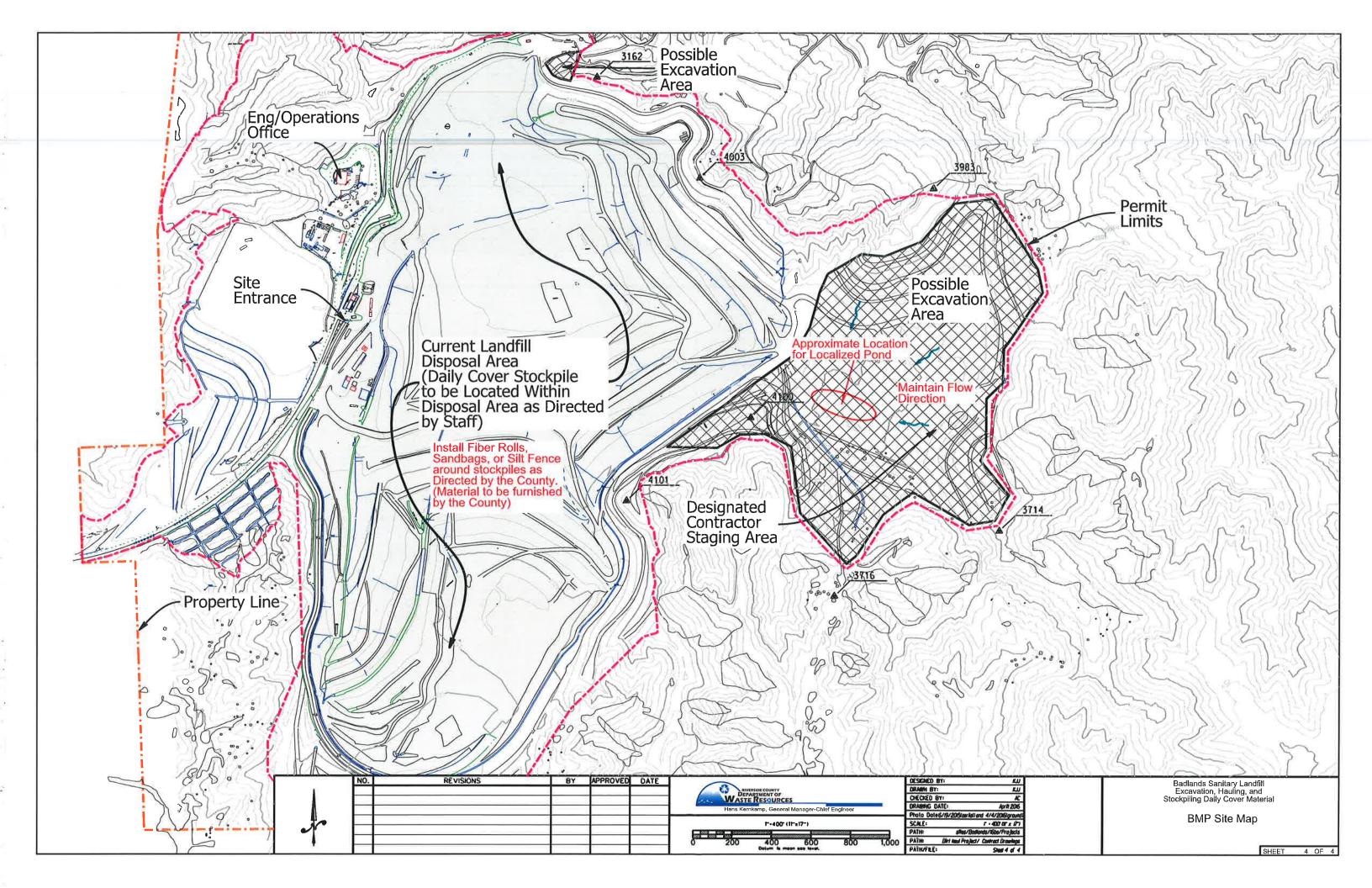
| REV | VISIONS | BY | AP | PROVED | DATE | | DESIGNED BY: | |
|-----|---------|----|--------|---------------|------|--|---------------------|------------------------------|
| | | | \neg | | | RIVERSIDE COUNTY | DRAWN BY: | KJ. |
| | | - | - | - | | WASTE RESOURCES | CHECKED BY: | ACC. |
| | | | _ | | | Activities and the control of the co | DRAWING DATE: | April 206 |
| | | | _ | \rightarrow | | Hans Kernkamp, General Manager-Chief Engineer | TOPO DATE: | |
| | | | | | | NTS | SCALE: | MTS |
| | | | | | | | PATH: 58 | es/Bodlands/IGes/Projects |
| | | | | | | | PATH: Old Houl Pro) | lect/2016 Contract Drawlings |
| | | | | | | | PATH/FILE: | Steel 2 d |

Badlands Sanitary Landfill Excavation, Hauling, and Stockpiling Daily Cover Material

Location and Vicinity Maps

SHEET 2 OF 4





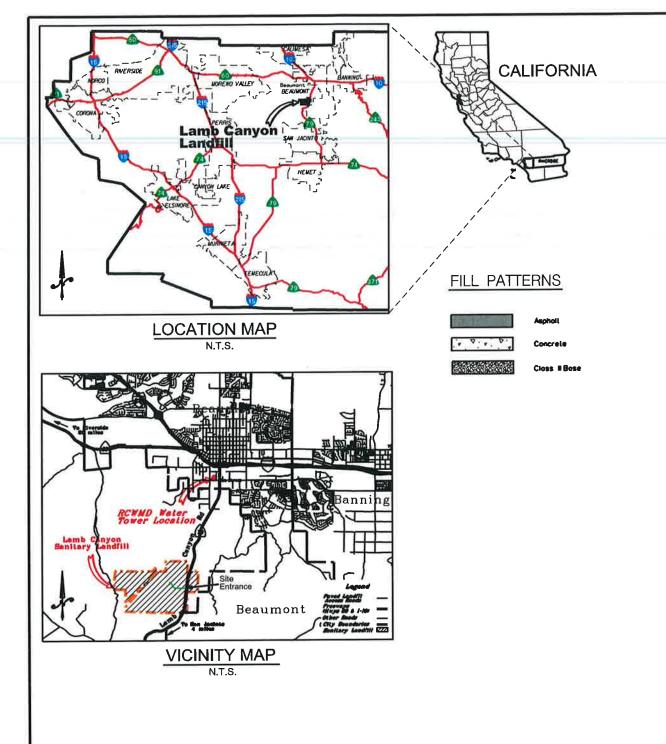
LAMB CANYON SANITARY LANDFILL

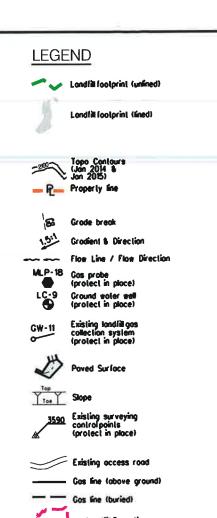
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MORENO VALLEY, CALIFORNIA 92553
TEL. (951) 486-3200 FAX (951) 486-3205







ABBREVIATIONS

F or CL Center Line

End Curve

Edge of Pov

Property Line

Typical Vertical

Reinforced Concrete
Registered Civil Engineer
Riverside County Flood Control

Aggregate Base

Asphall Concrete

| 011557 | | OF DRAWINGS |
|--------|---|---------------------------------|
| SHEET | FILE NAME | 1116 |
| 1 | LC Slockpiling Daily Cover S1 Title.dgn | Title Sheet |
| 2 | LC Stockpilling Dally Cover S2 Vicinity.dgn | Index, Legend, & Vicinity Map |
| 3 | LC Stockpiling Dally Cover S3 Map.dgn | Site Map and Project Work Areas |
| 4 | LC Stockpilling Daily Cover S4 BMP.dgn | BMP Sile Map |
| | | |
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| | REVISIONS | I BY | IAPPROVED DATE | | DESIGNED BY: |
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| <i>-</i> | ILE VISIONS | | TTT INCTED | ENGRIPPING COUNTY | DRAWN BY: EC |
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| | | | | WASTE RESOURCES | DRAWNG DATE: June 205 |
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Lamb Canyon Sanitary Landfill Excavation, Hauling, and Stockpiling Daily Cover Material

Index, Legend, and Vicinity Map

SCALE

NTS

NTS 1"=400'

1"=400"

