Draft Mitigated Negative Declaration – Initial Study No. 710 for the Proposed Valencia Greenery Composting Operation at the Olinda Alpha Landfill

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INITIAL ENVIRONMENTAL STUDY

ENVIRONMENTAL CHECKLIST FORM AND ENVIRONMENTAL DETERMINATION
This environmental document is an Initial Study. The Initial Study was prepared for the proposed project by the Lead Agency as a means to identify any significant environmental effects and to determine whether an Environmental Impact Report or Negative Declaration should be prepared.

The County of Orange, OC Waste & Recycling (OCWR) department is the Lead Agency for the project and is also the project proponent that will be implementing the project. The contact person for this project is Aimee Halligan, OCWR CEQA Manager, phone: (714) 834-4107, email: aimee.halligan@ocwr.ocgov.com.

OCWR Project Number: 710

1.1 PROJECT TITLE

Valencia Greenery at the Olinda Alpha Landfill

1.2 PURPOSE

OCWR proposes to implement a organic waste composting operation at the Olinda Alpha Landfill called the Valencia Greenery. The Valencia Greenery will receive a maximum of 230 tons per day (TPD) of compostable organic waste materials. The proposed project will allow OCWR to assist Orange County cities and the County unincorporated area in meeting State recycling mandates for the recycling of organic waste materials.

1.3 PROJECT LOCATION AND LAND USE DESIGNATIONS

The 565-acre Olinda Alpha Landfill site is located in Brea, approximately 0.5 miles northeast of the intersection of Valencia Avenue and Lambert Road, as shown on **Figure 1**. The street address for the Olinda Alpha Landfill is 1942 Valencia Avenue, Brea, CA.

General Plan Land Use Designation: 4LS (Public Facilities; Landfill Site)

Zoning: Exempt

1.4 EXISTING CONDITIONS AND ENVIRONMENTAL SETTING

The Olinda Alpha Landfill is a Class III landfill that only accepts municipal solid waste for disposal; no hazardous or liquid waste can be accepted. The landfill is currently authorized to receive a maximum daily tonnage of up to 8,000 TPD, and 10,000 TPD on up to 36 days per year. The landfill also receives exempt wastes for beneficial reuse at the landfill which currently include asphalt and soil, and prior to 2020, also included processed green material (PGM). Prior to 2020, when new regulations on green waste management came into effect (as further described below), the landfill accepted approximately 746 TPD of PGM (based on 2019 data). The landfill is

currently estimated to reach permitted capacity and cease accepting solid waste for disposal in 2036.

Existing on-site facilities include an entrance and access road, fee stations, administration building, crew quarters, equipment and maintenance yard, storm water collection system, leachate and groundwater collection systems, sumps and storage tanks, landfill gas renewable energy facility, landfill gas collection and destruction equipment including a flare station and parking lots.

1.5 PROJECT NEED

SB 1383 requires California to divert and recycle at least 50 percent of all organic waste materials disposed at solid waste landfills by January 1, 2020 and at least 75 percent by January 1, 2025. In addition, AB 1594 no longer allows jurisdictions to claim recycling credits for their green waste that is ground and turned into PGM and then brought to a solid waste landfill for use as alternative daily cover. Beginning on January 1, 2020, PGM used as alternative daily cover at solid waste landfills must be counted as disposal and is thus part of the landfill's daily disposal tonnage.

Prior to 2020, OCWR accepted a total of approximately 2,024 TPD of PGM from the 34 incorporated cities in Orange County and the County unincorporated area for beneficial reuse at its three active landfills, which are the Olinda Alpha, Frank R. Bowerman (FRB) and Prima Deshecha Landfills. Most of the PGM material coming to the landfills is from residential pick-up. Prior to 2020, OCWR used this PGM for alternative daily cover, geosynthetic tarp framing (i.e., weight to hold down the geosynthetic tarps that cover refuse in the evenings) and for erosion control at all three landfills. OCWR previously accepted the PGM at no charge and the contributing jurisdictions received AB 939 recycling credits for OCWR's beneficial reuse of the PGM at the landfills. Beginning on January 1, 2020, per the requirements of AB 1594, OCWR's use of PGM as alternative daily cover and for geosynthetic tarp framing is now considered disposal and is charged accordingly at the gate rate or negotiated contract rates.

Composting of PGM and other organic materials at OCWR landfills will count towards meeting the state mandated recycling goals pursuant to SB 1383 and AB 1594. The implementation of the Valencia Greenery at the Olinda Alpha Landfill will allow OCWR to compost a maximum of 230 TPD of PGM at the Olinda Alpha Landfill, thereby assisting the state, Orange County cities, and the County unincorporated area in meeting SB 1383 and AB 1594 requirements for organic waste recycling.

1.6 PROJECT DESCRIPTION

Currently, OCWR has implemented an open windrow pilot project at the Olinda Alpha Landfill and is in the approval process with the Local Enforcement Agency (LEA, local entity that inspects solid waste facilities and is designated to act on behalf of the California Department of Resources Recycling and Recovery (CalRecycle)) to begin a Covered Aerated Static Pile (CASP) pilot project in the near future. Following these pilot projects, the full-scale Valencia Greenery composting operation at the Olinda Alpha Landfill will be constructed and implemented. The Valencia Greenery will be constructed in Phases. The initial stage will include the construction of the components of the facility including the construction of the composting

deck, the lined stormwater pond, the construction of the fire water supply system, and the expansion of the existing operations water tanks to provide water for the composting operation. The second Phase of construction will include the equipment, piping and solar panels that comprise the CASP system, which is described below. It is estimated that the upon completion of construction, Phase I will operate for approximately 6 months before starting construction on Phase II. For the proposed Valencia Greenery, OCWR is proposing to utilize two methods of composting: 1) open windrow, during the operation of Phase 1 of the facility, and 2) covered aerated static pile (CASP) composting, during the operation of Phase 2 of the facility.

Demonstration Open Windrow Pilot Composting Operation at the Olinda Alpha Landfill

Beginning in March 2018, OCWR implemented demonstration pilot PGM composting operations on existing landfill areas at the Olinda Alpha, FRB and Prima Deshecha Landfills. These pilot operations were reviewed and approved separately from the full-scale composting operations. The purpose of the demonstration pilot composting operations, was for OCWR to (1) gain a better understanding of composting design, permitting, engineering and operations; (2) determine the costs associated with composting design, permitting, engineering and operations; (3) determine the potential environmental issues that could occur at a full-scale composting operation, by studying and observing on a microscale; (4) learn how to make high quality finished compost that will meet California Code of Regulations (CCR) Title 14 requirements; and (5) analyze the potential uses for finished compost.

The open windrow composting pilot facility at the Olinda Alpha Landfill is located on an approximately one-acre area in the equipment maintenance area. Material feedstocks (compostable materials) composted include source separated residential curbside green waste, commercial green waste, processed green waste and wood waste. The pilot project does not have more than 60 tons (i.e., 92 cubic yards) of material on-site at any one time or process more than 250 tons of material per year. OCWR creates one windrow that is no more than 92 cubic yards of material on-site with the approximate dimensions of 82 feet long, 10 feet wide and 6 feet high. The feedstock is placed on top of a crushed asphalt surface for all weather access and surrounded by an earthen berm to prevent storm water run-on and run-off. The windrow is periodically turned with a loader, skid steer, or similar equipment, up to three times per week, to quicken the decomposition of the feedstock into compost and to maintain temperatures greater than 131 degrees Fahrenheit during the pathogen reduction process. The heavy equipment is already in use at the landfill on a routine basis and is made available for the pilot project. The initial compost processing phase lasts at least 22 days or until the pile has completed the pathogen reduction process. Afterwards, the compost material is cured for a period that lasts between 30-60 days for further stabilization of the compost product. Altogether, the composting process takes up to 100 days. The active composting process requires the use of water to hydrate the windrow keeping the feedstock moist without overwatering. Water for the pilot project is provided by a water truck that is already in use at the landfill operation.

Demonstration CASP Pilot Composting Operation at the Olinda Alpha Landfill

As of the writing of this document, the proposed CASP pilot project is in the LEA approval process and should be in operation in 2022. The demonstration pilot CASP composting operation

at the Olinda Alpha Landfill will be located on an approximate 1-acre area in the existing equipment maintenance area. This area of the landfill is not currently being used for active landfill disposal. Material feedstocks to be used for composting include source separated residential curbside green waste, commercial green waste, processed green waste and wood waste. These materials are already being delivered to the landfill. The demonstration pilot composting operation will not have more than 2,000 tons (i.e., 5,000 cubic yards) of material on-site at any one time or process more than 250 tons of material per year. The feedstock is placed on top of a crushed asphalt surface for all weather access and surrounded by an earthen berm to prevent storm water run-on and run-off. Any green waste received that is noticeably highly odorous and determined to have the potential to contribute to off-site odors, or contaminated with residual solid waste, is diverted and disposed at the active area of the landfill. The demonstration pilot composting operation will continue at the landfill as a research project, so that OCWR can continue to learn about composting, until such time as the Valencia Greenery is fully permitted and operational.

Proposed Project – Valencia Greenery

Prior to 2020, the Olinda Alpha Landfill accepted approximately 746 TPD of PGM for beneficial reuse at the landfill, originating from incorporated cities in Orange County and the County unincorporated area. This material would be ground and screened at existing materials recovery facilities and composting operations, and then loaded into transfer trucks that carried approximately 20-ton payloads for delivery to the Olinda Alpha Landfill (i.e., approximately 38 two-way truck trips per day). Since 2020, any PGM or other green waste material coming to the landfill is counted as disposal, pursuant to AB 1594. Green waste material received is predominately from residential sources within Orange County. For the proposed Valencia Greenery, it is proposed that a maximum of 230 TPD of material be composted per day.

The proposed Valencia Greenery will have the ability to accept any green and agricultural material that contains no greater than 1.0 percent of physical contaminants by dry weight and meets maximum contamination requirements. Green material includes but is not limited to tree and yard trimmings, untreated wood wastes, natural fiber product, wood waste from silviculture and manufacturing, and construction and demolition wood waste. The facility will also have the ability to accept agricultural material that is strictly of plant origin, which result from the production and processing of farm, ranch, agricultural, horticultural, aquacultural, silvicultural, floricultural, or vermicultural products, including orchard and vineyard prunings and crop residues. Initially, arriving materials will already have been pre-processed (chipped and ground and contaminants removed) and will be consolidated at the material receiving area prior to deployment into windrows. OCWR plans to ultimately include chipping and grinding as well as a conveyor in the operation to allow for recovery of other types of uncontaminated compostable organic materials from the landfill (i.e. wood waste). Eventually food waste may also be included into the feedstock during Phase 2 operations. The timing of incorporating the food waste is not known at this time, but the percentage of food waste to be included in the feedstock could potentially be as much as 50%, although a 20% mixture is more likely. Under existing regulations, green waste composting operations can receive up to 20 percent manure by volume. Therefore, the Valencia Greenery will have the ability to accept up to 46 TPD of horse manure for composting, although it is anticipated that the operation will receive much lower daily

tonnages. A maximum of 230 TPD of the 746 TPD of PGM that was already being received at the landfill will be transferred over to the Valencia Greenery operation. In other words, a portion of the PGM that is already being received each day would simply be transferred to the Valencia Greenery.

The Valencia Greenery composting operation will be developed in an approximate 9.0-acre pad located at the northeastern portion of the landfill as shown on **Figure 2**, in an area that is not currently being used for active landfilling. The total area of the facility, including the compost pad and all appurtenant structures (i.e. solar area, lined stormwater pond, perimeter road) will be approximately 15.3 acres. A crushed asphalt base will be placed over the entire area that will be used for PGM storage and for composting operations. The facility will be developed in two phases: Phase I – Open Windrow Composting; and Phase II – CASP Composting.

Phase I – Open Windrow Composting

Phase I of the Valencia Greenery will consist of open windrow composting. With open windrow composting, the compostable organic waste material is placed in long rows called windrows. The windrows are turned (using a compost windrow turner or front-end loader) to improve porosity and oxygen content, mix in or remove moisture, and redistribute cooler and hotter portions of the pile. Open windrow composting is a commonly used composting operation method. Composting process control parameters include the initial ratios of carbon and nitrogen rich materials, the amount of bulking agent added to ensure air porosity, the pile size, moisture content and turning frequency. The temperature of the windrows must be measured and logged constantly to determine the optimum time to turn them for quicker compost production.

As temperatures in the compost pile increase, thermophiles (microorganisms that function at temperatures above 105 degrees Fahrenheit) take over. The temperature in the compost pile typically increases rapidly to 122-150 degrees Fahrenheit within 24 – 72 hours of pile formation, which is maintained for several weeks. This is called the active phase of composting. In the active thermophilic phase, temperatures above 131 degrees Fahrenheit are high enough to kill pathogens and weed seeds and to break down phytotoxic compounds (organic compounds toxic to plants). Compost is considered finished when the raw feedstocks (compostable materials such as PGM and other organic wastes) are no longer actively decomposing and are biologically and chemically stable. Finished compost is dark brown or black (almost like bagged potting soil), crumbly textured, and has a rich earthy smell. Finished compost must meet CCR Title 14 requirements for both pathogens and metals prior to land application.

The Valencia Greenery will accept a maximum of 94 TPD of PGM and feedstock during the Phase I operation of the site (since this is during the initial operation the capacity will start off with a lower number and work up to 94 TPD, the maximum capacity of Phase I), with a maximum on-site storage of materials of 26,650 cubic yards (i.e., feedstock, compost – active, curing and final product) on-site at any given time.

The Valencia Greenery will consist of a material recycling area (tipping floor, which will eventually include chipping/grinding and conveyor), composting area, curing area, screening area, finished product load out area, storm water pond, and parking. PGM and other compostable

organic waste materials will be brought to the Valencia Greenery and placed in a designated unloading area (that can accommodate a storage of approximately 1,000 cubic yards). Initially, since the PGM will have already been ground and screened before being brought to Olinda Alpha Landfill, the material will be transported by front-end loaders as soon as possible and placed into new compost piles. When chipping/grinding and conveying operations begin, uncontaminated compostable organic waste materials may be recovered from the landfill and brought to the composting area for processing. Following processing, this material will be transported by front-end loaders as soon as possible and placed into new compost piles. The layout of the compost piles is shown on **Figure 3A**. Any highly contaminated or highly odorous loads will be immediately transported to the active landfill area and disposed. In the event of unusually high quantities of feedstock, the proposed staging area will have adequate area to stockpile the excess materials until they are able to be processed. Incoming pre-processed materials will typically be stockpiled on-site for a period of up to 48 hours, or as allowed by the LEA.

The feedstock materials will be formed into elongated piles/open windrows for composting with the addition of moisture as needed by the on-site water truck. The active compost pile dimensions will be no greater than 12 feet in height, 20 feet wide and 100 feet in length. The active compost process will take up to 120 days to complete. Since the proposed project includes composting operations, the proposed project is subject to the requirements of South Coast Air Quality Management District (SCAQMD) Rule 1133.3, specifically as follows: Under Subparagraph (d)(2)(A), the Lead Agency should cover each active phase compost pile with a six-inch layer of (screened or unscreened) finished compost within 24 hours of initial pile formation and shall not turn the pile for the first seven days. Under Subparagraph (d)(2)(B), the Lead Agency should water each active phase compost pile for the first 15 days after the initial pile formation, within six hours before turning that pile, shall be wet at a depth of at least three inches. In Clause (i) under Subparagraph (d)(2)(B), being wet is determined by a squeeze ball test. Under Subparagraph (d)(2)(B), if the pile needs to be turned within the first seven days for managing temperature or pathogen reduction pursuant to CCR Title 14 Division 7, Chapter 3.1, Section 17868.3, the operator does not need to re-apply the finished compost cover and shall apply water for the first fifteen days of the active phase. During this period, the temperature of each compost pile will be taken every day. Active compost shall be maintained under aerobic conditions at a temperature of 55 degrees Celsius (131 degrees Fahrenheit) or higher for the Process to Further Reduce Pathogens (PFRP) period of 15-days or longer as specified in 14 CCR 17868.3(b)(3) utilizing wheeled loaders or a windrow turner. During the period when the compost is maintained at 55 degrees Celsius or higher, there shall be a minimum of five turnings of the windrow. Feedstock materials will remain in stage one – active composting windrows - for approximately 12 weeks on average, but may vary depending on ambient temperature, rainfall, feedstock, consistency and other factors. Once the initial composting is completed, the material will be moved into the stage two – curing piles, for approximately 8 weeks. Altogether, the composting process will take approximately 20 weeks, or five months.

After the active compost process has been completed, the compost will be placed in curing piles for further stabilization of the compost product. The layout of the curing piles is shown on **Figure 3A**. The curing process will take up to 48 days to complete. After the curing process is complete, the finished compost will be screened to remove oversized un-composted material and

residual solid waste. Altogether, the composting process may take up to 20 weeks, or 5 months. Finished compost will be placed in a temporary storage area that can accommodate up to 1,400 cubic yards of finished compost. The finished compost will be delivered to end users located within and outside of Orange County. At 94 TPD and using 20-ton per load end dump trucks, the Valencia Greenery will generate approximately 5 two-way new truck trips per day, with these trucks taking finished compost to end markets. There will not be any additional new two-way truck trips associated with increasing the current amount of PGM accepted at the landfill since the 94 TPD is within the current 746 TPD that are accepted at the landfill. Phase I is a temporary condition and anticipated to last for the first 5-6 months of the Valencia Greenery operation.

Heavy equipment will include two front-end loaders, a mobile screen (optional), a windrow turner, cover turner (for Phase II CASP), dump truck, a water truck, a chipper/grinder, and a conveyor. The Valencia Greenery operation will require a minimum of three employees to operate all of the heavy equipment described above for building, turning, watering and monitoring the compost piles, and to perform other miscellaneous duties. Five full-time employees will be needed to provide sufficient staffing for days off, vacations, etc. For open-windrow composting, the loaders will be used to turn each active compost pile as needed. Composting operations require significant volumes of water to facilitate the composting process, to regulate temperatures, and to prevent fires. Water will also be required for dust control. The landfill operation currently uses potable water from a City of Brea water line. Current water consumption is approximately 115,000 gallons per day. It is anticipated that during Phase I, the operation will use up to 54,000 gallons of potable water per day for moistening the compost piles and for dust control. Altogether, the Olinda Alpha Landfill operation and Phase I of the Valencia Greenery will use approximately 169,000 gallons of potable water per day. As the windrows are turned, water will be added to maintain optimum moisture content of 45-60% within the piles. The temperature of each compost pile will be taken and recorded each operating day. Valencia Greenery employees will continuously monitor the active compost piles for odor generation, vectors and potential for fire generation.

Phase II – CASP Composting

Phase II at the Valencia Greenery will entail composting via a CASP system. The Valencia Greenery will accept a maximum of 230 TPD of PGM and feedstock during the Phase II operation of the site with a maximum on-site storage of materials of 40,450 cubic yards (i.e., feedstock, compost – active, curing and final product) on-site at any given time.

As with Phase I, the Valencia Greenery will consist of a material recycling area (tipping floor, which will eventually include chipping/grinding and conveyor), composting area, curing area, screening area, finished product load out area, storm water pond, and parking. PGM and other compostable organic waste materials will be brought to the Valencia Greenery and placed in a designated unloading area (that can accommodate a storage of approximately 1,000 cubic yards). Initially, since the PGM will have already been ground and screened before being brought to Olinda Alpha Landfill, the material will be transported by front-end loaders as soon as possible and placed into new compost piles. When chipping/grinding and conveying operations begin, uncontaminated compostable organic waste materials may be recovered from the landfill and brought to the composting area for processing. Following processing, this material will be

transported by front-end loaders as soon as possible and placed into new compost piles. The layout of the compost piles is shown on **Figure 3B**. Any highly contaminated or highly odorous loads that are determined may contribute to off-site odors will be immediately transported to the active landfill area and disposed. In the event of unusually high quantities of feedstock, the proposed staging area will have adequate area to stockpile the excess materials until they are able to be processed. Incoming pre-processed materials will typically be stockpiled on-site for a period of up to 48 hours, or as allowed by the LEA.

The CASP composting process at the Valencia Greenery will consist of an automated system that blows air (through a system of pipes) into the compost, which is covered with a synthetic semi-permeable cover. The system allows expedited processing time and significantly reduces water use as compared to open windrow composting. The feedstock materials will be formed into elongated piles over the aeration system for composting. Water will be added as needed by the on-site water truck prior to covering the piles. During the active composting phase, the compost remains covered and is then uncovered during the curing phase. Temperature is monitored through automated sensors. The composting occurs in the aerated piles for a minimum of 8 weeks; the first 4 weeks (21-28 days) are the active composting phase, after which the active curing phase occurs for a minimum of 4 weeks. Once an active phase is complete the piping is removed from the pile and the compost is moved to the curing area of the greenery for the next phase (i.e., moved from an active CASP phase pile to a passive curing phase pile, see **Figure 3B**). Once the compost completes a minimum of 21 to 28 days in the CASP active phase and meets the PFRP requirements, it will require a minimum of 28 days of passive curing (no aeration) in the curing area before it can be stored or transported off-site. The dimensions of the covered aerated static piles (i.e., height, length, and width) will be 12 feet by 90 feet by 22 feet, with an additional 10 feet of the pile length reserved for the push wall and equipment. Since there is no physical turning, CASP composting requires careful monitoring to ensure that the outside of the pile heats up as much as the core. To reduce odors, a semi permeable membrane cover is applied over the top of the pile. The membrane cover helps maintain the appropriate temperatures throughout the pile during the compost process.

The same heavy equipment used for open windrow composting would also be used to construct the compost piles for CASP composting. The CASP composting system will use a mechanical cover winder to apply and remove the covers from the compost piles. The composting occurs in the aerated piles for a minimum of 8 weeks; the first 4 weeks (21-28 days) are the active composting phase, after which the curing phase occurs for a minimum of 4 weeks. It is anticipated that the CASP composting will use less water when compared to open windrow composting, and therefore will not use more than 35,967 gallons per day, less than what is anticipated for open windrow composting described above.

There is no available power for the Valencia Greenery. Therefore, the compost facility will be designed as a standalone system with a solar field to supply electric power and operations water provided by existing water trucks that will fill at existing and newly added water tanks served by an existing City of Brea water line. The solar field will be primarily located in the defensible space of the composting area to generate the required electrical demands. Batteries will be utilized for electrical storage and backup for the facility. The solar field will provide 480 volt, three-phase power for provision to the vendor supplied battery powered mechanical winder, the

blowers, and the control panel. The solar field and batteries will be designed to accommodate operation at night and during periods of minimal sunlight. However, the system will not be designed for 100 percent full-time operation as the intended system will cycle on/off on a timer. Thus, extended periods of rain and/or cloud events and shortened days during winter may result in loss of electricity to operate and aerate the facility and may lead to material wasting. To accommodate for these instances, the composting facility's power system will include an electrical generator (200 kb) connection as back up to the system, to be utilized in emergency situations and extended periods where the solar power system is offline.

Both Phases

Use of Additives or Amendments:

The Valencia Greenery composting operation may use additives in one or both Phases. Additives are materials that are mixed with feedstock or active compost to improve composting conditions or the finished product. Additives may include but are not limited to materials such as diatomaceous earth, grape lees, fertilizers and urea. Additives do not include compost feedstock. All additives must be approved by the Regional Water Quality Control Board (RWQCB) and LEA prior to their application. The application for the use of each additive shall include the type of additive, any analyses requested or required by RWQCB or LEA, placement methods, and plans for the control of odors, vectors, and other nuisances. The Valencia Greenery composting operation may also use amendments. Amendments are materials added to stabilized or cured compost to provide attributes for certain compost products, such as product bulk, product nutrient value, product pH, and soils blend. Amendments may include but are not limited to lime, gypsum, worm castings, oyster shells, soil, rice hulls, cocoa bean hulls, and corn gluten. Amendments do not include septage, biosolids or compost feedstock. Amendments added to finished compost to be transported off-site will not require RWQCB or LEA approval.

Load Check Program:

A load checking program will be implemented for the composting operation. The load check program will include inspection of incoming loads of feedstock materials for municipal solid waste and other contamination, to ensure a reduction of physical contaminants to the greatest extent possible. In addition, testing of finished compost (i.e., after the curing process is complete) for pathogens, metals and physical contamination will be performed. Load checking, sampling and record keeping will be conducted in accordance with CCR Title 14 requirements, including changes that have been made thereto pursuant to SB 1383.

Vector Control Measures:

Vector control measures will be actively conducted during operations. The primary anticipated avian nuisance is seagulls. Types of vector nuisance include, but are not limited to: flies, rodents (i.e., mice, rats, squirrels, etc.) and other animals (i.e., coyotes, racoons, opossums, etc.). Fly propagation will be limited by the prompt deployment of feedstock into windrows and the periodic turning of the windrows. Other Best Management Practices (BMPs) to address insect, bird, rodent and other animal vectors will be implemented as-needed. In the event that birds

(primarily seagulls) become a nuisance, non-lethal noise-making devices will be utilized to startle and frighten birds away from the operations area. A qualified falconer may be contracted to use falconry as a means of bird control. In the event that flies, rodents or other animals are found to be a problem, the appropriate control and/or extermination measures would be implemented, as outlined in the Report of Composting Site Information (RCSI). The RCSI is the key engineering, permitting, construction and operations document that the LEA will rely upon when issuing the Solid Waste Facility Permit for the Valencia Greenery Composting Operation.

Odor Management:

OCWR will implement an odor impact minimization plan (OIMP) for the Valencia Greenery operation (**Appendix E**). Odor control measures may include but not be limited to, daily site assessment, using proper composting techniques, frequent monitoring, good housekeeping procedures (i.e. spill clean-up, eliminating ponding water), limiting new feedstock receipt if it is contributing to off-site odors until the source is corrected or mitigated, investigation of and response to complaints. Odor minimization measures are further detailed in the OIMP.

Compost Testing:

Testing of finished compost (i.e., after the curing process is complete) for pathogens and metals will be performed in accordance with CCR Title 14 requirements for green waste sampling, including changes that have been made thereto pursuant to SB 1383.

Fire Protection and Prevention:

The Valencia Greenery will be designed and operated to meet all Orange County Fire Authority (OCFA) requirements. This will include but not be limited to the spacing between windrows/CASP piles; the number, width and length of fire lanes; and the distance of the windrows/CASP piles and material storage areas to flammable vegetation. In addition, the Valencia Greenery will have fire hydrants (connected to and fed by the water-tanks on site) – the number and locations to be determined by OCFA. OCWR will provide a plot plan to OCFA for review and approval that contains the following information:

- Architectural plans of buildings and structures in conformance with California Building Code Chapter 7A. The plot plan shall show the location of permanent and portable structures, storage areas for raw and processed material with separation isles.

- A Fire Protection Plan showing all driveways and parking areas constructed of all-weather surface roads with a minimum of 20 feet in width.

- Location of all water sources (fire hydrants).

- Location of all other hazards (i.e., flammable, combustible or LPG tanks).

- Defensible space.

Methane generated by the underlying landfill area will not result in surface fires at the composting area through the effective maintenance and monitoring of the existing landfill gas collection system.

Water Supply and Usage:

There is no existing water source in the immediate area of the proposed composting facility location on the landfill. It is anticipated composting operations will require up to 54,000 gallons per day for Phase I and up to 35,967 gallons per day for Phase II operation which will be supplied by water truck. The existing elevated tanks that are used to provide water for landfill operations including dust control are filled by a City of Brea water line which has a point of connection located within the Olinda Alpha Landfill office parking lot. For the proposed project, three additional 20,000-gallon tanks will be added for a total storage capacity of 80,000 to 100,000 gallons for both landfill and composting operations. To meet the proposed project and landfill needs, these tanks continually refill as needed at a 200 GPM rate.

To provide the required fire flow to the composting operation, the minimum fire flow shall be no less than 500 gallons per minute (GPM) @ 20 Pounds per Square Inch Residual (PSIR) for a minimum of two (2) hour duration. This will be provided by 3 additional tanks with a total capacity in excess of 60,000 gallons. These new tanks will be located on the west side of Tower Road on the slope above the composting deck. The water flow and pressure will be provided by the elevation difference between the bottom of the tank and the composting deck.

Surface Preparation:

Either asphalt paving (for the perimeter road) or a layer of crushed asphalt concrete (the composting deck) will be placed over the entire landfill area where the composting will occur so that there will be no impacts to the underlying waste prism. The design of the proposed composting operation shall account for the underlying refuse and comply with any landfill-related regulations.

For the Valencia Greenery, the site will be graded such that the center of each compost pile will be located on a high point or BMPs will be instituted around the piles to divert flows away from the compost. The compost deck will be graded at 2 percent toward the access lanes which will be graded at 2 percent to the southeast, conveying flows to an approximate 8.9-acre feet lined composting operation pond, that will be constructed to capture storm water runoff and leachate from the composting operation. The location of the lined composting operations pond is shown on **Figure 4**. The composting operation lined pond dimensions were determined based on National Oceanic and Atmospheric Administration (NOAA) precipitation data based for a 25-year, 24-hour storm event (per Order WQ 2015-0121-DWQ, General Waste Discharge Requirements for Composting Operations) and the appropriate tributary boundary of the compost area. The compost operating area will require perimeter berms with a minimum 2-foot height, depending on the location, to convey flows from a 25-year, 24-hour storm to the lined pond. In addition, in accordance with standard engineering practices, the pond will be designed to accommodate an additional two feet of freeboard above the water level of the design storm event to accommodate waves and splashing from water flows. OCWR shall fully contain all surface

water runoff and leachate resulting from the composting operation. Collected surface water runoff and leachate will be collected on-site from the composting operation lined pond and reused with the composting operation as a supplement to the storage capacity of the on-site water tanks. Collected surface water runoff and leachate will not be discharged to the landfill storm water drainage system.

For the acceptance of compostable organic waste materials, the Valencia Greenery will have the same hours of operation as the Olinda Alpha Landfill – Monday through Saturday, 6 AM – 4 PM. No incoming compostable organic waste materials will be accepted on Sundays and the six major holidays (New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day). The Valencia Greenery will be open on Sundays for composting operations only, primarily to monitor the compost piles. The Valencia Greenery will not be open to the public. OCWR shall maintain accurate records of various categories of waste materials processed at the Valencia Greenery, including the residual waste that will be disposed at the Olinda Alpha Landfill, as required under CCR Title 14 Disposal Reporting System regulations.

1.7 ENVIRONMENTAL DETERMINATION AND PROJECT APPROVAL

This Initial Study has been prepared pursuant to Section 15063 of the California Environmental Quality Act (CEQA) Guidelines, as amended. Although this Initial Study was prepared with consultant support, all analyses, conclusions, findings and determinations made herein represent the position of the County of Orange, OC Waste & Recycling, acting as the Lead Agency for CEQA compliance. This project is subject to approval by the Orange County Board of Supervisors. Comments received on the Initial Study will be considered during the County's review of and decision on the project. This Draft Initial Study/Mitigated Negative Declaration will be circulated for a period of 30 days for public review, pursuant to Section 15073 of the CEQA Guidelines. The Initial Study Mailing List is included as **Appendix A**. The Mitigation Monitoring and Reporting Program (MMRP) for the proposed project is included as **Appendix B**.

Environmental Determination

Based on the analysis conducted in this Initial Study, the following has been determined:

Table 1: Environmental Determination

I find that there is no substantial evidence that the project will have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.	☐
I find that although the proposed project could have a significant effect on the environment, revisions to the project or proposals have been made by or agreed to by the project proponent, that will avoid the effects or mitigate the effects to where no significant effects on the environmental will occur. A **MITIGATED NEGATIVE DECLARATION** will be prepared.	☒
I find that the proposed project MAY have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.	☐

I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.	☐
I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.	☐
I find that the proposed project has previously been analyzed as part of an earlier CEQA document (which either mitigated the project or adopted impacts pursuant to findings) adopted/certified pursuant to State and County CEQA Guidelines. The proposed project is a component of the whole action analyzed in the previously adopted/certified CEQA document.	☐
I find that the proposed project has previously been analyzed as part of an earlier CEQA document (which either mitigated the project or adopted impacts pursuant to findings) adopted/certified pursuant to State and County CEQA Guidelines. Minor additions and/or clarifications are needed to make the previous documentation adequate to cover the project which are documented in this addendum to the earlier CEQA document (CEQA §15164).	☐
I find that the proposed project has previously been analyzed as part of an earlier CEQA document (which either mitigated the project or adopted impacts pursuant to findings) adopted/certified pursuant to State and County CEQA Guidelines. However, there is important new information and/or substantial changes have occurred requiring the preparation of an additional CEQA document (ND or EIR) pursuant to CEQA Guidelines Sections 15162 through 15163.	☐

_____ _____

Signature Date

_____

Name

1.8 RESPONSIBLE AGENCIES AND PERMITS

OCWR will be required to obtain all necessary permits for the Valencia Greenery. These permits will include, but may not be limited to the following: (1) new Solid Waste Facility Permit for Compostable Materials Handling Facility issued by the California Department of Resources Recycling and Recovery (CalRecycle) and the County of Orange Health Care Agency/Local Enforcement Agency; (2) CalRecycle approval of revision to the County of Orange Non-Disposal Facility Element; (3) Waste Discharge Requirements under the Compost General Order issued by the California Regional Water Quality Control Board, Santa Ana Region; (4) National Pollutant Discharge Elimination System Permit issued by the California Regional Water Quality Control

Board, Santa Ana Region; (5) Permit issued by the South Coast Air Quality Management District for the mobile screener, per Rule 301; (6) and a permit issued by the Orange County Fire Authority.

1.9 CALIFORNIA NATIVE AMERICAN TRIBAL CONSULTATION

See Section 2.18.

2.0 ENVIRONMENTAL EVALUATION

This section of the Initial Study analyzes the potential for significant environmental impacts that may result from the construction and operation of the proposed Valencia Greenery at the Olinda Alpha Landfill. This document incorporates the Environmental Checklist Form from Appendix G of the Orange County Local CEQA Procedures Manual.

For the evaluation of potential impacts associated with the proposed Valencia Greenery, the questions in the checklist are stated and an answer is provided reflecting the analysis conducted of this impact. To each question, there are four possible responses:

- *No Impact* – The proposed project will not have a measurable impact on the environment.

- *Less Than Significant Impact* – The proposed project will have the potential for impacting the environment but at a level less than the significance criteria used to evaluate the impact.

- *Less Than Significant With Mitigation Incorporated* – The proposed project will have a significant impact unless mitigation measures are implemented to reduce the impact to a less than significant level.

- *Potentially Significant Impact* – The proposed project will have impacts considered significant and either (1) additional analysis is needed to identify specific mitigation measures to reduce this impact to a less than significant level, (2) feasible mitigation measures are not available to reduce this impact to a less than significant level, or (3) the impacts associated with the project are not known at this time and further analysis is needed. In these cases, preparation of an Environmental Impact Report (EIR) is required.

2.1 Aesthetics *Would the project:*	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☒	☐	☐
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☒	☐	☐

2.1 AESTHETICS. Would the project:

a. Have a substantial adverse effect on a scenic vista?

Less Than Significant Impact

California Government Code Section 65560(b)(3) stipulates that city and county General Plans address "… Open space for outdoor recreation, including but not limited to, areas of outstanding scenic, historical and cultural value; areas particularly suited for park and recreation purposes, including access to lakeshores, beaches, and rivers and streams; and areas that serve as links between major recreation and open-space reservations, including utility easements, banks of rivers and streams, trails, and scenic highway corridors…."

A scenic vista is generally defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. The closest designated scenic vista to the proposed

project site is Gilman Peak, which has surrounding views of the natural terrain, vegetation, and ridgelines within Chino Hills State Park.[1]

The existing site for the proposed project is developed with uses associated with the operation of the landfill, including the following: an entrance and access road, fee stations, an administration building, crew quarters, an equipment and maintenance yard, a storm water collection system, leachate and groundwater collection systems, sumps and storage tanks, a landfill gas renewable energy facility, and landfill gas collection and destruction equipment including a flare station and parking lots. Land uses in the vicinity of the landfill include undeveloped hillsides to the north and west. The Firestone Boy Scout Reservation in Los Angeles County also exists to the north of the landfill. Parks, recreation, and open space land uses associated with Chino Hills State Park exist to the east and southeast. Residential uses associated with the Olinda Ranch Specific Plan exist to the south. Carbon Canyon Regional Park also exists further beyond the Olinda Ranch Specific Plan area to the southeast.

The proposed project would be located within the existing boundary of the Olinda Alpha Landfill and would not extend into any of the adjacent land uses or properties. The proposed Valencia Greenery composting operation would be developed on an approximately 9.0-acre pad located in the northeastern portion of the existing landfill site (approximately 15.3 acres including all appurtenant structures). During Phase I, open windrow composting, the active compost piles would be no greater than 12 feet (ft) in height, 20 ft wide, and 100 ft long. Phase I is a temporary condition, and the active compost piles would be removed upon completion of the 5- to 6-month phase. The proposed additional fire water tanks and operational water tanks would also be constructed during Phase I. The three proposed fire water tanks would be located behind the existing communications towers, on the west side of Tower Road on the slope above the composting deck, and would be no greater than 26.5 ft in height and 16 ft wide. As the proposed fire water tanks would be located behind the existing communications towers, views of the fire water tanks are not expected to be visible to the public. The proposed three additional operational water tanks would be located on the western edge of the upper deck of the landfill by the existing operational water tanks, approximately 0.7 mi southwest of the proposed project. The proposed operational water tanks would be similar in height and style as the existing operational water tanks, and would be no greater than 31 ft in height and 10 ft wide.

During Phase II, CASP composting, the covered aerated static piles would be no greater than 12 ft in height, 22 ft wide, and 90 ft long, with an additional 10 ft of the pile length reserved for the proposed push wall and equipment. A solar field would also be developed during Phase II to supply electric power to the proposed project. An approximately 2 ft high berm around the perimeter of the proposed project site would also be constructed and utilized during both phases to prevent storm water runoff.

Due to the distance and topography, the proposed project site is not anticipated to be visible from Gilman Peak, which is located approximately 3 miles (mi) southeast of the proposed project site. In addition, due to the relatively low heights of the proposed improvements, the proposed project would not substantially reduce views of Chino Hills State Park. Furthermore, the proposed

[1] City of Brea. 2003. General Plan. August 19.

improvements would not be built higher than existing landfill facilities, and views of the proposed project from Chino Hills State Park would be similar to existing views.

No other scenic vistas are located within the vicinity of the proposed project site. Therefore, because the proposed project would not substantially impair views of or from Gilman Peak or of or from Chino Hills State Park, the proposed project would have a less than significant impact on a scenic vista, and no mitigation would be required.

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Less Than Significant Impact

The California Department of Transportation (Caltrans) Landscape Architecture Program administers the Scenic Highway Program contained in the Streets and Highways Code, Sections 260–263. State Highways are classified as either Officially Listed or Eligible for listing as a scenic highway. The nearest State highway that is eligible for official designation as a State Scenic Highway is State Route 57 (SR-57), which is located approximately 2.4 mi west of the proposed project site.[2] However, limited views of the landfill are visible from SR-57 due to distance, the varying elevations, and surrounding topography. Furthermore, views of the proposed project from SR-57 would be similar to views of existing landfill facilities.

The City of Brea also considers Carbon Canyon Road to have scenic value.[3] Motorists on Carbon Canyon Road between Valencia Avenue and the eastern edge of the Olinda Ranch Specific Plan have views of the existing landfill and would also have views of the proposed project, which falls within the footprint of the existing landfill. However, residential uses associated with the Olinda Ranch Specific Plan would limit views of the proposed project from Carbon Canyon Road. Additionally, as the proposed improvements would not be built higher than existing landfill facilities, views of the proposed project from Carbon Canyon Road would remain similar to existing views.

According to the City of Brea's General Plan, two ridgelines designated as scenic resources are located on the northwest and east boundaries of the landfill. Although the west slope of eastern ridgeline passes through the southern portion of the proposed project site near the location of the proposed fire water tanks, the slope was previously excavated for horizontal expansion of the landfill.[4] Furthermore, the crest of the ridgeline remains unaltered and will not be altered as part of the proposed project. Views of the ridgeline would remain the same as the proposed water tanks would be located behind the existing communications towers and are not anticipated to be visible

[2] California Department of Transportation. 2019. California State Scenic Highway System Map. Website: https://www.arcgis.com/apps/webappviewer/index.html?id=2e921695c43643b1aaf7000dfcc19983 (accessed April 19, 2021).

[3] County of Orange Integrated Waste Management Department. 2004. Draft Environmental Impact Report for the Regional Landfill Options for Orange County (RELOOC) Strategic Plan—Olinda Alpha Landfill Implementation: Volume I. June.

[4] County of Orange Integrated Waste Management Department. 2004. Draft Environmental Impact Report for the Regional Landfill Options for Orange County (RELOOC) Strategic Plan—Olinda Alpha Landfill Implementation: Volume I. June.

to the public. No other potentially scenic resources are located within the vicinity of the proposed project site.

Therefore, the proposed project would have a less than significant impact related to scenic resources within a State Scenic Highway corridor. No mitigation is required.

c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than Significant With Mitigation Incorporated

The proposed project site is located within a nonurbanized area within the existing Olinda Alpha Landfill. The majority of the land surrounding the proposed project site consists of undeveloped wooded and hilly terrain, although urban land uses associated with the Olinda Ranch Specific Plan exist to the south and southeast of the proposed project site. The proposed project would be consistent with the visual character of the existing landfill. Public views of the proposed project site exist from adjacent residential uses and Carbon Canyon Regional Park to the south and southeast. However, these residential uses also limit views of the proposed project from Carbon Canyon Road and Carbon Canyon Regional Park. In addition, public views of the project site and proposed operational water tanks on the western edge of the upper deck of the landfill from SR-57 to the west and Chino Hills State Park to the east are limited due to distance and the varying elevations and surrounding topography. Although the proposed fire water tanks would be higher than other components of the proposed project on the proposed project site, views of the fire water tanks are not expected to be visible to the public as they would be located behind the existing communications towers. Regardless, Mitigation Measure AS-1 specifies that the proposed fire water tanks would be painted tan or a similar color to better blend in with adjacent topography. Therefore, with implementation of Mitigation Measure AS-1, the proposed project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings and impacts to the existing visual character of the proposed project site would be less than significant. The proposed project site is not located in an urban area; therefore, analysis relating to the proposed project conflicting with applicable zoning and other regulations governing scenic quality is not warranted.

Mitigation Measure AS-1

- The proposed new water tanks to be located for the composting operations shall be painted tan or a similar neutral color or be constructed of a neutral-colored material that blends in with the adjacent topography. In addition, the tanks shall be painted with non-reflective (i.e., matte) paint.

d. Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

Less than Significant with Mitigation Incorporated

The impact of nighttime lighting depends upon the type of use affected, the proximity to the affected use, the intensity of specific lighting, and the background or ambient level of the combined nighttime lighting. Nighttime ambient light levels may vary considerably depending on the age, condition, and abundance of point-of-light sources present in a particular view. The use of exterior lighting for security and aesthetic illumination of architectural features may contribute to ambient nighttime lighting conditions.

Nighttime illumination impacts are evaluated in terms of the project's net change in ambient lighting conditions and proximity to light-sensitive land uses. The proposed project site is located within the existing boundary of the landfill. Existing sources of light on or adjacent to the proposed project site include exterior lighting from the administration building and crew quarters and from light reflecting off of vehicles traveling on the on-site access road. However, sources of night light at the landfill are minimal because the landfill is only operational during the day from 6 a.m. to 4 p.m., Monday through Saturday, and nighttime lighting at the landfill is limited to security lighting for access roads, parking areas, and on-site buildings.

Any construction-related illumination during evening and nighttime hours would be shielded to the extent feasible, would consist of the minimum lighting required for safety and security purposes, and would occur only for the duration required for the temporary construction process. Due to its limited scope and short duration, light resulting from construction activities would not substantially impact sensitive uses, substantially alter the character of off-site areas surrounding the construction area, or interfere with the performance of an off-site activity. However, due to the proximity of the proposed project to Chino Hills State Park, which functions as a wildlife corridor, and consistent with the requirements of the Regional Landfill Options for Orange County (RELOOC) Strategic Plan—Olinda Alpha Landfill Implementation certified Environmental Impact Report (EIR), Mitigation Measure AS-2 would be implemented to minimize spillover from construction light and glare. Therefore, with implementation of Mitigation Measure AS-2, construction of the proposed project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area, and light impacts associated with construction would be less than significant.

A solar field would also be constructed as part of the proposed project to supply electrical power to Valencia Greenery. The proposed solar panels would be dark-colored (usually blue or black) and would be covered with antireflective coating. The proposed solar panels would be designed to reduce reflection, as reflected light cannot be converted to energy. The objective of the proposed solar panels is instead to absorb solar radiation to convert it to electricity. Furthermore, modern solar panels reflect as little as 2 percent of incoming sunlight, which is approximately the same amount as water and less than soil or wood shingles. No other sources of light or glare would be constructed as part of the proposed project. Therefore, the proposed project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the

proposed project area, and impacts associated with lighting would be less than significant with incorporation of Mitigation Measure AS-2.

Mitigation Measure AS-2

- All outdoor lighting, including any construction-related lighting, shall be designed, installed and operated in a manner that ensures that all direct rays from project lighting are contained within the landfill property, and that residences and undeveloped areas that may provide wildlife value are protected from spillover light and glare.

2.2 Agriculture and Forestry Resources *Would the project:*	**Potentially Significant Impact**	**Less than Significant With Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code 12220 (g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51004)(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or forest land to non-forest use?	☐	☐	☐	☒

2.2 AGRICULTURE & FORESTRY RESOURCES. Would the project:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?

c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

d. Result in the loss of forest land or conversation of forest land to non-forest use?

e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact

The proposed project site is located within an existing landfill operation and would not affect Farmlands listed as "Prime", "Unique" or of "Statewide Importance" as shown on the State Farmland Mapping and Monitoring Program. The proposed project would not result in any conflicts with Williamson Act contracts nor would the proposed project involve the conversion of farmlands to a non-agricultural use. No impacts to agricultural resources would occur. In addition, the proposed project would not result in any conflicts with forest land, timberland or Timberland Production areas. Also, the proposed project would not result in the loss of forest land or conversion of forest land to non-forest use. No impacts to forest land would occur.

2.3 Air Quality *Would the project:*	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

2.3 AIR QUALITY. Would the project:

a. Conflict with or obstruct implementation of the applicable air quality plan?

b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?

c. Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact

LSA prepared an air quality/health risk impact analysis for the proposed Valencia Greenery Composting Operation. This study is included as **Appendix C**. The study concludes that the proposed project would not conflict with or obstruct the implementation of an applicable air quality plan, nor would the proposed project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standards. The proposed composting operation will occur at an existing, active landfill. Trucks that are already bringing green waste or compostable organic waste material to the landfill will be diverted to the composting operation. At a maximum daily tonnage of 230 TPD, and using 20-ton per load end dump trucks, the Valencia Greenery will generate approximately 12 new two-way truck trips per day, with these trucks taking finished compost to end markets. Applying a Passenger Car Equivalent (PCE) factor of 2.0 to these

delivery trucks, it is anticipated that typical operations at full capacity would generate approximately 58 Average Daily Trips (ADT). The 58 ADT would result in an insignificant increase in air emissions when compared to the existing environmental setting of the Olinda Alpha Landfill operation, which generates approximately 677 two-way vehicle trips per day.

In addition, the new heavy equipment associated with the compost operation, which will include a windrow turner, two front loaders, a mobile screen, a cover turner (for Phase II CASP), a water truck, a dump truck, a chipper/grinder, and a conveyor associated with the 230 TPD composting operation would result in an insignificant increase in air emissions when compared to the existing environmental setting of all of the heavy construction equipment (i.e., scrapers, compactor bulldozers, water trucks, etc.) and associated emissions for the active Olinda Alpha Landfill that accepts approximately 6,850 tons of solid waste per day and approximately 5,175 tons of exempt wastes (i.e., processed green material for erosion control, asphalt and soil) per day. The proposed Valencia Greenery composting operation will therefore result in a less than significant impact to air quality.

The proposed Valencia Greenery composting operation will not expose sensitive receptors to substantial pollutant concentrations or result in any human health risks. As stated above, the proposed composting operation will not result in substantial pollutant concentrations and the closest sensitive receptors are residential areas in Olinda Village community that are located approximately 1.2 miles southeast of the proposed project site.

An Air Quality Management Plan (AQMP) describes air pollution control strategies to be undertaken by a city or county in a region classified as a nonattainment area to meet the requirements of the federal Clean Air Act. The main purpose of an AQMP is to bring an area into compliance with the requirements of federal and State ambient air quality standards (AAQS). The applicable air quality plan is the SCAQMD's adopted 2016 AQMP. The AQMP is based on regional growth projections developed by the Southern California Association of Governments (SCAG).

The proposed project would implement an organic waste materials composting operation at the Olinda Alpha Landfill. The proposed project would not house any persons, occupy more than 40 acres of land, or encompass more than 650,000 square feet of floor area. Thus, the proposed project would not be defined as a regionally significant project under CEQA and, therefore, it does not meet SCAG's Intergovernmental Review criteria under the 2016 AQMP.

Pursuant to the methodology provided in the SCAQMD's 1993 CEQA Air Quality Handbook (currently being revised), consistency with the 2016 AQMP is affirmed when a project (1) would not increase the frequency or severity of an air quality standards violation or cause a new violation, and (2) is consistent with the growth assumptions in the AQMP. Consistency review is presented as follows:

1. The proposed project would result in short-term construction and long-term operational pollutant emissions that are all less than the CEQA significance emissions thresholds established by the SCAQMD, as demonstrated below; therefore, the

proposed project would not result in an increase in the frequency or severity of an air quality standards violation or cause a new air quality standards violation.

2. The SCAQMD's CEQA Air Quality Handbook indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and significant projects. Significant projects include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and offshore drilling facilities. The proposed project would implement an organic waste composting operation at the Olinda Alpha Landfill consistent with State standards for solid waste diversion; therefore, the proposed project is not defined as a significant project by the SCAQMD CEQA Air Quality Handbook.

Based on the consistency analysis presented above, the proposed project would be consistent with the regional AQMP. As such, impacts would be less than significant.

The Basin is currently designated as nonattainment for the federal and State standards for O_3 (ozone) and $PM_{2.5}$ (particulate matter less than 2.5 microns in diameter). In addition, the Basin is in nonattainment for the PM_{10} standard. The Basin's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of an ambient air quality standard. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, SCAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. The SCAQMD's CEQA Air Quality Handbook establishes suggested significance thresholds based on the volume of pollutants emitted. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Regional thresholds for Construction and Operational emissions pursuant to the SCAQMD CEQA Air Quality Handbook are listed in Table A.

Table A: Regional Thresholds for Construction and Operational Emissions

Emissions Source	Pollutant Emissions Threshold (lbs/day)					
	VOCs	NO_X	CO	PM_{10}	$PM_{2.5}$	SO_X
Construction	75	100	550	150	55	150
Operations	55	55	550	150	55	150

Source: Air Quality Significance Thresholds (SCAQMD 2019).
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

The following analysis assesses the potential project-level air quality impacts associated with construction and operation of the proposed project (full analysis provided in **Appendix C**).

Construction Emissions

In accordance with the proposed phasing of the proposed project, a project-level analysis of projected construction activities was prepared. During construction, short-term degradation of air quality may occur due to the release of particulate emissions generated by grading, paving, and other activities. Emissions from construction equipment are also anticipated and would include CO, NO_x, Volatile Organic Compounds (VOCs), directly emitted Particulate Matter ($PM_{2.5}$ and PM_{10}), and Toxic Air Contaminants (TACs) such as Diesel Particulate Matter (DPM).

Construction activities for the proposed project would include grading, soil import, paving and asphalt placement, and other activities. Construction-related effects on air quality from the proposed project would be greatest during the grading phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on the soil moisture, silt content of soil, wind speed, and amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. The SCAQMD has established Rule 403, Fugitive Dust, which would require the applicant to implement measures that would reduce the amount of PM generated during the construction period. The following Rule 403 measures were incorporated in the California Emissions Estimator Model version 206.3.2 (CalEEMod) analysis:

- Water active sites at least three times daily (the locations where grading is to occur shall be thoroughly watered prior to earthmoving).
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 2 feet (0.6 meter) of freeboard (vertical space between the top of the load and the top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.
- Reduce traffic speeds on all unpaved roads to 15 mph or less.

In addition to dust-related PM_{10} emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO_2, NO_x, VOCs, and some soot particulate ($PM_{2.5}$ and PM_{10}) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. These emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

Construction emissions were estimated for the proposed project using the CalEEMod. The proposed project would be developed in two phases: Phase I – Open Windrow Composting and Phase II – CASP Composting. Construction of Phase I would occur for approximately three months and construction of Phase II would also occur for approximately three months. In addition, this analysis assumes that a total of 15.3 acres would be graded during construction of the proposed project. Table B identifies the maximum daily emissions associated with construction activities during each construction phase.

Table B: Project Construction Emissions

Project Construction	Maximum Pollutant Emissions (lbs/day)					
	VOCs	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Phase I Peak Daily Emissions	3.9	33.8	23.5	<0.1	9.3	5.5
Phase II Peak Daily Emissions	2.2	33.8	23.5	<0.1	9.3	5.5
SCAQMD Thresholds	75.0	100.0	550.0	150	150.0	55.0
Exceeds?	**No**	**No**	**No**	**No**	**No**	**No**

Source: *Air Quality, Energy, and Greenhouse Gas Emissions for the Valencia Greenery Project*; LSA Associates, Inc. July 2021. (Appendix C).

CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

As shown in Table B, construction emissions associated with the proposed project would not exceed the SCAQMD thresholds for VOCs, NO_X, CO, sulfur oxides (SO_x), $PM_{2.5}$, or PM_{10} emissions during Phase I or Phase II. In addition to the construction period thresholds of significance, the proposed project is required to comply with regional rules that assist in reducing short-term air pollutant emissions. SCAQMD Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emissions source. In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Therefore, with implementation of SCAQMD Rule 403 measures, construction of the proposed project would not result in a cumulatively considerable increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State AAQS. Impacts would be less than significant.

The SCAQMD published its Final Localized Significance Threshold Methodology in July 2008[5], recommending that all air quality analyses include an assessment of air quality impacts to nearby sensitive receptors. This guidance was used to analyze potential localized air quality impacts associated with construction of the proposed project. Localized significance thresholds (LSTs) are developed based on the size or total area of the emissions source, the ambient air quality in the source receptor area, and the distance to the project. Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality. LSTs are based on the ambient concentrations of a pollutant within the project Source Receptor Area (SRA) and the distance to the nearest sensitive receptor. LSTs differ from the numeric regional mass daily

[5] South Coast Air Quality Management District (SCAQMD). 2008. *Final Localized Significance Threshold Methodology*. July. Website: http://www.aqmd. gov/docs/default-source/ceqa/handbook/localizedsignificance-thresholds/final-lst-methodology-document.pdf (accessed July 2021).

thresholds because the LSTs are based on the amount of emissions generated from a project that is not expected to cause or contribute to an exceedance of the most stringent applicable federal or State AAQS, and are based on the ambient concentrations of the pollutant and the relative distance to the nearest sensitive receptor (SCAQMD performed air dispersion modeling to determine what amount of emissions generated a particular concentration at a particular distance). For the proposed project, the appropriate SRA for the LST is the North Orange County area (SRA 16). The SCAQMD provides LST screening tables for 25-, 50-, 100-, 200-, and 500-meter (82-, 164-, 328-, 656-, and 1,640 ft) source receptor distances. As identified above, the closest sensitive receptor locations to the proposed project site include the single-family residences within the Olinda Village Community, located approximately 1.2 miles southeast of the proposed project site along Lilac Lane. An LST analysis was completed to show the construction and operational impacts conservatively at a distance of 500 meters (1,640 ft) to the nearest sensitive receptors southeast of the proposed project site. The total proposed project site is 15.3 acres; therefore, the 5-acre thresholds would apply to the proposed project. Table C lists the emissions thresholds that apply during construction and operation of the proposed project.

Table C: Localized Significance Thresholds

Emissions Source	Pollutant Emissions Threshold (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Construction (5-acre, 1,640 ft distance)	317	8,754	165	95
Operation (5-acre, 1,640 ft distance)	317	8,754	40	23

Source: *Final Localized Significance Threshold Methodology* (SCAQMD 2008).
CO = carbon monoxide
ft = foot/feet
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District

An LST analysis was completed to show the construction impacts conservatively at a distance of 500 meters (1,640 feet) to the nearest sensitive receptors southeast of the proposed project site in SRA 16.

Table D: Project Localized Construction Emissions

Source (in lbs/day)	NO_X	CO	PM_{10}	$PM_{2.5}$
Phase I				
On-Site Project Emissions	33.7	23.0	9.1	5.4
Localized Significance Threshold	317.0	8,754.0	165.0	95.0
Exceeds?	**No**	**No**	**No**	**No**
Phase II				
On-Site Project Emissions	33.7	23.0	9.1	5.4
Localized Significance Threshold	317.0	8,754.0	165.0	95.0
Exceeds?	**No**	**No**	**No**	**No**

Source: *Air Quality, Energy, and Greenhouse Gas Emissions for the Valencia Greenery Project*; LSA Associates, Inc. July 2021. (Appendix C).
CO = carbon monoxide
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size

The results of the LST analysis, summarized in Table D, indicate that the proposed project would not result in an exceedance of SCAQMD LSTs during construction of the proposed project. Therefore, the proposed project would not result in the exposure of sensitive receptors to

substantial pollutant concentrations and would result in less than significant localized air quality impacts during construction.

Operational Air Quality Impacts

Long-term air pollutant emission impacts are those typically associated with mobile sources (e.g., vehicle trips), energy sources (e.g., electricity and natural gas), and area sources (e.g., architectural coatings and the use of landscape maintenance equipment), off-road sources (e.g., use of off-road equipment), and stationary sources (e.g., emergency backup generator). Under existing conditions, the green waste material is chipped and ground at existing materials recovery facilities, transfer stations, and green waste/wood waste chipping and grinding facilities in Orange County and is then brought to landfills for use as alternative daily cover (ADC) or erosion control, resulting in the disposal of this material. Valencia Greenery at Olinda Alpha Landfill would accept a maximum of 230 TPD of compostable organic waste materials with the proposed composting facility and eventually chip and grind uncontaminated compostable organic materials recovered from the landfill operation (i.e. wood waste) for use in composting. Compared to existing conditions, the proposed project would result in no change to the green waste compost emissions and only net increases in off-road and mobile-source emissions because of the operation of composting facility, and potential for stationary emissions from an emergency back-up generator.

PM_{10} emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways. Entrainment of PM_{10} occurs when vehicle tires pulverize small rocks and pavement and the vehicle wakes generate airborne dust. The contribution of tire and brake wear is small compared to the other PM emission processes. Gasoline-powered engines have small rates of PM emissions compared with diesel-powered vehicles. Once operational, the proposed project would generate 10 worker trips and 8 truck trips during Phase I and 10 worker trips and 24 truck trips during Phase II.

The proposed project would not generate energy source emissions as the proposed project would be designed as a stand-alone system with a solar field to supply electric power. The solar field would generate the required electrical demands. Solar power generation does not have associated energy source emissions.

Typically, area source emissions consist of direct sources of air emissions located at the project site, including architectural coatings and the use of landscape maintenance equipment. Area source emissions associated with the proposed project would be minimal and would be associated with site maintenance activities.

In addition, the proposed project's composting operation would require the use of off-road equipment, a mobile screen, two loaders, a windrow turner, a water truck, a dump truck, a cover turner, a chipper/grinder, and a conveyor. This equipment would use fossil-based fuels to operate, resulting in off-road source emissions. The loaders, water truck, and dump truck are already in use at the existing landfill; therefore, only the mobile screen, windrow turner, cover turner, chipper/grinder, and conveyor were included in this analysis.

The solar field and batteries would be designed to accommodate operation at night and during periods of minimal sunlight. However, extended periods of rain and/or cloud events and shortened days during winter may result in loss of electricity to operate and aerate the facility and may lead to material wasting. Therefore, Phase II would include a 200 kW diesel emergency backup generator, which was included in CalEEMod as a stationary source of emissions. Long-term operational emissions associated with the proposed project were calculated using CalEEMod. The annual emissions associated with operation of the proposed project are identified in Table E for VOCs, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$.

Table E: Project Operational Emissions

Source	Pollutant Emissions (lbs/day)					
	VOCs	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Phase I						
Phase I Area Sources	0.2	<0.1	<0.1	0.0	0.0	0.0
Phase I Energy Sources	0.0	0.0	0.0	0.0	0.0	0.0
Phase I Mobile Sources	0.1	1.5	0.7	<0.1	0.2	0.1
Phase I Off-road Sources	1.2	12.0	9.5	<0.1	0.6	0.6
Phase I Stationary Sources	0.0	0.0	0.0	0.0	0.0	0.0
Total Phase I Emissions	**1.4**	**13.5**	**10.2**	**<0.1**	**0.8**	**0.7**
SCAQMD Thresholds	55.0	55.0	550.0	150.0	150.0	55.0
Exceeds?	**No**	**No**	**No**	**No**	**No**	**No**
Phase II						
Phase II Area Sources	0.2	<0.1	<0.1	0.0	0.0	0.0
Phase II Energy Sources	0.0	0.0	0.0	0.0	0.0	0.0
Phase II Mobile Sources	0.1	4.4	1.5	<0.1	0.4	0.1
Phase II Offroad Sources	0.7	7.0	5.9	<0.1	0.4	0.4
Phase II Stationary Sources	0.1	0.2	0.2	<0.1	<0.1	<0.1
Total Phase II Emissions	**1.1**	**11.6**	**7.6**	**<0.1**	**0.8**	**0.5**
SCAQMD Thresholds	55.0	55.0	550.0	150.0	150.0	55.0
Exceeds?	**No**	**No**	**No**	**No**	**No**	**No**

Source: *Air Quality, Energy, and Greenhouse Gas Emissions for the Valencia Greenery Project*; LSA Associates, Inc. July 2021. (Appendix C).

CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

The results shown in Table E indicate the proposed project would not exceed the significance criteria for VOCs, NO_X, CO, SO_X, PM_{10}, or $PM_{2.5}$ emissions during operation of Phase I or Phase II; therefore, the proposed project would not result in a significant effect on regional air quality. Therefore, operation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State AAQS. Impacts would be less than significant.

An LST analysis was completed to show the operational impacts conservatively at a distance of 500 meters (1,640 feet) to the nearest sensitive receptors southeast of the proposed project site in SRA 16.

Table F: Project Localized Operational Emissions

Source (in lbs/day)	NO_X	CO	PM_{10}	$PM_{2.5}$
Phase I				
On-Site Project Emissions	12.0	9.6	<1.0	<1.0
Localized Significance Threshold	317.0	8,754.0	40.0	23.0
Exceeds?	**No**	**No**	**No**	**No**
Phase II				
On-Site Project Emissions	7.4	6.1	<1.0	<1.0
Localized Significance Threshold	317.0	8,754.0	40.0	23.0
Exceeds?	**No**	**No**	**No**	**No**

Source: *Air Quality, Energy, and Greenhouse Gas Emissions for the Valencia Greenery Project*; LSA Associates, Inc. July 2021. (Appendix C).

CO = carbon monoxide
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size

The results of the LST analysis, summarized in Table F, indicate that the proposed project would not result in an exceedance of SCAQMD LSTs during operation of the proposed project. Therefore, the proposed project would not result in the exposure of sensitive receptors to substantial pollutant concentrations and would result in less than significant localized air quality impacts during operation.

Long-Term Microscale (CO Hot Spot) Analysis

Vehicle and truck trips associated with the proposed project would contribute to congestion at intersections and along roadway segments in the vicinity of the proposed project site (it should be noted however that the landfill was accepting approximately 746 TPD of PGM (38 loads, or 76 trips, per day using 20-ton trucks) for erosion control prior to the implementation of SB 1383 and AB 1594, and the trips associated with the proposed project represent a portion of those trips being diverted from the landfill to the composting operation). Localized air quality impacts would occur when emissions from vehicular traffic increase as a result of the proposed project. The primary mobile-source pollutant of local concern is CO, a direct function of vehicle idling time and, thus, of traffic flow conditions. CO transport is extremely limited. Under normal meteorological conditions, it disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels, affecting local sensitive receptors (e.g., residents, schoolchildren, the elderly, and hospital patients).

Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels.

An assessment of project-related impacts on localized ambient air quality requires that future ambient air quality levels be projected. Existing CO concentrations in the immediate proposed project vicinity are not available. Ambient CO levels monitored at the La Habra Monitoring Station showed a highest recorded 1-hour concentration of 3.8 ppm (the State standard is 20 ppm) and a highest 8-hour concentration of 1.7 ppm (the State standard is 9 ppm) from 2017 to 2019.

The highest CO concentrations would normally occur during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis. Reduced speeds and vehicular congestion at intersections result in increased CO emissions.

Based on the trip generation prepared for the proposed project, the proposed project would generate up to 34 ADT in CalEEMod, with 4 trips in the AM peak hour and 9 trips in the PM peak hour. As the proposed project would not generate 100 or more AM or PM peak hour trips, the proposed project did not meet the criteria for an evaluation of study area intersection or roadway segment level of service. Therefore, it is assumed that the addition of the proposed project traffic would not create any significant adverse impacts to nearby intersections.

A CO hotspot is a location where high CO concentrations occur, which is typically associated with roadways or intersections with extremely high traffic volumes. Therefore, given the extremely low level of CO concentrations in the proposed project area and the lack of traffic impacts at any intersections, proposed project-related vehicles are not expected to contribute significantly to CO concentrations exceeding the State or federal CO standards. Because no CO hot spot would occur, there would be no project-related impacts on CO concentrations associated with the proposed project. Impacts would be less than significant, and no mitigation is required.

Although the proposed project is not expected to exceed SCAQMD's numeric regional mass daily emission thresholds, this does not in itself constitute a less than significant health impact to the population adjacent to the proposed project site and within the Basin.

SCAQMD's numeric regional thresholds are based in part on Section 180(e) of the federal Clean Air Act. (Please note that the numeric regional mass daily thresholds have not changed since their adoption as part of SCAQMD's CEQA Air Quality Handbook published in 1993). The numeric regional mass daily thresholds are also intended to provide a means of consistency in significance determination within the environmental review process. Notwithstanding, simply exceeding the SCAQMD's numeric regional mass daily thresholds does not constitute a particular health impact to an individual nearby. The reason for this is that the mass daily thresholds are in pounds per day emitted into the air, whereas health effects are determined based on the concentration of emissions in the air at a particular location (e.g., ppm by volume of air, or micrograms per cubic meter [$\mu g/m^3$] of air). State and federal AAQS were developed to protect the most susceptible population groups from adverse health effects and were established in terms of ppm or $\mu g/m^3$ for the applicable emissions.

The air quality analysis included in **Appendix C** evaluated the proposed project's localized impact to air quality for emissions of CO, NO_x, $PM_{2.5}$, and PM_{10} by comparing the proposed project's on-site emissions to SCAQMD's applicable LSTs (see Tables D and F). As shown in Tables D and F, the proposed project would not result in emissions that exceed SCAQMD's LSTs. Therefore, the proposed project would not be expected to exceed the most stringent applicable federal or State AAQS for emissions of NO_x, $PM_{2.5}$, and PM_{10}. It should be noted that the AAQS were developed to represent levels at which the most susceptible persons (children and the elderly) are protected. In other words, the AAQS are purposefully set low to protect children, elderly, and those with existing respiratory problems.

Furthermore, air quality trends for emissions of NO_x, VOCs, and O_3 (which is a byproduct of NOX and VOCs) have been trending downward within the Basin even as development has increased over the last several years. Therefore, because the proposed project would not exceed the SCAQMD's applicable numeric thresholds, the proposed project would not result in any Basin-wide increase in health effects.

While the environmental analysis above did not conclude that the proposed composting operation will result in a significant environmental impact to this environmental resource, in order to further reduce the proposed project's less than significant impacts, OCWR has added the following Project Design Features and Operational Control Measures (PDF & OCM). All of these PDF & OCM are also included in the Mitigation Monitoring and Reporting Program (MMRP) and will also be incorporated into the Report of Composting Site Information (RCSI), to be reviewed and approved by the Orange County Health Care Agency, Environmental Health Division, acting in its capacity as the Orange County Solid Waste Local Enforcement Agency (LEA) for the California Department of Resources Recycling and Recovery (CalRecycle). The RCSI is the key engineering, permitting, construction and operations document that the LEA will rely upon when issuing the Solid Waste Facility Permit for the Valencia Greenery Composting Operation.

(Air Quality-Dust Control PDF & OCM-1) Compost windrows will not be turned during high wind episodes exceeding wind speeds of 30 miles per hour in order to manage dust particulates.

(Air Quality-Dust Control PDF & OCM-2) The compost operation entryway and often-traveled paths will be overlain with crushed rock or asphalt to prevent tracking of onsite materials and dust off-site.

(Air Quality-Dust Control PDF & OCM-3) Unpaved roads shall be watered as necessary to minimize visible dust. Alternatively, roads may be paved.

(Air Quality-Dust Control PDF & OCM-4) The composting operation will implement SCAQMD's Rule 403, requiring control of fugitive dust during construction and operations via best-available control measures. These measures include the following:

- Apply non-toxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (i.e., previously graded areas inactive for 10 days or more).

- Water active sites at least twice daily (locations where grading is to occur shall be thoroughly watered prior to earthmoving).

- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 2 feet (ft.) (0.6 meter) of freeboard (vertical space between the top of the load and the top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.

- Pave construction access roads at least 100 ft. (30 meters) onto the site from the main road.

- Reduce traffic speeds on all unpaved roads to 15 mph or less.

d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact

SCS Engineers completed a quantitative odor analysis of a proposed composting operation at the Olinda Alpha Landfill. The results of the quantitative odor analysis, included in **Appendix D**, show that the proposed project will not result in any significant odor impacts to the closest homes near the proposed project site, which are located in the Olinda Village residential community, approximately 1.2 miles southeast of the proposed composting operation. The odor analysis modeling accounted for all parts of the proposed project including types of feedstock materials anticipated to be included in the composting operation and the stormwater and leachate collection basin. Based on the analysis and conclusions included in the odor analysis, the proposed composting operation will not result in any significant odor impacts. In addition, OCWR will implement an Odor Impact Minimization Plan (OIMP) to further reduce the potential for odor impacts. The OIMP is included as **Appendix E**.

While the environmental analysis above did not conclude that the proposed composting operation will result in a significant environmental impact to this environmental topic, in order to further reduce the proposed project's less than significant impacts, OCWR has added the following PDF & OCM. All of these PDF & OCM are also included in the MMRP and will also be incorporated into the RCSI, to be reviewed and approved by the Orange County Health Care Agency, Environmental Health Division, acting in its capacity as the Orange County Solid Waste LEA for CalRecycle. The RCSI is the key engineering, permitting, construction and operations document that the LEA will rely upon when issuing the Solid Waste Facility Permit for the Valencia Greenery Composting Operation.

(Air Quality-Odor Control PDF & OCM-1) The composting operation will accept compostable organic waste materials loads for composting. Initially these loads will have already been processed off-site (i.e., chip, ground and screened) to remove contamination prior to the processed green waste being delivered to the Valencia Greenery. Pre-processing will reduce the potential for highly odorous loads. When OCWR begins chipping and grinding and use of a conveyor to recover other uncontaminated compostable organic waste materials from the landfill for composting, OCWR will only recover materials that are not highly odorous. Highly odorous materials will continue to be buried at the landfill and not used in the composting operation.

(Air Quality-Odor Control PDF & OCM-2) Upon acceptance at the composting operation, prior to unloading, any highly odorous loads that are determined to have the potential to contribute to off-site odors will be taken to the landfill working face for disposal.

(Air Quality-Odor Control PDF & OCM-3) Upon acceptance at the composting operation, if any highly odorous loads are inadvertently unloaded, OCWR will collect the loads and take the material to the landfill working face for disposal.

(Air Quality-Odor Control PDF & OCM-4) Compostable organic waste materials will be delivered to the composting operation on an as-needed basis to reduce odors.

(Air Quality-Odor Control PDF & OCM-5) OCWR will not select or use any additives or amendments in the composting operation that are either highly odorous by themselves, are highly odorous when added to the compost piles, or are highly odorous over time during the active or curing phases of the composting operation.

(Air Quality-Odor Control PDF & OCM-6) OCWR will comply with SCAQMD Rules 1133 and 1133.3 for composting.

(Air Quality-Odor Control PDF & OCM-7) Incoming pre-processed materials will be stored on-site no longer than 48 hours. PGM, processed agricultural material, and other compostable organic waste materials will be loaded into a dump truck by a front loader as soon as possible and delivered to the active composting area, where the material will then be placed into new compost piles by a front loader.

(Air Quality-Odor Control PDF & OCM-8) For the open windrow composting operation in Phase I, the feedstock materials will be formed into elongated piles/open windrows, with dimensions not exceeding 12 feet in height, 20 feet in length and 100 feet long for composting with the addition of moisture as needed by the on-site water truck. Newly constructed compost windrows in the Phase I open windrow process will initially be covered with at least 6 inches of finished compost within 24 hours of formation as required by SCAQMD Rule 1133.3. For the first 15 days after initial windrow formation, within six hours before turning, water will be applied as necessary to ensure the pile meets the wetness criteria described in Rule 1133.3. During this period, the temperature of each compost pile will be taken every day.

(Air Quality-Odor Control PDF & OCM-9) Active compost shall be maintained under aerobic conditions at a temperature of 55 degrees Celsius (131 degrees Fahrenheit) or higher for the Process to Further Reduce Pathogens (PFRP) period of 15-days or longer as specified in 14 CCR 17868.3(b)(3) utilizing wheeled loaders or a windrow turner. During the period when the compost is maintained at 55 degrees Celsius (131 degrees Fahrenheit) or higher, there shall be a minimum of five turnings of the windrow.

(Air Quality-Odor Control PDF & OCM-10) OCWR has prepared an Odor Impact Minimization Plan (OIMP) for the proposed composting operation in compliance with 14 CCR 17863.4. The OIMP is included as **Appendix E** to the Mitigated Negative Declaration for the composting operation. All odor control measures included in the OIMP are hereby incorporated into this MMRP. Per the OIMP, each operating day, designated site personnel shall assess and evaluate the perimeter of the composting operation area and landfill boundary for objectionable odors. BMPs and good housekeeping measures will be implemented to minimize the release of objectionable odors. BMPs include:

- Maintaining adequate heat in the piles through appropriate pile density, limiting turning frequency and/or pile dimensions.

- Provide adequate moisture throughout the active composting process.

- Frequent monitoring of temperature and moisture content assures composting conditions are within acceptable parameters.

Good housekeeping measures that will be implemented include:

- Clearing spilled materials between windrows.
- Eliminating areas with the potential for ponding water.
- Maintaining reasonably sized stockpiles of incoming feedstock by deploying it into windrows within 72 hours.

(Air Quality-Odor Control PDF & OCM-11) The OIMP requires that OCWR implement the following steps in the event that objectionable odors are detected at the composting operation site:

- Stop all operations if they are causing off-site odor impacts until the source of the odors is identified, corrected and the odor migration ceases.
- Designated site personnel shall investigate likely source of odors.
- Designated site personnel shall determine wind patterns and direction at the time odor was detected.
- Based on the intensity of odor nuisance, designated site personnel shall determine if odor has travelled off-site by surveying the perimeter of the composting facility and vicinity of potential off-site receptors.
- If the source of odors is found to be the composting operation, determine if on-site management practices (e.g., mixing odiferous materials with sawdust or other bulking agent, turning the windrows less frequently, remove odiferous materials and dispose of them in the landfill, etc.) could remedy any odor problems and immediately take steps to remedy the situation.
- Determine whether or not the odor has moved off-site and if so, if it significant enough to warrant contacting the adjacent neighbors and/or the LEA.
- If it has been determined that odor has moved off-site, the incident shall be recorded in the compost daily operational logbook which shall include all actions and activities taken to resolve or minimize odor nuisance for future reference and operational considerations.
- Do not start operations again (i.e., accepting additional compostable organic waste in temporary storage area, placement and formation of new windrows) until the wind and meteorological conditions are favorable and will not promote off-site odors.

(Air Quality-Odor Control PDF & OCM-12) Per the OIMP, the following complaint response protocols will be implemented:

- All odor complaints received from potential receptors and/or regulators shall be recorded in the facility operational logbook and complaint log.

- Designated site personnel shall contact complainant and/or regulator to obtain details of the complaint such as name, time, location and nature or characteristics of odors.
- Designated site personnel shall notify appropriate regulators of the complaint.

- Designated site personnel shall investigate and implement methods in assessing odor impacts.

- Designated site personnel shall immediately implement additional or appropriate measures to minimize odors.

- Once the OIMP measure or measures have been implemented and the odor has been minimized, designated site personnel shall follow up with complainant.

(Air Quality-Odor Control PDF & OCM-13) The Olinda Alpha Landfill maintains an on-site meteorological station that monitors wind direction, wind speed, temperature, and relative humidity. Data from this station will be used to help monitor conditions at the composting operation if an odor issue arises and also prior to an odor issue occurring.

(Air Quality-Odor Control PDF & OCM-14) For the composting operation, OCWR will establish contingency plans for operating downtime (e.g., equipment malfunction, power outage).

(Air Quality-Odor Control PDF & OCM-15) OCWR shall post telephone numbers at the entrance of the landfill and composting facility to allow members of the public to contact the composting facility superintendent to report odor complaints. Contact information is also available on the OCWR website.

(Air Quality-Odor Control PDF & OCM-16) Should compostable organic waste material arrive at the composting operation with noticeable odors, options for reducing odors would include but are not limited to the following: reject highly odorous loads and landfill the material; eliminate troublesome or contaminated feedstocks; mix materials upon receipt (i.e., to increase material porosity); stockpile bulking agents or high carbon amendments; make smaller piles; blanketing odorous material with a six inch to one-foot layer of bulking agent, high carbon amendments or finished compost.

(Air Quality-Odor Control PDF & OCM-17) Should compostable organic waste material in the temporary unloading and storage area begin to generate odors, options for reducing odors would include but are not limited to the following: expedite material processing; first in, first out processing; reduce the size of material stockpiles; blanketing odorous material with a six inch to

one-foot layer of bulking agent, high carbon amendments or finished compost; reduce the volume of incoming materials; identify alternative facilities for incoming materials.

(Air Quality-Odor Control PDF & OCM-18) Should compostable organic waste material begin to generate odors during mixing and material handling, options for reducing odors would include but not be limited to the following: create windrow piles that are sufficiently blended; combine materials to achieve a high carbon to nitrogen ratio (greater than 30 to 1); create piles with good porosity; ensure that mixing areas/activities are located as far as possible from sensitive receptors; reduce mixing/materials handling activity during stagnant air conditions; reduce mixing/materials handling activity when wind is in the direction of sensitive receptors; mist water or odor neutralizer at dust generation points.

(Air Quality-Odor Control PDF & OCM-19) Should compostable organic waste material begin to generate odors during the composting process, options for reducing odors would include but not be limited to the following: turn regularly to re-invigorate the composting process; maintain sufficient moisture in windrows; avoid over-watering windrows; make smaller windrows to increase passive aeration; increase porosity and bulk density; consider blanketing odorous materials with a six-inch to one-foot layer of bulking agent; make piles on a one-foot bed of overs to increase airflow; reduce turning/material handling activities when winds are blowing in the direction of nearby receptors; diligently manage and monitor the composting process.

(Air Quality-Odor Control PDF & OCM-20) Should compostable organic waste material begin to generate odors during screening, options for reducing odors would include but not be limited to the following: reduce screening activities during stagnant air conditions; reduce screening activities when wind is in the direction of nearby receptors; use mist water or neutralizer at dust generation points.

(Air Quality-Odor Control PDF & OCM-21) Should compostable organic waste material begin to generate odors from water ponding after a rain event, options for reducing odors would include but not be limited to the following: inspect piles after major rain events; grade the site to eliminate puddles, depressions and wheel ruts where water collects; absorb ponded water with wood chips/other absorbent, fill potholes with soil/pad material.

(Air Quality-Odor Control PDF & OCM-22) Should compostable organic waste material begin to generate odors after as a result of un-composted material in aisles between the windrows, options for reducing odors would include but not be limited to the following: clean aisles of spilled material (particularly at the end of each day; mechanically sweep paved areas at the end of each shift; apply water and/or neutralizer to reduce dust during dry conditions.

(Air Quality-Odor Control PDF & OCM-23) Should compostable organic waste material begin to generate odors during curing, options for reducing odors would include but not be limited to the following: increase processing time prior to moving to curing; decrease curing pile size; review moisture content of in-process compost; aerate curing piles; screen after curing to maintain porosity.

(Air Quality-Odor Control PDF & OCM-24) Should collected leachate and storm water in the lined pond begin to generate odors, options for reducing odors would include but not be limited to the following: review NPDES procedures to minimize storm water contact with organic materials; remove particles from water draining into the lined pond; filter stormwater through a filter berm or sock; clean out lined pond during the dry season; reapply collected leachate and storm water to active compost piles; install aeration system.

The proposed composting operation will be on top of an area of the landfill not currently in use for landfill operations. The area is underlain by landfilled refuse. The existing landfill gas collection system serves every part of the landfill, including the portion underneath the proposed project site. The composting operation will not impact OCWR's ability to perform landfill gas monitoring in compliance with SCAQMD Section 1150.1 requirements. No significant landfill gas migration or odor impacts will occur. No impacts to the landfill gas collection system will occur as a result of the proposed composting operation.

2.4 Biological Resources *Would the project:*	**Potentially Significant Impact**	**Less than Significant With Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

2.4 BIOLOGICAL RESOURCES. Would the project:

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Services?

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

c. Have a substantial effect on state or federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

f. Conflict with provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact

The proposed Valencia Greenery will be located at the northeastern portion of the landfill in an area that is not currently being used for active landfilling, but that is entirely underlain by landfilled refuse. The additional water tanks will be placed in two locations that have been previously disturbed for landfill operations – the three new operational water tanks will be placed along with the existing landfill operational water tanks, and the three new fire water tanks will be placed along an access road adjacent to existing communication towers. There will be no disturbance to biological resources. Therefore, there will be no impacts to any sensitive plant or animal species. The proposed project will also not result in any impacts to riparian habitat or wetlands. The proposed project will not interfere in any way with the movement of any migratory species or impede the use of native wildlife nursery sites. In addition, the proposed project will not result in the removal of any trees, so there will be no conflicts with the County's tree protection ordinance. The proposed project is not located in an area covered by an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. The proposed project is located on the Olinda Alpha Landfill site, and will not result in the removal of any coastal sage scrub or any other native habitat; therefore no impacts will occur.

2.5 Cultural Resources *Would the project:*	**Potentially Significant Impact**	**Less than Significant With Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☐	☒

2.5 CULTURAL RESOURCES. Would the project:

a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

No Impact

The proposed project would not result in any disturbance to historical resources, as defined in Section 15064.5 of the CEQA Guidelines, as there are no historical structures located on the

proposed project site. The Valencia Greenery site is located entirely on an area of the landfill that is underlain by refuse or previously impacted by landfill operations. No impacts to historical resources will occur.

b. Cause a substantial change in the significance of an archaeological resource pursuant to Section 15064.5?

c. Disturb any human remains, including those interred outside of formal cemeteries.

No Impact

The proposed project will not result in the disturbance to any archaeological resources, nor will the proposed project result in the disturbance to any human remains. The Valencia Greenery site is located entirely on an area of the landfill that is underlain by refuse or previously impacted by landfill operations. No impacts will occur.

2.6 Energy *Would the project:*	**Potentially Significant Impact**	**Less than Significant With Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☒
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

2.6 ENERGY. Would the project:

a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

No Impact

The proposed project will not result in the wasteful, inefficient or unnecessary consumption of energy resources during construction or operation of the proposed project. The Valencia Greenery will be constructed and operated on the Olinda Alpha Landfill which is an existing landfill operation. Green waste, which will comprise the majority of material that will be composted, was already being brought to the landfill, thereby resulting in a minimal increase in energy

consumption. LSA prepared an energy analysis for the proposed Valencia Greenery operation. This study is included in **Appendix C**. The study concluded that construction activities are not anticipated to result in an inefficient use of energy, as gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the proposed project. Energy (i.e., fuel) usage on the proposed project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. During operation of the facility, energy and fuel (i.e. diesel) demand generated by delivery truck trips, off-road equipment, and the emergency backup generator associated with the proposed project would be a minimal fraction of diesel fuel consumption in California. Therefore, the proposed project not result in a substantial increase in transportation-related energy uses and would not result in the wasteful inefficient or unnecessary consumption of fuel. No impacts will occur.

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact

The proposed project will not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The California Energy Commission (CEC) approved the 2020 Integrated Energy Policy Report in March 2021. The 2020 Integrated Energy Policy Report provides the results of the CEC's assessments of a variety of energy issues facing California. Energy usage on the proposed project site during construction would be temporary in nature. In addition, once operational, the proposed project would not generate energy usage as the proposed project would be designed as a stand-alone system with a solar field to supply electric power emissions. The solar field would generate the required electrical demands. Because California's energy conservation planning actions are conducted at a regional level, and because the proposed project's total impact on regional energy supplies would be minor, the proposed project would not conflict with or obstruct California's energy conservation plans as described in the CEC's 2020 Integrated Energy Policy Report. No impacts will occur.

2.7 Geology and Soils *Would the project:*	**Potentially Significant Impact**	**Less than Significant With Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: ii) Strong seismic ground shaking?	☐	☐	☒	☐
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal system where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

2.7 GEOLOGY AND SOILS. Would the project:

a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

Less Than Significant Impact

The proposed project site is located immediately north of the active northwest trending Whittier fault. However, this active earthquake fault does not extend underneath the landfill and therefore the proposed project would not be subject to fault rupture. Although the Olinda Alpha Landfill is located within the earthquake prone southern California region, the proposed project will not expose people or structures to potential impacts pertaining to seismic ground shaking. Since earthquake-related hazards cannot be avoided in the Southern California region, the proposed project site could be subjected to ground motion. The Maximum Credible Earthquake (MCE) at this location is a moment magnitude 6.8 event on this fault, an event expected to generate peak bedrock accelerations of about 0.75g at the site; based on a yield acceleration of 0.16 g for the more critical southern facing slope, no significant seismic displacements are anticipated at the site during the MCE.[6] As such, vertical motions of great magnitude are not expected and soils or rock

[6] *Final EIR 588 for the RELOOC Strategic Plan – Olinda Alpha Landfill Implementation*, page 5.2-12, June 2004.

deposits susceptible to liquefaction or other strain-softening behavior have not been identified at the proposed project site. The proposed project will not alter the exposure of people or property to the risk of loss, injury, or death involving seismic-related activities, including local fault rupture, ground shaking, liquefaction, landslides, mudslides, or ground failure, no significant impacts will occur.

b. Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact

For a discussion of the potential for soil erosion or the loss of topsoil, see 2.10 c., below.

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?
d. Be located on expansive soils, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less Than Significant Impact

The proposed project will not be located on an unstable geologic unit. In addition, the proposed project site would not be subject to impacts resulting from on- or off-site landslides, lateral spreading, expansive soils, subsidence, liquefaction or collapse. For additional information, see 2.9a – i-iii, above. No impacts will occur.

e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal system where sewers are not available for the disposal of waste water?

No Impact

The proposed project will not result in the development or use of any septic or wastewater treatment systems. No impacts will occur.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Impact

The proposed Valencia Greenery composting operation will occur entirely on a previously disturbed area of the Olinda Alpha Landfill that is underlain by landfilled refuse. No impacts to paleontological resources will occur.

2.8 Greenhouse Gas Emissions *Would the project:*	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant effect on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

2.8 GREENHOUSE GAS EMISSIONS. Would the project:

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact

A greenhouse gas (GHG) emissions impact analysis for the proposed Valencia Greenery Composting Operation was prepared by LSA. This study is included as **Appendix C**. According to SCAQMD, a project would have less than significant GHG emissions if it would result in operational-related GHG emissions of less than 2,760 MT CO_2e per year. Based on the results of the study, Phase I of the proposed project would result in 386.6 MT CO_2e per year, and Phase II would result in 374.6 MT CO_2e per year, which would both be below the numeric threshold of 2,760 MT CO_2e per year. Therefore, operation of the proposed project would not generate significant GHG emissions that would have a significant effect on the environment.
The study by LSA included as **Appendix C** also concluded that the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, as described below.

CARB Scoping Plan

California's major initiative for reducing GHG emissions is AB 32, passed by the State legislature on August 31, 2006. AB 32 is aimed at reducing GHG emissions to 1990 levels by 2020. AB 32 requires the California Air Resource Board (CARB) both to prepare a Scoping Plan that outlines the main State strategies for meeting the 2020 deadline and to reduce GHGs that contribute to global climate change.

Executive Order B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan, to reflect the 2030 target set by EO B-30-15, which was codified by SB 32. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reduction target of at least 40 percent below 1990 levels by 2030 contained in EO B-30-15. SB 32 builds on AB 32 and keeps the State on the path toward achieving the 2050 objective of reducing emissions to 80 percent below 1990 levels.

The AB 32 Scoping Plan contains GHG reduction measures that work toward reducing GHG emissions, consistent with the targets set by AB 32 and EO B-30-15 and codified by SB 32 and AB 197. The measures applicable to the proposed project include energy efficiency measures, water conservation and efficiency measures, and transportation and motor vehicle measures, as discussed below.

Energy efficient measures are intended to maximize energy efficiency building and appliance standards, pursue additional efficiency efforts (including new technologies and new policy and implementation mechanisms), and pursue comparable investment in energy efficiency from all retail providers of electricity in California. In addition, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. The proposed project would not generate energy source emissions as the proposed project would be designed as a stand-alone system with a solar field to supply electric power emissions. Therefore, the proposed project would not conflict with any of the energy efficient measures.

Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. The proposed project would require watering to maintain moisture content; however, water would be provided by existing water trucks at the landfill. The proposed project is not expected to result in significant water usage. Therefore, the proposed project would not conflict with any of the water conservation and efficiency measures.

The goal of transportation and motor vehicle measures is to develop regional GHG emission reduction targets for passenger vehicles. Specific regional emission targets for transportation emissions would not directly apply to the proposed project. The second phase of standards will reduce GHG emissions from new cars by 34 percent from 2016 levels by 2025, resulting in a 3 percent decrease in average vehicle emissions for all vehicles by 2020. Vehicles traveling to the proposed project site would comply with the Pavley II (LEV III) Advanced Clean Cars Program. Therefore, the proposed project would not conflict with the identified transportation and motor vehicle measures.

Accordingly, as demonstrated above, the proposed project would comply with existing State regulations adopted to achieve the overall GHG emission reduction goals identified in AB 32, the AB 32 Scoping Plan, EO B-30-15, SB 32, and AB 197.

Pursuant to AB 32 and other laws and regulations mentioned in the GHG emissions impact analysis, composting is viewed as a very positive step for reducing GHG emissions in California

by removing some of the organic waste materials from landfills that would otherwise be generating methane. In fact, the 2017 CARB Scoping Plan references composting as a strategy to meet GHG reduction goals in the state, particularly referencing SB 1383 for the diversion of organic materials from landfills to reduce methane emissions. The Valencia Greenery is being developed to assist in meeting these goals.

SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

SCAG's 2020–2045 RTP/SCS was adopted September 3, 2020. SCAG's RTP/SCS identifies that land use strategies that focus on new housing and job growth in areas served by high-quality transit and other opportunity areas would be consistent with a land use development pattern that supports and complements the proposed transportation network. The core vision in the 2020–2045 RTP/SCS is to better manage the existing transportation system through design management strategies, integrate land use decisions and technological advancements, create complete streets that are safe to all roadway users, preserve the transportation system, and expand transit and foster development in transit-oriented communities. The 2020–2045 RTP/SCS contains transportation projects to help more efficiently distribute population, housing, and employment growth, as well as a forecasted development pattern that is generally consistent with regional-level General Plan data. The forecasted development pattern, when integrated with the financially constrained transportation investments identified in the 2020–2045 RTP/SCS, would reach the regional target of reducing GHG emissions from autos and light-duty trucks by 8 percent per capita by 2020 and 19 percent by 2035 (compared to 2005 levels). The 2020–2045 RTP/SCS does not require that local General Plans, Specific Plans, or zoning be consistent with the 2020–2045 RTP/SCS but provides incentives for consistency for governments and developers.

Implementing SCAG's RTP/SCS will greatly reduce the regional GHG emissions from transportation, helping to achieve statewide emission reduction targets. The proposed project would not conflict with the stated goals of the RTP/SCS; therefore, the proposed project would not interfere with SCAG's ability to achieve the region's GHG reduction targets at 8 percent below 2005 per capita emissions levels by 2020 and 19 percent below 2005 per capita emissions levels by 2035, and it can be assumed that regional mobile emissions will decrease in line with the goals of the RTP/SCS. Furthermore, the proposed project is not regionally significant per State CEQA Guidelines Section 15206, and, as such, it would not conflict with the SCAG RTP/SCS targets, since those targets were established and are applicable on a regional level.

The proposed project would implement an organic waste composting operation at the Olinda Alpha Landfill consistent with State requirements for solid waste diversion. Based on the nature of the proposed project, it is anticipated that implementation of the proposed project would not interfere with SCAG's ability to implement the regional strategies outlined in the RTP/SCS. Therefore, the proposed project would not conflict with an adopted plan, policy, or regulation pertaining to GHG emissions. Therefore, impacts would be less than significant, and no mitigation is required.

The proposed composting operation will occur at an existing, active landfill. Trucks that were already bringing green waste material to the landfill will be diverted to the composting operation. At a maximum daily tonnage of 230 TPD, and using 20-ton per load end dump trucks, the

Valencia Greenery will generate approximately 12 new two-way truck trips per day, with these trucks taking finished compost to end markets. Applying a Passenger Car Equivalent (PCE) factor of 2.0 to these trips, it is anticipated that full scale operation of the composting facility will result in approximately 58 Average Daily Trips (ADT). The 58 ADT would result in an insignificant increase in GHG emissions when compared to the existing environmental setting of the Olinda Alpha Landfill operation that generates approximately 677 two-way vehicle trips per day. In addition, the new heavy equipment associated with the compost operation, which will include a windrow turner, two front loaders, a mobile screen, a cover turner (for Phase II CASP), a water truck, a dump truck, a chipper/grinder, and a conveyor associated with the 230 TPD composting operation would result in an insignificant increase in GHG emissions when compared to the existing environmental setting of the heavy construction equipment (i.e., scrapers, compactor bulldozers, water trucks, etc.) and accompanying GHG associated with the active Olinda Alpha Landfill that accepts approximately 6,850 tons of solid waste per day and approximately 5,175 tons of exempt wastes (i.e., processed green material for erosion control, asphalt and soil) per day.

The proposed Valencia Greenery composting operation will therefore result in a less than significant impact from GHG emissions.

2.9 Hazards and Hazardous Materials *Would the project:*	**Potentially Significant Impact**	**Less than Significant With Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

2.9 HAZARDS & HAZARDOUS MATERIALS. Would the project:

a. Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Less Than Significant Impact

The proposed Valencia Greenery will not result in the use or transport of hazardous materials. The proposed project will result in an organic waste composting operation. The proposed composting operation will generate leachate from the composting process which will be collected and reused in the composting operation. Heavy construction equipment used in the composting operation will be properly maintained so that there are no major spills or leaks of diesel fuel, oil or other fluids used in the standard operation of the heavy construction equipment that will be used at the composting operation. A spill response plan will be implemented in compliance with NPDES requirements.

While the environmental analysis above did not conclude that the proposed composting operation will result in a significant environmental impact to this environmental resource, in

order to further reduce the proposed project's less than significant impacts, OCWR has added the following PDF & OCM. All of these PDFs & OCMs are also included in the MMRP and will also be incorporated into the RCSI, to be reviewed and approved by the Orange County Health Care Agency, Environmental Health Division, acting in its capacity as the Orange County Solid Waste LEA for CalRecycle. The RCSI is the key engineering, permitting, construction and operations document that the LEA will rely upon when issuing the Solid Waste Facility Permit for the Valencia Greenery Composting Operation.

(Hazards and Hazardous Materials – Hazardous Waste Exclusion and Control PDF & OCM-1) The existing hazardous waste exclusion and load-checking program for the Olinda Alpha Landfill will also be used for the proposed composting operation. Loads are inspected both at the fee booth and during unloading. If any hazardous materials are discovered in loads at the fee booth, the hauler will be turned away from the landfill and provided with information regarding acceptable hazardous waste disposal facilities. Any hazardous wastes that are discovered after unloading, if safe to handle, will be stored at the temporary hazardous waste storage area at the landfill, before being transported off-site by a certified hazardous waste hauler for proper disposal.

(Hazards and Hazardous Materials – Exclusion of Unacceptable Solid Wastes PDF & OCM-1) For the composting operation, all compostable organic waste materials received will be initially be processed, ground and screened prior to delivery to the composting operation to eliminate most non-compostable organic waste solid waste materials prior to delivery to the composting operation. However, if contaminated loads are received at the composting operation that contain unacceptable solid wastes, these loads will be immediately collected and transported to the landfill working face for disposal. When OCWR begins chipping and grinding and use of a conveyor to recover other uncontaminated compostable organic waste materials from the landfill for composting (i.e. wood waste), OCWR will only recover materials that are not highly odorous. Highly odorous materials will continue to be buried at the landfill and not used in the composting operation.

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact

The proposed Valencia Greenery composting operation will be located within the Olinda Alpha Landfill site boundary. The Olinda Alpha Landfill is located within a relatively remote location. The proposed project will not be located within one-quarter mile of an existing or proposed school. No impacts will occur.

d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact

The proposed project be located within the Olinda Alpha Landfill site boundary. The Olinda Alpha Landfill is not on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. No impacts will occur.

e. For a project located within an airport land use plan or, where such plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact

The Olinda Alpha Landfill site, and therefore the proposed project site, is not located within an airport land use plan area or within two miles of an airport. No impacts will occur.

f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact

The proposed project will not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. The proposed Valencia Greenery composting operation will be located at the Olinda Alpha Landfill. Access to and from the Olinda Alpha Landfill is via SR-57, Imperial Highway, and Valencia Avenue. During an emergency, such as a regional fire, vehicles exiting the landfill will not interfere or impede nearby resident vehicles that may be attempting to leave the area.

g. Expose people or structures, either directly or indirectly, to a significant risk or loss, injury or death involving wildland fires?

Less Than Significant Impact

The Olinda Alpha Landfill site is located within a high fire hazard area, as designated by the *County of Orange General Plan*. However, the Valencia Greenery composting operation will be located on the active Olinda Alpha Landfill that is completely disturbed. There will be no native vegetation located in close proximity to the unloaded compostable organic waste, the windrows, CASP piles, curing piles or finished compost storage areas. The potential for the compost piles to generate fires will be minimized by the implementation of proper compost operation practices such as maintaining the proper moisture content in the compost piles, turning the compost piles at the correct frequency, monitoring the temperature inside the compost piles, ensuring that the compost piles do not exceed the required height, width and length dimensions, maintaining proper spacing between the compost piles and ensuring proper access for firefighting equipment. In the event that a compost pile does catch on fire, the fire will be immediately put out (i.e., smothered) by the loaders at the composting operation. The water truck can also be used if needed.

The Valencia Greenery will be designed and operated to meet all OCFA requirements, which are discussed in the project description section of this Initial Study. OCWR and its consultants have worked closely with OCFA staff to ensure that the proposed Valencia Greenery composting operation will be designed to meet all OCFA requirements.

Methane generated by the underlying landfill area will not result in surface fires at the composting area through the continued effective maintenance and monitoring of the landfill gas collection system.

The proposed project will therefore not expose people or structures, either directly or indirectly, to a significant risk or loss, injury or death involving wildland fires. No significant impacts will occur.

While the environmental analysis above did not conclude that the proposed composting operation will result in a significant environmental impact to this environmental topic, in order to further reduce the proposed project's less than significant impacts, OCWR has added the following PDF & OCM. All of these PDF & OCM are also included in the MMRP and will also be incorporated into the RCSI, to be reviewed and approved by the Orange County Health Care Agency, Environmental Health Division, acting in its capacity as the Orange County Solid Waste LEA for CalRecycle. The RCSI is the key engineering, permitting, construction and operations document that the LEA will rely upon when issuing the Solid Waste Facility Permit for the Valencia Greenery Composting Operation.

(Hazards and Hazardous Materials-Fire Prevention and Protection PDF & OCM-1) OCWR shall provide fire prevention, protection and control measures, including, but not limited to, temperature monitoring of windrows and piles, adequate water supply for fire suppression, and the isolation of potential ignition sources from combustible materials. A strip of sufficient width of cleared land must be maintained along the perimeter of site operations to act as a fire barrier or break. OCWR will consult with OCFA to determine the size of the fire break.

(Hazards and Hazardous Materials-Fire Prevention and Protection PDF & OCM-2) The composting operation will be designed and operated to meet all OCFA fire flow and fire safety requirements. This will include but not be limited to the spacing between windrows; the number, width and length of fire lanes; the distance of the windrows and material storage areas to flammable vegetation, a water tank, water pumps, water lines and fire hydrants.

(Hazards and Hazardous Materials-Fire Prevention and Protection PDF & OCM-3) All 20-foot wide compost pile areas will be surrounded by 20-foot wide fire access lanes. Perimeter roads will be a minimum width of 20 feet and expand to a minimum width of 40 feet at hydrant locations to accommodate fire response.

2.10 Hydrology and Water Quality *Would the project:*	**Potentially Significant Impact**	**Less than Significant With Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner, which would: (i) result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner, which would: (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner, which would: (iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner, which would: (iv) Impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

2.10 HYDROLOGY & WATER QUALITY. Would the project:

a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less Than Significant Impact

The proposed Valencia Greenery composting operation will routinely generate leachate that must and will be captured. In addition, during storm events, leachate and runoff that has come into contact with organic waste and compost must be properly conveyed and captured.

Appropriate asphalt material will be placed over the entire landfill area where the composting will occur so that there will be no impacts to the underlying waste prism. The design of the proposed composting operation shall account for the underlying refuse and comply with any landfill-related regulations.

For the Valencia Greenery, the site will be graded such that the center of each compost pile will be located on a high point or BMPs will be instituted around the piles to divert flows away from the compost. The compost deck will be graded at 2 percent toward the access lanes which will be graded at 2 percent to the southeast, as shown on **Figure 4**, conveying flows to an approximate 8.9-acre feet lined composting operation pond, that will be constructed to capture storm water runoff and leachate from the composting operation. The composting operation lined pond dimensions were determined based on NOAA precipitation data based for a 25-year, 24-hour storm event (per Order WQ 2015-0121-DWQ, General Waste Discharge Requirements for Composting Operations) and the appropriate tributary boundary of the compost area. The compost operating area will require perimeter berms with a minimum 2-foot height, depending on the location, to convey flows from a 25-year, 24-hour storm to the lined pond. In addition, in accordance with standard engineering practices, the pond will be designed to accommodate an additional two feet of freeboard above the water level of the design storm event to accommodate waves and splashing from water flows. OCWR shall fully contain all surface water runoff and leachate resulting from the composting operation. Collected surface water runoff and leachate will be collected on-site from the composting operation lined pond, and reused with the composting operation. Collected surface water runoff and leachate will not be discharged to the landfill storm water drainage system. With the incorporation of these design features (i.e. lined pond and berms), the proposed composting operation will not generate polluted runoff to off-site storm water drainage systems, nor will the composting operation degrade ground or surface water quality.

The proposed project will not result in the violation of any water quality standards or waste discharge requirements. For the Valencia Greenery composting operation, OCWR will be applying for coverage under Order WQ 2015-0121-DWQ, General Waste Discharge Requirements for Composting Operations. In addition, OCWR will obtain a Notice of Intent (NOI) for Construction Activities and an NOI for Industrial Activities under the National Pollutant Discharge Elimination Systems Permit (NPDES), issued by the California Regional Water Quality Control Board, Santa Ana Region (RWQCB). In addition, to ensure that the proposed composting operation will not substantially degrade water quality or provide substantial additional sources of polluted runoff to existing drainage, OCWR will be required to implement a project specific Storm Water Pollution Prevention Plan (SWPPP) consisting of several BMPs. BMPs are used to control surface water runoff, erosion and siltation at the proposed project site during the construction of the proposed facility.

While the environmental analysis above did not conclude that the proposed composting operation will result in a significant environmental impact to this environmental topic, in order to further reduce the proposed project's less than significant impacts, OCWR has added the following PDF & OCM. All of these PDF & OCM are also included in the MMRP and will also be incorporated into the RCSI, to be reviewed and approved by the Orange County Health Care Agency, Environmental Health Division, acting in its capacity as the Orange County Solid Waste LEA for CalRecycle. The RCSI is the key engineering, permitting, construction and operations document that the LEA will rely upon when issuing the Solid Waste Facility Permit for Valencia Greenery Composting Operation.

(Hydrology and Water Quality PDF & OCM-1) Prior to construction of storm water containment and treatment facilities and prior to grading of the composting operation project site, OCWR shall prepare a Storm Water Pollution Prevention Plan (SWPPP) to obtain coverage under the State-wide general construction storm water pollution National Pollutant Discharge Elimination System (NPDES) permit. The BMPs outlined in the SWPPP shall be implemented in project construction and operations.

BMPs are used to control surface water runoff, erosion and siltation at the project site during the construction of the proposed facility. Typical BMPs are listed below:

- Fuel delivery or dispensing will be observed by facility personnel. Fuel delivery or dispensing that is not observed by facility personnel is prohibited.

- Vehicles and equipment will be kept in good working order. Equipment and vehicles with leaks are to be repaired promptly by trained mechanics.

- Equipment and parts with a potential to impact storm water are to be placed under tarps as needed during storm events.

- Spills will be reported and proper spill response procedures will be promptly implemented. Should such a situation occur, soils affected by spills and leaks from landfill equipment will be removed. Proper clean-up procedures will first involve removal of the impacted soil layer. The soil will then be placed in 55-gallon drums for off-site treatment and disposal.

- Berms, silt fences, sandbags, hay bales, wattles, geo-logs and straw mats will be installed during construction to reduce erosion.

- BMPs include both non-structural and structural controls. Non-structural controls will include BMPs such as preventative maintenance, proper materials handling, spill prevention and control and litter control. Structural controls would include BMPs such as overhead coverage, secondary containment, roof gutters, paved surfaces designed to maintain positive drainage and curbs.

(Hydrology and Water Quality PDF & OCM-2) Prior to operation of the composting operation, OCWR shall apply for coverage under the State-wide general storm water NPDES permit for industrial facilities or apply for an individual facility storm water NPDES permit.

(Hydrology and Water Quality PDF & OCM-3) OCWR shall conduct sampling and testing of windrow leachate and runoff for the presence of any hazardous substances at concentrations above those effluent standards set forth in the project's NPDES permit.

(Hydrology and Water Quality PDF & OCM-4) OCWR shall fully contain all surface water runoff and leachate resulting from the composting operation. Collected surface water runoff and leachate will be collected on-site from the composting operation lined pond, and reused with the composting operation.

(Hydrology and Water Quality PDF & OCM-5) Testing of finished compost (i.e., after the curing process is complete) for pathogens, metals and physical contamination will be performed in accordance with CCR Title 14 requirements.

(Hydrology and Water Quality PDF & OCM-6) Although OCWR has no plans to use additives or amendments as part of the composting operation at this time, should this change in the future, any additives or amendments that will be used shall be non-toxic and subject to the approval of the RWQCB and the LEA prior to their use.

(Hydrology and Water Quality PDF & OCM-7) For the Valencia Greenery, the site will be graded such that the center of each compost pile will be located on a high point and the compost deck will be graded at 2 percent toward the access lanes which will be graded at 2 percent to the southeast, as shown on **Figure 4**, conveying flows to an approximate 8.9-acre feet lined composting operation pond, that will be constructed to capture storm water runoff and leachate from the composting operation. The composting operation lined pond dimensions were determined based on NOAA precipitation data based for a 25-year, 24-hour storm event (per Order WQ 2015-0121-DWQ, General Waste Discharge Requirements for Composting Operations) and the appropriate tributary boundary of the compost area. In addition, in accordance with standard engineering practices, the pond will be designed to accommodate an additional two feet of freeboard above the water level of the design storm event to accommodate waves and splashing from water flows.

b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant Impact

The proposed project site does not overlie a major groundwater basin identified by the California Department of Water Resources, but is part of the watershed tributary to the La Habra-Yorba Linda Groundwater Basin, which is located south of the Whittier Fault Zone. There are no known beneficial uses of the low-yield groundwater underlying the landfill site.[7] The proposed project does not include any provisions which will require the direct or indirect use of groundwater and, as a result, is not expected to deplete groundwater supplies, influence groundwater quality, or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or the lowering of the local groundwater table level. The proposed project would not result in the depletion of groundwater supplies and would not interfere with groundwater recharge.

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:

(i) Result in substantial erosion or siltation on- or off-site?

[7] GeoSyntec Consultants, *Semi-Annual Water Quality Monitoring Report (October 2002 – March 2003) and Annual Summary Report (April 2002 – March 2003) Olinda Alpha Landfill*, p. 5, April 2003.

(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

(iv) Impede or redirect flood flows?

Less Than Significant Impact

While the proposed Valencia Greenery composting operation will result in changing the existing drainage pattern on the top deck of a 9.0-acre portion at the northeastern portion of the Olinda Alpha Landfill only, this will not result in a substantial alteration of the existing drainage pattern of the site or area. At the proposed Valencia Greenery composting operation site, the proposed project will redirect storm flows that are currently being directed to the landfill surface water collection system to a lined pond that is described above. The proposed project would not result in a substantial increase in the rate or amount of surface water runoff. All surface water flows at the Valencia Greenery composting operation will be conveyed by berms to the lined pond, collected, and then reused at the composting operation. The proposed project would not result in substantial erosion or siltation on- or off-site. In addition, the proposed project will not result in the alteration of the course of a stream or river.

The proposed project does not include the development of any new housing. In addition, the proposed project site is not located within a 100- or 500-year flood zone (Zone X) as designated by the Federal Emergency Management Agency[8]. The proposed project will not expose people or structures to flooding risks. In addition, the Olinda Alpha Landfill site is not located within a dam inundation area.

d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Impact

The Olinda Alpha Landfill site is not located in close proximity to the Pacific Ocean or any large inland water bodies. The proposed project would not result in any impacts associated with seiche, tsunami or mudflow.

e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

[8] U.S. Federal Emergency Management Agency, *Federal Emergency Management Agency National Flood Insurance Program Map Nos. 06059C0075F (November 3, 1993) and 066059C0076E (September 15, 1989),* (Washington, D.C.: U.S. Federal Emergency Management Agency).

No Impact

The proposed Valencia Greenery composting operation will not result in the obstruction of any water quality control plan or sustainable groundwater management plan.

2.11 Land Use and Planning *Would the project:*	**Potentially Significant Impact**	**Less than Significant With Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

2.11 LAND USE & PLANNING. Would the project:

a. Physically divide an established community?

b. Cause a significant environmental impact due to a conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact

The proposed project site is located within the Olinda Alpha Landfill site. The Olinda Alpha Landfill site is located on unincorporated County property to the north of the City of Brea (within the City's Sphere of Influence). The Orange County General Plan designation for the Olinda Alpha Landfill site is 4LS (Public Facilities; Landfill Site). Because the property is owned by the County of Orange, the proposed project is exempt from the provisions of the Orange County Zoning Code, pursuant to Orange County Codified Ordinance, Ordinance No. 99-02, Section 2, Section 7-9-20(i). The proposed project will not physically divide an established community, nor will the proposed project conflict with any land use plans, policies or ordinances adopted for the purpose of avoiding or mitigating an environmental effect. No impacts will occur.

2.12 Mineral Resources *Would the project:*	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

2.12 MINERAL RESOURCES. Would the project:

a. Result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state?
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact

The proposed project would not result in any impacts to mineral resources. The Olinda Alpha Landfill site does not contain mineral resources that are either designated as important to the State of California or are considered to be of local importance. In addition, the landfill site is not designated as a mineral resource recovery facility.

2.13 Noise *Would the project result in:*	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

2.13 NOISE. Would the project result in:

a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

b. Generation of excessive ground borne vibration or ground borne noise levels?

Less than Significant Impact

LSA prepared a noise and vibration impact analysis for the proposed Valencia Greenery Composting Operation. This study is included as **Appendix F**. The study concludes that the proposed project would not result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the proposed project in excess of standards established in the local general plan or noise ordinance. The proposed Valencia Greenery composting operation will operate during the daytime only and will not exceed the maximum noise ordinance levels specified by the County of Orange or the City of Brea. In addition, the noise and vibration study shows that the proposed project will not result in the generation of temporary or permanent excessive ground borne vibration or ground borne noise levels.
The proposed composting operation will occur at an existing, active landfill. Trucks that were already bringing green waste material to the landfill will be diverted to the composting operation. At a maximum daily tonnage of 230 TPD, and using 20-ton per load end dump trucks, the Valencia Greenery will generate approximately 12 new two-way truck trips per day, with these trucks taking finished compost to end markets. Access to and from the Olinda Alpha Landfill is via SR-57, Imperial Highway, and Valencia Avenue. Applying a Passenger Car Equivalent (PCE) factor of 2.0 to these trips, it is anticipated that full scale operation of the composting facility will result in approximately 58 Average Daily Trips (ADT). The 58 ADT would result in an insignificant increase in noise and vibration impacts when compared to the existing environmental setting of the Olinda Alpha Landfill operation that generates approximately 677 two-way vehicle trips per day. In addition, the new heavy equipment associated with the compost operation, which will include a windrow turner, two front loaders, a mobile screen, a cover turner (for Phase II CASP), a water truck, a dump truck, a chipper/grinder, and a conveyor associated with the 230 TPD composting operation would result in an insignificant increase in noise and vibration impacts when compared to the existing environmental setting of all of the heavy construction equipment (i.e., scrapers, compactor bulldozers, water trucks, etc.) associated

with the active Olinda Alpha Landfill that accepts approximately 6,850 tons of solid waste per day and approximately 5,175 tons of exempt wastes (i.e., processed green material for erosion control, asphalt and soil) per day.

While the environmental analysis above did not conclude that the proposed composting operation will result in a significant environmental impact to this environmental topic, in order to further reduce the proposed project's less than significant impacts, OCWR has added the following PDF & OCM. All of these PDF & OCM are also included in the MMRP and will also be incorporated into the RCSI, to be reviewed and approved by the Orange County Health Care Agency, Environmental Health Division, acting in its capacity as the Orange County Solid Waste LEA for CalRecycle. The RCSI is the key engineering, permitting, construction and operations document that the LEA will rely upon when issuing the Solid Waste Facility Permit for the Valencia Greenery Composting Operation.

(Noise Control PDF & OCM-1) Construction activities will be limited to between the hours of 7:00 a.m. and 7:00 p.m. on Mondays through Saturdays. The County of Orange shall have the discretion to permit construction activities to occur outside of the allowable hours if compelling circumstances warrant such an exception (e.g., weather conditions to pour concrete).

(Noise Control PDF & OCM-2) Construction contractors shall limit haul truck deliveries to between the hours of 6:00 a.m. and 7:00 p.m. on Mondays through Saturdays, with a start time consistent with the start of site operational hours (except in the case of urgent necessity). The contractor shall prepare a haul route exhibit for review and approval by OCWR prior to commencement of construction activities. The haul route exhibit shall design delivery routes to minimize the exposure of sensitive land uses or residential dwellings to delivery truck-related noise. Per the County's Cooperative Agreement with the City of Brea, the designated access roads to the Olinda Alpha Landfill are SR-57, Imperial Highway, and Valencia Avenue. These same roadways will be used by vehicles going to and from the composting operation during both the construction and operational phases of the project.

(Noise Control PDF & OCM-3) All construction equipment shall use noise-reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.

(Noise Control PDF & OCM-4) All trucks, windrow turners, loaders and any other heavy equipment used during both the construction and operational phases of the project shall be operated with properly operating and well-maintained mufflers.

(Noise Control PDF & OCM-5) Truck drivers shall turn off engines when not in use; diesel trucks servicing the project shall not idle for more than five (5) minutes.

(Noise Control PDF & OCM-6) OCWR shall post telephone numbers at the entrance of the composting facility to allow members of the public to contact the composting facility superintendent to report noise complaints.

(Noise Control PDF & OCM-7) The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and most noise-sensitive receptors nearest the project site during all project construction.

(Noise Control PDF & OCM-8) The construction contractor shall place all stationary construction equipment so that the emitted noise is directed away from the sensitive receptors nearest the project site.

c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact

The proposed project site is not located within the vicinity of a private airstrip. The proposed project site is approximately 10 mi northeast of Fullerton Municipal Airport, which is the closest airport, and does not fall within the Fullerton Municipal Airport Planning Area. Due to the distance of the airport from the proposed project site, there would be no noise-related impacts due to airport activities following implementation of the proposed project. The proposed project would not expose any noise sensitive receptors to excessive noise levels. No impacts will occur.

2.14 Population and Housing *Would the project:*	**Potentially Significant Impact**	**Less than Significant With Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

2.14 POPULATION AND HOUSING. Would the project:

a. Induce substantial unplanned population growth in the area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact

The proposed project would not induce substantial unplanned population growth, either directly or indirectly. The proposed project would not result in the development of any new homes or businesses, nor would the proposed project result in the expansion of any major utilities or public facilities that would serve future population or employment growth. The proposed project is designed to divert a portion of the existing solid waste disposal materials from the disposal stream and would not cause the landfill to accept a greater or new amount of solid waste material. No impacts will occur.

b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact

The proposed Valencia Greenery Composting Operation will be developed at an existing landfill site. The proposed project will not result in the displacement of existing people, housing or businesses as a result of the proposed project. No impacts will occur.

2.15 Public Services *Would the project:*	**Potentially Significant Impact**	**Less than Significant With Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a-i) Fire protection?	☐	☐	☐	☒
a-ii) Police protection?	☐	☐	☐	☒
a-iii) Schools?	☐	☐	☐	☒
a-iv) Parks?	☐	☐	☐	☒
a-v) Other public facilities?	☐	☐	☐	☒

2.15 PUBLIC SERVICES. Would the project:

a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

i) Fire protection?

ii) Police protection?

iii) Schools?

iv) Parks?

v) Other public facilities?

No Impact

The proposed Valencia Greenery composting operation will be located at the existing Olinda Alpha Landfill site. The proposed project would not result in new residential, commercial or industrial developments that would increase the need for fire protection and police protection services, the building of new schools or parks or the need for either expanded or enhanced public facilities and services. No impacts will occur.

2.16 Recreation *Would the project:*	**Potentially Significant Impact**	**Less than Significant With Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

2.16 RECREATION. Would the project:

a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse effect on the environment?

No Impact

The proposed Valencia Greenery composting operation will be located at the existing Olinda Alpha Landfill site. The proposed project would not result in new residential, commercial or industrial developments that would increase the need for new recreational facilities or increase the use of existing recreational facilities. No impacts will occur.

2.17 Transportation *Would the project:*	**Potentially Significant Impact**	**Less than Significant With Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☐	☒

2.17 TRANSPORTATION/TRAFFIC. Would the project:

a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064, subdivision (b)?

Less than Significant Impact

The proposed Valencia Greenery Composting Operation will not conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle or pedestrian facilities, nor would the proposed project conflict with or be inconsistent with CEQA Guidelines section 15064, subdivision (b). The proposed project will occur at an existing solid waste landfill operation and will not interfere or impact any future plans for the use of railway or

busing by residents nor will the proposed project result in a significant impact to GHG emissions or climate change.

LSA prepared a transportation impact analysis for the proposed Valencia Greenery Composting Operation. This study is included as **Appendix G**. The study concludes that the proposed project would not result in any significant transportation or traffic impacts, associated with a maximum daily tonnage 230 TPD composting operation. The proposed composting operation will occur at an existing, active landfill. Trucks that were already bringing green waste material to the landfill will be diverted to the composting operation. Access to and from the Olinda Alpha Landfill is via SR-57, Imperial Highway, and Valencia Avenue. Vehicles using the composting operation will use these same roadways.

To assess the impact of the proposed project on the surrounding circulation system, the study calculated project trips that would be generated for temporary construction activities and typical operations based on the estimated number of trucks and workers. Typical operations of the 230 TPD composting operation include the net increase in vehicle (worker and truck) trips of the landfill resulting from the incoming feedstock and delivery of finished product in order to meet SB 1383 and AB 1594 requirements for organic waste recycling. It should be noted that the landfill was accepting approximately 746 TPD of PGM (38 loads, or 76 trips, per day using 20-ton trucks) for erosion control prior to the implementation of SB 1383 and AB 1594. In order to provide a conservative, worst-case estimate for project trip generation, the truck trips associated with erosion control (that would cease to occur with the proposed project), were not reduced from the total trip generation.

Construction and operation of the proposed project is anticipated to include the following two phases (with estimated phase durations and daily truck and worker estimates):

- Phase 1 Construction (9.5 weeks): up to 18 workers per day
- Phase 1 Operations (6 months): 5 workers and 4 delivery trucks per day
- Phase 2 Construction (13.5 weeks): up to 18 workers per day
- Overlap of Phase 1 Operations and Phase 2 Construction (9.5 weeks): up to 23 workers and 4 delivery trucks per day
- Phase 2 Operations (ongoing): 5 workers and 12 delivery trucks per day

A Passenger Car Equivalent (PCE) factor of 2.0 was applied to the delivery trucks. Truck trips for delivery of up to 230 TPD of composting feedstock and off site hauling of finished compost would be dispersed throughout the landfill hours of operation (6:00 a.m. to 4:00 p.m., Monday through Saturday). It is assumed that workers would arrive at the site prior to the a.m. peak hour and depart the site during the p.m. peak hour given the current landfill hours of operation.

The overlap of Phase 1 Operations and Phase 2 Construction represents the highest trip generation of the proposed project. During this period, the overlap of Phase 1 Operations and Phase 2 is forecast to generate 62 ADT, including 23 outbound trips in the p.m. peak hour. During typical operations of the proposed project, Phase 2 Operations would generate 58 ADT, including 4 trips (2 inbound and 2 outbound) in the a.m. peak hour and 9 trips (2 inbound and 7 outbound) in the p.m. peak hour.

Based on the low daily and peak-hour trip generation for temporary construction activities and typical operations, the proposed project is not anticipated to result in any Level of Service (LOS) or operational deficiencies to the surrounding circulation system. In addition, the anticipated trips for project construction and operations are lower than the existing erosion control trips (152 ADT, in PCEs, generated by 38 daily trucks) that would no longer occur with the proposed project, and the 58 ADT associated with the composting operation would result in an insignificant increase in traffic, when compared to the existing environmental setting of the Olinda Alpha Landfill operation that generates approximately 677 two-way vehicle trips per day.

The proposed project would not generate a substantial number of daily or peak-hour vehicle trips for construction or typical operations to warrant modifications to any transportation facilities (e.g., vehicular, transit, bicycle, or pedestrian). Therefore, the proposed project would not conflict with the City of Brea's General Plan.

In addition, The *City of Brea Transportation Impact Analysis Guidelines*[9] is the guidance document for the citywide transportation system. These guidelines are intended to ensure that the traffic impacts of a development proposal are adequately addressed. The *City of Brea Transportation Impact Analysis Guidelines* state that projects that would not exceed 50 trips during any peak hour do not require a Traffic Impact Analysis (TIA). Because the project would generate fewer than 50 peak-hour trips and fewer than 110 daily trips for temporary construction activities and typical operations, a TIA is not required. Based on the low daily and peak-hour trip generation for both construction and operations, the project is not anticipated to result in any LOS or operational deficiencies to the surrounding circulation system.

In addition, *State CEQA Guidelines* Section 15064.3, Subdivision (b), states that for land use projects, transportation impacts are to be measured by evaluating the project's Vehicle Miles Traveled (VMT), as outlined in the following:

> *Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.*

Based on the *City of Brea Transportation Impact Analysis Guidelines*, projects that generate fewer than 110 daily trips are screened from a VMT analysis. Because the project would generate fewer than 110 daily trips for construction and typical operations, it meets the City's screening criteria for a VMT analysis. As such, the project is presumed to have a less-than significant transportation impact.
According to the County's Final Draft Guidelines for Evaluating Vehicles Miles Traveled under CEQA,[10] public services and facilities that support community health, safety, or welfare are

[9] City of Brea. 2020. City of Brea Transportation Impact Analysis Guidelines. September.
[10] LSA Associates, Inc. 2020. Final Draft Guidelines for Evaluating Vehicles Miles Traveled under CEQA.

screened from a VMT analysis. Such facilities include fire stations, police/sheriff stations, jails, community centers, refuse stations, and landfills (i.e., Olinda Alpha Landfill). These facilities are already a part of the community, and as a public service, the VMT is accounted for in the existing regional average.

In addition, the OPR *Technical Advisory on Evaluating Transportation Impacts in CEQA* makes it clear that VMT is measured for "automobiles," which are "on-road passenger vehicles, specifically cars and light trucks."[11] As such, heavy trucks (delivery trucks) are not included in the VMT for the proposed project. Therefore, the proposed project is screened from a VMT analysis and would not conflict or be inconsistent with State CEQA Guidelines Section 15064.3(b). Accordingly, the impacts would be less than significant, and no mitigation is required.

While the environmental analysis above did not conclude that the proposed composting operation will result in a significant environmental impact to this environmental topic, in order to further reduce the proposed project's less than significant impacts, OCWR has added the following PDF & OCM. This PDF & OCM is also included in the MMRP and will also be incorporated into the RCSI, to be reviewed and approved by the Orange County Health Care Agency, Environmental Health Division, acting in its capacity as the Orange County Solid Waste LEA for CalRecycle. The RCSI is the key engineering, permitting, construction and operations document that the LEA will rely upon when issuing the Solid Waste Facility Permit for the Valencia Greenery Composting Operation.

(Transportation PDF & OCM-1) Trucks going to and coming from the composting operation will be required to use the same roadways that waste hauling vehicles use for accessing the landfill operation. These authorized roadways include SR-57, Imperial Highway, and Valencia Avenue.

c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact

The proposed project does not involve the design or redesign of surface transportation facilities. The proposed project, therefore, will have no impact on traffic safety.

d. Result in inadequate emergency access?

No Impact

This proposed project does not affect or change conditions related to emergency access to the landfill site or nearby uses. All emergency access routes to the proposed project site and adjacent areas would be kept clear and unobstructed during all phases of construction and operations. No roadway closures or lane closures are anticipated as part of construction of the proposed project,

[11] Governor's Office of Planning and Research (OPR). 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. December.

and traffic volumes resulting from construction and operational vehicles would not impede traffic flow on the surrounding circulation system. Therefore, no impacts to emergency access will occur.

2.18 Tribal Cultural Resources *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*	**Potentially Significant Impact**	**Less than Significant With Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a-i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	☐	☐	☐	☒
a-ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒

2.18 TRIBAL CULTURAL RESOURCES. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a-i). Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

a-ii). A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public

Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

No Impact

The proposed Valencia Greenery composting operation will be located on a 9.0-acre area at the northeastern portion of the Olinda Alpha landfill that is not currently being used for active landfilling and that is entirely underlain by refuse or that has been previously disturbed for landfilling operations. Including appurtenant structures, the full size of the compost operation will be approximately 15.3 acres. The area is completely underlain by a refuse and is entirely disturbed. Therefore, there is no possibility that tribal cultural resources will be present or will be disturbed during the construction phase of the proposed project. In compliance with AB 52, OCWR sent letters to four Native American tribes whose historic ranges included the area where the proposed project is located, in order to determine if any of these Native American tribes would request that they provide consultation on the potential for impacts to Native American tribal resources for the proposed project. These letters are included as **Appendix H**. OCWR did not receive any comments or a request for consultation from any of the four Native American tribes. As such, no impacts to tribal resources will occur.

2.19 Utilities and Service Systems *Would the project:*	**Potentially Significant Impact**	**Less than Significant With Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

2.19. UTILITIES & SERVICE SYSTEMS. Would the project:

a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

No Impact

The proposed project will not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. No impacts will occur.

b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less Than Significant Impact

Composting operations require significant volumes of water to facilitate the composting process, to regulate temperatures and to prevent fires. Water will also be required for dust control. Current potable water usage for the Olinda Alpha Landfill operation is approximately 115,000 gallons of water per day. For the proposed composting operation, it is estimated that during Phase I, the operation will use up to 54,000 gallons of potable water per day for moistening the compost piles and for dust control. It is anticipated that the CASP composting will use less water when compared to open windrow composting, and therefore it is estimated that during Phase II, the operation will use up to 35,967 gallons per day. Altogether, at a maximum, the Olinda Alpha Landfill operation and the Valencia Greenery will use approximately 169,000 gallons of potable water per day. The

water purveyor, the City of Brea, has existing infrastructure in the form of a waterline point of connection located within the OAL office parking lot. The existing elevated tanks that are used to provide water for landfill operations including dust control are filled this existing waterline. Three additional 20,000-gallon operational water tanks will be added for a total storage capacity of 80,000 to 100,000 gallons for both landfill and composting operations and will be served by this existing waterline. To meet the proposed project and landfill needs, these tanks continually refill as needed at a 200 GPM rate.

To meet the fire flow requirements, three additional fire water tanks will be added to provide a total capacity in excess of 60,000 gallons. These tanks will be located on the west side of Tower Road on the slope above the composting deck. The water flow and pressure will be provided by the elevation difference between the bottom of the tank and the composting deck, and will also be served by connecting to the existing waterline. Based on conversations between Tetra Tech BAS (i.e., environmental engineering consultant under contract with OCWR) and the City of Brea Water District, it is anticipated that existing Brea Water District infrastructure and supply can accommodate the proposed project's projected daily water demand. As such, no significant impacts are anticipated.

c. Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact

The proposed Valencia Greenery composting operation will not result in the construction of any new sewers nor will the proposed project generate sewerage wastewater. Therefore, no impacts will occur.

d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

e. Comply with federal, state and local management and reduction statutes and regulations related to solid waste?

No Impact

The proposed project will not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. The proposed project will help Orange County cities achieve their State-mandated solid waste reduction goals by diverting organic solid waste from landfill disposal, via composting. The Olinda Alpha Landfill operates in compliance with federal, state, regional and local governmental statutes and regulations, and will continue to do so with the implementation of the proposed project. No impacts will occur.

2.20 Wildfire *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:*	**Potentially Significant Impact**	**Less than Significant With Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as road, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability or drainage changes?	☐	☐	☐	☒

2.20. Wildfire. Would the project:

a. Substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact

The proposed project will not substantially impair an adopted emergency response plan or emergency evacuation plan. The proposed Valencia Greenery composting operation will be located at the Olinda Alpha Landfill which is in a relatively remote location. Access to and from the Olinda Alpha Landfill is via SR-57, Imperial Highway, and Valencia Avenue. During an emergency, such as a regional fire, vehicles exiting the landfill will not interfere or impede nearby resident vehicles that may be attempting to leave the area.

b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact

The proposed Valencia Greenery Composting Operation will not result in the development of new housing or other occupied structures. Therefore, no impacts will occur.

b. Require the installation or maintenance of associated infrastructure (such as road, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risks or that may result in temporary or ongoing impacts to the environment?

Less Than Significant Impact

The Olinda Alpha Landfill is located within a high fire hazard area, as designated by the *County of Orange General Plan*. However, the Valencia Greenery composting operation will be located on an area of the active landfill that is completely disturbed. There will be no native vegetation located in close proximity to the unloaded organic waste, the windrows, curing piles or finished compost storage areas. Methane generated by the underlying landfill area will not result in surface fires at the composting area through the continued effective maintenance and monitoring of the landfill gas collection system. The potential for the compost piles to generate fires will be minimized by implementing proper compost operation practices such as maintaining proper moisture content in the compost piles, turning compost piles at the correct frequency, monitoring the temperature inside compost piles, ensuring that compost piles do not exceed the required height, width and length dimensions, maintaining proper spacing between compost piles and ensuring proper access for fire-fighting equipment. In the event that a compost pile does catch on fire, the fire will be immediately put out (i.e., smothered) by the loaders at the composting operation, and the water truck can also be used if needed.

The Valencia Greenery will be designed and operated to meet all OCFA requirements, which are discussed in the project description section of this Initial Study. OCWR and its consultants have worked closely with OCFA staff to ensure that the proposed Valencia Greenery composting operation will be designed to meet all OCFA requirements.

The proposed project will therefore not expose people or structures, either directly or indirectly, to a significant risk or loss, injury or death involving wildland fires. No significant impacts will occur.

d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability or drainage changes?

No Impact

The proposed Valencia Greenery Composting Operation will not result in the development of new housing or other occupied structures. In addition, the proposed composting operation is not

located in close proximity to any downslope or downstream housing or structures. Therefore, the proposed project will not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability or drainage changes.

2.21 Mandatory Findings of Significance *Would the project:*		**Potentially Significant Impact**	**Less than Significant With Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		☐	☐	☐	☒
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		☐	☐	☐	☒
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		☐	☐	☐	☒

2.21 MANDATORY FINDINGS OF SIGNIFICANCE

a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

No Impact

The proposed project would not substantially reduce the habitat of a fish or wildlife population, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. In addition, the proposed project would not eliminate important examples of the major periods of California history or prehistory. The proposed Valencia Greenery composting operation will be developed at the Olinda Alpha Landfill site on an area that has been completely disturbed.

b. Does the project have possible environmental effects, which are individually limited but cumulatively considerable? ("cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

No Impact

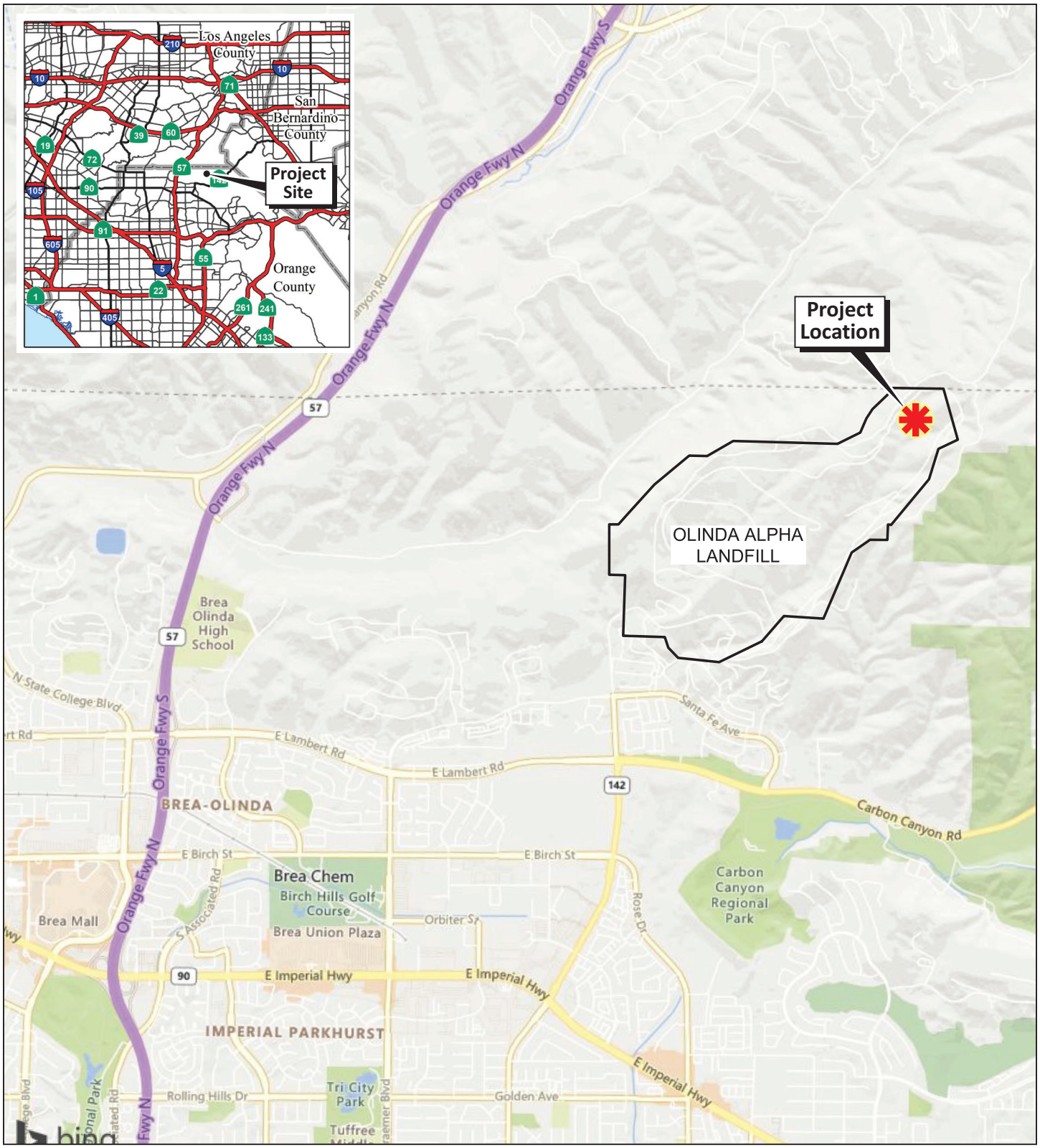
The proposed Valencia Greenery composting operation will not result in any environmental impacts that would be cumulatively considerable. The proposed project will be located on the existing Olinda Alpha Landfill operation and the proposed project would generate a very limited number of new vehicle trips, as discussed and analyzed in Section 2.17 - Transportation, above, when compared to existing vehicle trips associated with the landfill operation. As a result, impacts to transportation/traffic, air quality/GHG emissions and noise would be less than significant and would not result in cumulatively considerable significant impacts. All other environmental topics analyzed in Sections 2.1- 2.20 above, would result in impacts that are either negligible or would have effects that would only occur within the Olinda Alpha Landfill property boundary. The proposed project will not result in any cumulatively considerable environmental impacts.

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

No Impact

The analysis included in Sections 2.1 – 2.20 above shows that the proposed Valencia Greenery composting operation would not result in any substantial adverse effects on human beings, either directly or indirectly. With the implementation of Mitigation Measure AS-1 and AS-2, no significant impacts will occur.

FIGURES



LSA

FIGURE 1

N

0 1500 3000

FEET

SOURCE: Bing Maps

Valencia Greenery Project

Project Location

I:\SWT1701.05\G\Project Location.cdr (5/19/2021)

P:\OCWR\Olinda\Valencia Greenery\CAD\SheetFiles\Figures\C-801 Proposed Site Layout

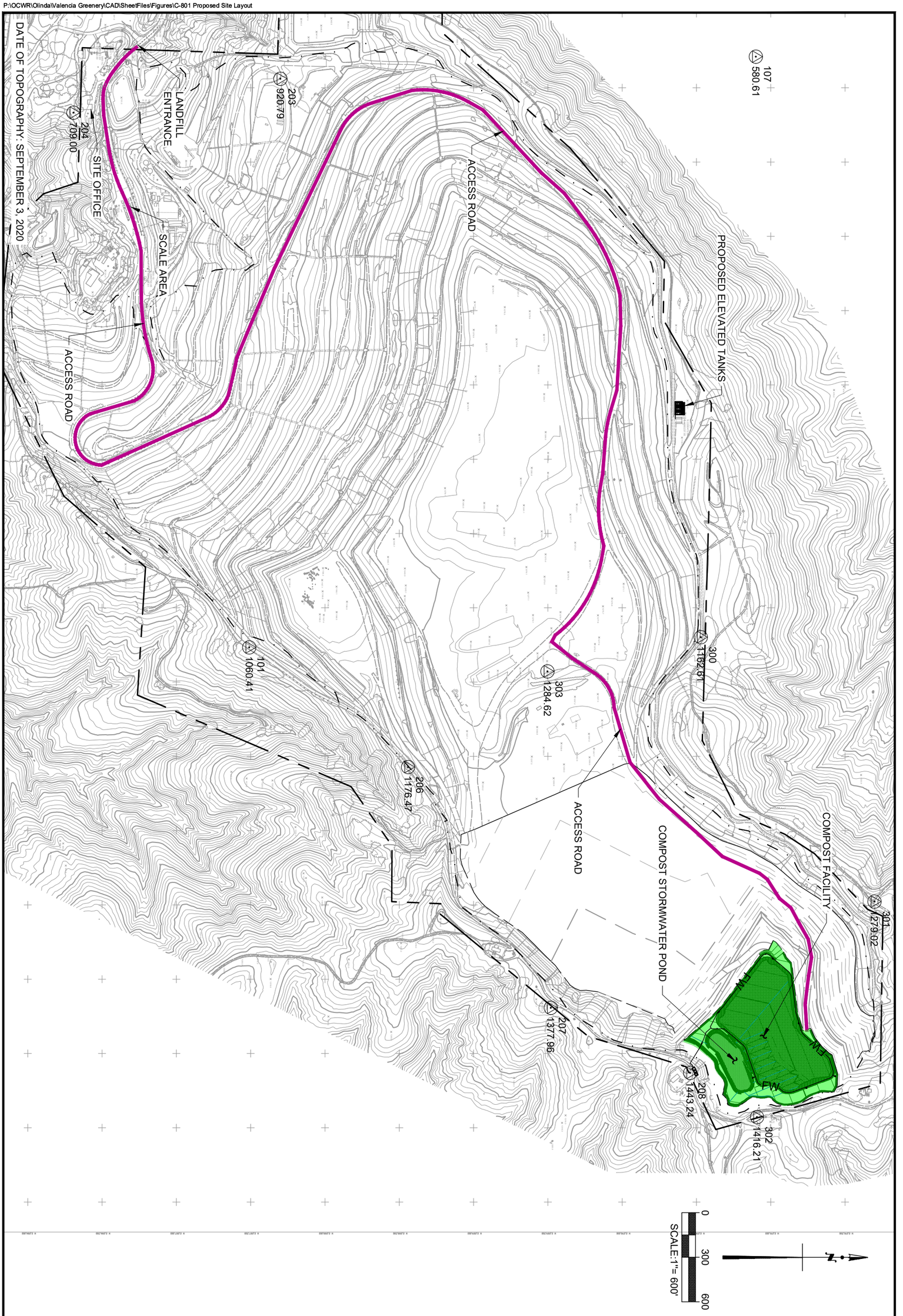
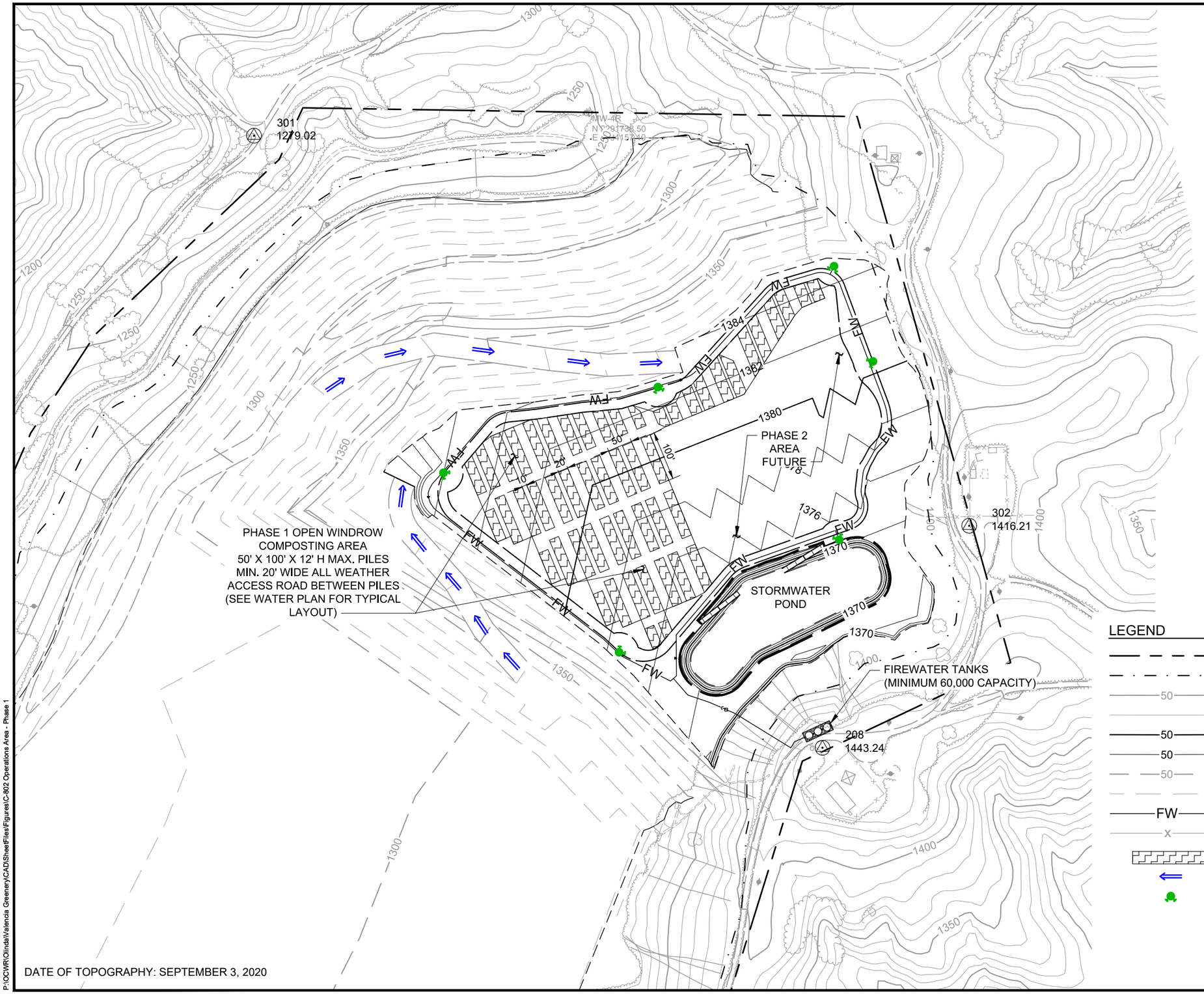


FIGURE 2	VALENCIA GREENERY	OC WASTE & RECYCLING	
	PROPOSED SITE LAYOUT	DESIGNED BY : V.H.Y.	DATE: 03-2021
		DRAWN BY : R.C.W.	PROJ. NO.: 2018-0180G
		CHECKED BY : V.B.	
		APPROVED BY : G.E.S.	

TETRA TECH
21700 Copley Drive, Suite 200
Diamond Bar, CA 91765
TEL 909.860.7777 FAX 909.860.8017



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0 100 200

SCALE:1"= 200'

DATE OF TOPOGRAPHY: SEPTEMBER 3, 2020

P:\OCWR\Olinda\Valencia Greenery\CAD\SheetFiles\Figures\C-802 Operations Area - Phase 1

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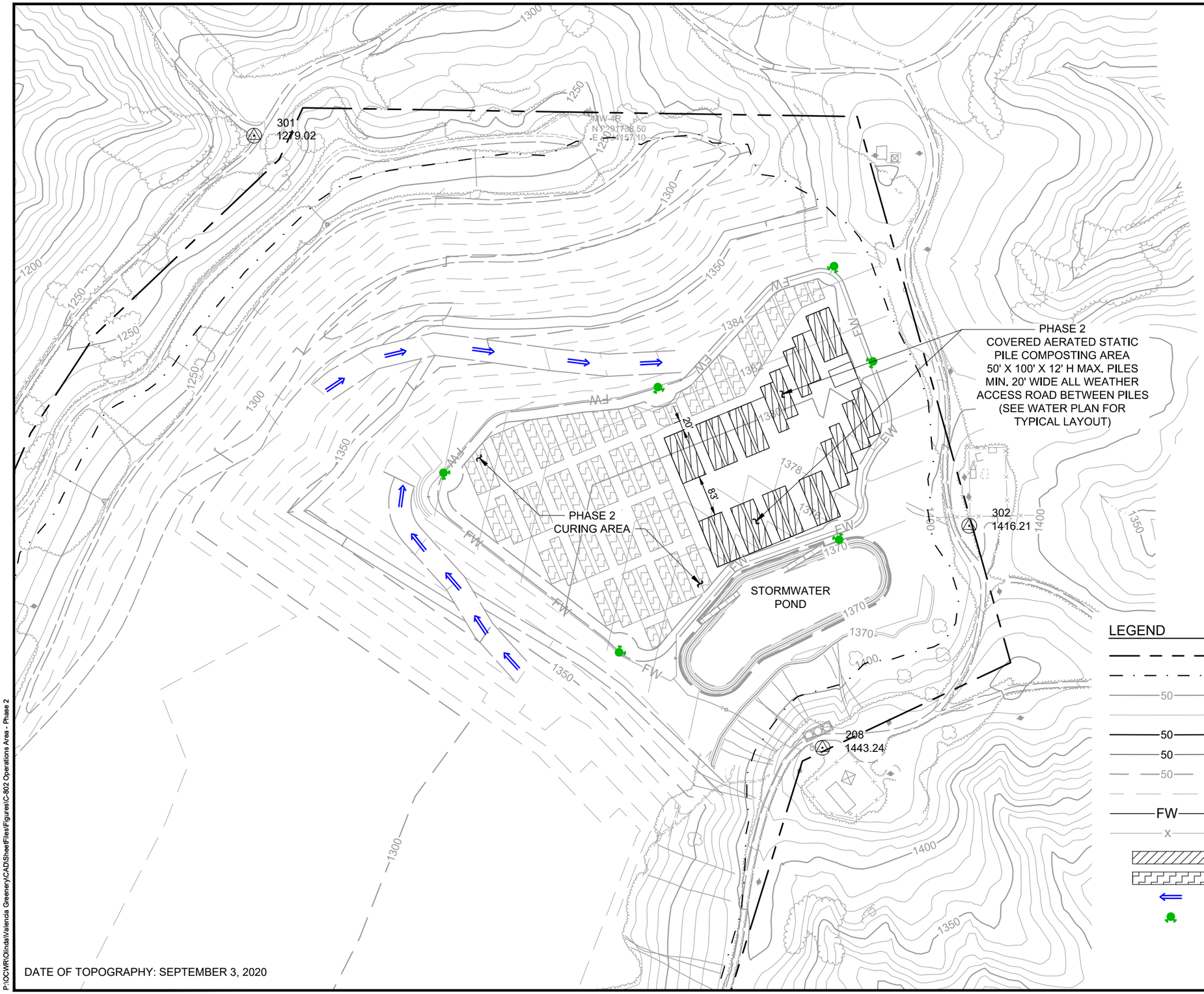
OC WASTE & RECYCLING

DESIGNED BY :	V.H.Y.	DATE:	03-2021
DRAWN BY :	R.C.W.	PROJ. NO.:	2018-0180G
CHECKED BY :	V.B.		
APPROVED BY :	G.E.S.		

VALENCIA GREENERY

OPERATIONS AREA - PHASE 1

FIGURE 3A



DATE OF TOPOGRAPHY: SEPTEMBER 3, 2020

P:\OCWR\Olinda\Valencia Greenery\CAD\SheetFiles\Figures\C-802 Operations Area - Phase 2

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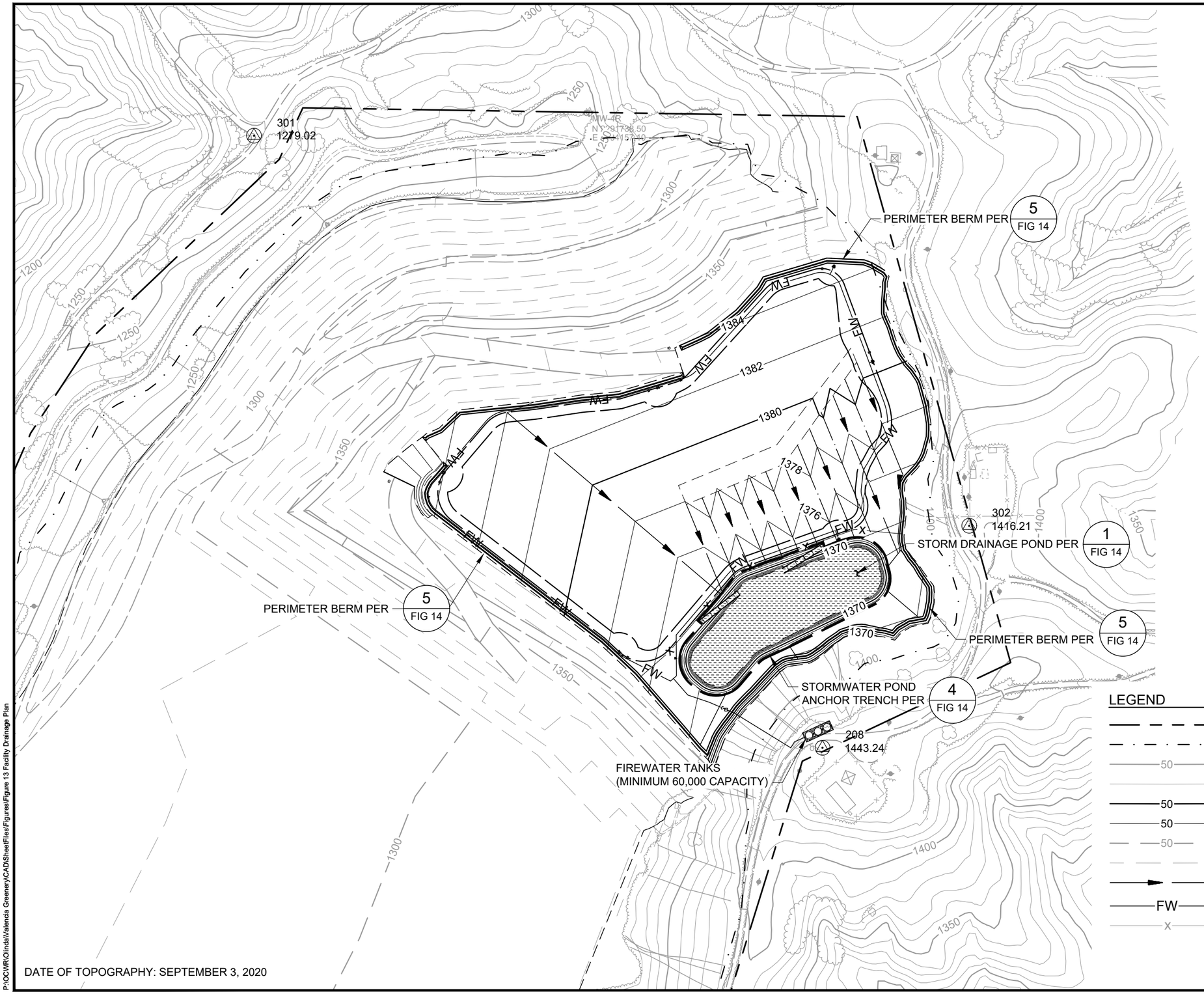
OC WASTE & RECYCLING

DESIGNED BY :	V.H.Y.	DATE:	03-2021
DRAWN BY :	R.C.W.	PROJ. NO.:	2018-0180G
CHECKED BY :	V.B.		
APPROVED BY :	G.E.S.		

VALENCIA GREENERY

OPERATIONS AREA - PHASE 2

FIGURE 3B



0 100 200

SCALE:1"= 200'

LEGEND

- APPROXIMATE LIMIT OF PROPERTY LINE
- LIMIT OF REFUSE
- 50 EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- 50 PROPOSED MAJOR CONTOUR
- 50 PROPOSED MINOR CONTOUR
- 50 CONSTRUCTED MAJOR CONTOUR
- CONSTRUCTED MINOR CONTOUR
- DIRECTION OF DRAINAGE FLOW
- FW FIRE WATER SUPPLY LINE
- X FENCE

DATE OF TOPOGRAPHY: SEPTEMBER 3, 2020

P:\OCWR\Olinda\Valencia Greenery\CAD\SheetFiles\Figures\Figure 13 Facility Drainage Plan

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OC WASTE & RECYCLING

DESIGNED BY : V.H.Y. DATE: 03-2021
DRAWN BY : R.C.W. PROJ. NO.: 2018-0180G
CHECKED BY : V.B.
APPROVED BY : G.E.S.

VALENCIA GREENERY

FACILITY DRAINAGE PLAN

FIGURE 4

APPENDICES