APPENDIX F

AMENDMENT NO. 5 TO THE 2001 PRIMA DESHECHA LANDFILL GENERAL DEVELOPMENT PLAN

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AMENDMENT NO. 5 TO THE GENERAL DEVELOPMENT PLAN

Prima Deshecha Landfill

Orange County, California

2001
Amendment No. 1: October 2002
Amendment No. 2: September 2006
Amendment No. 3: June 2021
Amendment No. 4: July 2021
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Prepared For:

OC Waste & Recycling
601 N. Ross Street, 5th Floor
Santa Ana, California 92701

TETRA TECH

Prepared By:

Tetra Tech
21700 Copley Drive, Suite 200
Diamond Bar, California 91765
(909) 860-7777

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GLOSSARY OF ACRONYMS

AB	Assembly Bill
ACOE	United States Army Corps of Engineers
amsl	Above mean sea level
AQMP	Air Quality Management Plan
AUF	Airspace Utilization Factor
AWMA	Aliso Water Management Agency
BACT	Best Available Control Technology
BO	Biological Opinion
BRCP	Biological Resources Construction Plan
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CIWMB	California Integrated Waste Management Board
CIWMP	County Integrated Waste Management Plan
CO	Carbon Monoxide
CUP	Conditional Use Permit
cy	Cubic Yards
EG	Emission Guidelines
EIR	Environmental Impact Report
ERF	Energy Recovery Facility
FESA	Federal Endangered Species Act
FY	Fiscal Year
GDP	General Development Plan
HBP	Harbors, Beaches and Parks
HHW	Household Hazardous Waste
HHWCC	Household Hazardous Waste Collection Center
HI	Hazard Index

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GLOSSARY OF ACRONYMS

IGP	Industrial General Permit
IWMD	County of Orange Integrated Waste Management Department
JTD	Joint Technical Document
lbs/cy	Pounds per cubic yard
LCRS	Leachate collection and recovery system
LEA	Local Enforcement Agency
LFG	Landfill Gas
LPPE	Los Patrones Parkway Extension (LPPE)
mcy	Million cubic yards
MICR	Maximum Individual Cancer Risk
MOU	Memorandum of Understanding
MPAH	Master Plan of Arterial Highways
MSW	Municipal Solid Waste
NAAQS	National Ambient Air Quality Standards
NCCP	Natural Community Conservation Plan
NESHAP	National Emission Standard for Hazardous Pollutants
NEO	NEO California LLC
NMOC	Non-methane Organic Compounds
NO_2	Nitrogen Dioxide
NO_X	Nitrogen Oxides
NPDES	National Pollution Discharge Elimination System
NSPS	New Source Performance Standards
NSR	New Source Review
O_3	Ozone
OCCP	Orange County Circulation Plan
OCWR	OC Waste & Recycling
Pb	Lead
PFRD	County of Orange Public Facilities & Resources Department
PM	Particular Matter
ppm	Parts per million
RMV	Rancho Mission Viejo
RDMD	Resources and Development Management Department
RDSI	Report of Disposal Site Information

GLOSSARY OF ACRONYMS

ROC	Reactive Organic Compounds
RV	Recreational Vehicle
RWQCB	Regional Water Quality Control Board
SAMP	Special Area Management Plan
SB	Senate Bill
SCAB	Southern California Air Basin
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison Company
SDG&E	San Diego Gas and Electric Company
SDRWQCB	San Diego Regional Water Quality Control Board
SEIR	Supplemental Environmental Impact Report
SERRA	Southeast Regional Reclamation Authority
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
SO_X	Sulfur oxides
SOCWA	South Orange County Wastewater Authority
SOS	Supplemental Open Space
SSHCP	Southern Sub-Region Habitat Conservation Plan
SWAT	Solid Waste Assessment Test
SWFP	Solid Waste Facility Permit
TAC	Toxic Air Contaminants
T-BACT	Toxics-Best Available Control Technology
tpd	Tons per day
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
VOC	Volatile Organic Compounds
VPL	Viewshed Protection and Landscaping
VPP	Viewshed Protection Plan
WDRs	Waste Discharge Requirements
WMU1	Waste Management Unit 1
WMU2	Waste Management Unit 2

SECTION 1.0

1.0 INTRODUCTION

1.1 SITE DEVELOPMENT HISTORY

In February 1973, the Orange County Board of Supervisors (Board of Supervisors) directed the adoption of a multi-use concept of refuse disposal/recreational development to establish the Prima Deshecha Landfill. At that time, it was determined that a master park plan was not necessary for the site. The disposal of municipal solid waste was initiated in 1976, in an area now known as Waste Management Unit 2 (WMU2). In December 1976, a planning consultant was retained to prepare a General Development Plan (GDP) to combine both recreational and refuse disposal plans for the site.

An Interim Project Report/Environmental Impact Analysis for the Prima Deshecha site was submitted in August 1978 to the County of Orange (County) Harbors Beaches and Parks (HBP) Commission. The report contained an Interim Plan and two ultimate Alternative Schematic Plans. Alternative 2 (an 81 million cubic yard refuse plan covering 800 acres of landfill area and 200 acres of borrow area for a total of 1,000 acres) was recommended by the Commission and subsequently adopted by the Board of Supervisors in December 1978. That Alternative Schematic Plan was further refined and provided the basis for the 1979 Prima Deshecha GDP as well as the initial Solid Waste Facilities Permit (SWFP) No. 30-A-0019 for the site. In 1980, the disposal operations were moved to a second active area known as Waste Management Unit 1 (WMU1).

In 1994, an updated draft GDP was prepared and described in a Program Environmental Impact Report (EIR 548) which was certified in November 1995. The draft 1995 GDP itself was not approved pending additional landfill design considerations to be negotiated with the City of San Clemente. Negotiations with the City of San Clemente were consequently completed, and the Board of Supervisors approved a Memorandum of Understanding (MOU) with the City of San Clemente on July 1, 1997, which included design features to be implemented at the landfill.

Conditions governing landfill design and operations within the jurisdiction of the City of San Juan Capistrano were also negotiated and documented in a MOU approved by the Board of Supervisors on September 12, 1995, and a Conditional Use Permit (CUP) approved by the City of San Juan Capistrano on December 5, 1995. A subsequent City of San Juan Capistrano Cooperative Agreement (November 2018) supersedes the MOU (September 1995, 1st Amendment November 1995, 2nd Amendment April 2016) with the City. The Cooperative Agreement includes: (1) Termination of prior agreements and understandings of the Parties regarding the

landfill as provided in documents such as the 1995 MOU between City and County and its amendments; (2) Initiation of required actions by City to rescind the CUP as provided in City Resolution 95-12-5-1 and its subsequent amendments; (3) Restatement, in one document, of the duties and procedures required to be followed by County to reasonably mitigate the impacts on City caused by operations at the landfill; (4) Identification of City obligations regarding cooperation with County in its efforts to comply with existing and anticipated legislation and regulation related to landfill operations; and (5) Addressing other financial matters of mutual concern required to fully mitigate the impacts associated with continuation of landfill operations through build-out of the landfill.

The previously proposed 1995 GDP was then modified in 2001 in an effort to ensure compliance with the design and operational conditions set for both Cities. The design features contained within both approved MOUs were incorporated into the 2001 GDP, which replaced the 1994 GDP and currently serves as the future planning guide for the Prima Deshecha site. Also incorporated into the 2001 GDP are design requirements for remediating a landslide which occurred in May 1998 in a stockpile area south of the Prima Deshecha Cañada channel. This modification resulted in enlarging the limit of the Zone 1 landfill plan and re-routing to the south a portion of Prima Deshecha Cañada channel impacted by the landslide. A new Environmental Impact Report No. 575 (EIR 575) was certified for the 2001 GDP.

EIR 575 addresses environmental impacts resulting from the 2001 GDP for the property, which includes replacing the existing long-term plan for the landfill, recreational uses, and traffic circulation. EIR 575 also addresses near-term activities planned for the next phases of landfill development.

The 2001 Prima Deshecha GDP was further modified as an outcome of negotiations between the County and Rancho Mission Viejo, LLC (RMV), the adjacent landowner to the north and east of the Prima Deshecha Landfill property. These negotiations resulted in a Settlement Agreement and Covenant and Declaration of Restrictions (collectively referred to herein as RMV agreements) on 945 acres comprising the eastern portion of the Prima Deshecha property. The RMV agreements identified a Landfill Operations Area and Restricted Area on the eastern 945 acres of the Prima Deshecha Landfill property (referred to in the RMV agreements as the Burdened Property) and specified conditions and restrictions for each of those areas. One design change to the 2001 GDP due to the RMV agreements was a reduction in the Zone 4 refuse footprint previously established at 412 acres to 409 acres. The total Zone 4 area (including some cut areas outside refuse limits) remained the same at 473 acres. The agreements also identified RMV's Benefited Property and place conditions on a No-Build Area within the Benefited Property adjacent to and east of

the Prima Deshecha property. These agreements also contain requirements for Avenida La Pata funding, maintenance, and litter control. Collectively, the RMV agreements constitute Amendment No.~~umber~~ 1 to the 2001 GDP. Reference is made to the RMV agreements and conditions placed on the Prima Deshecha Landfill property in this Amendment ~~Number~~ No. ~~4~~ 5 to the 2001 GDP, where appropriate.

EIR 575 addresses environmental impacts resulting from the 2001 GDP for the property, which includes replacing the existing long term plan for the landfill, recreational uses, and traffic circulation. EIR 575 also addresses near-term activities planned for the next phases of landfill development.

In 2006, Final Supplemental Environmental Impact Report 597 (Final SEIR 597) was certified to address environmental impacts of the project proposed in Amendment No. 2 to the 2001 GDP. The 2006 Amendment No. 2 to the GDP provided the necessary project-level detail for Final SEIR 597 to obtain required state and federal resource agency permits and participate in the Orange County Southern Sub-Region Habitat Conservation Plan (SSHCP) and Special Area Management Plan (SAMP). Final SEIR 597 served as an important vehicle to ensure the close coordination and integration of environmental mitigation and enhancement opportunities at the site with other regional planning efforts. The project included the following:

- Considered the maximum areal extent of disturbance anticipated for landslide remediation to achieve slope stability within Zones 1 and 4, potential stockpile and trail areas and additional area for ancillary facilities;
- Provided for slope stability measures, without which the Prima Deshecha Landfill would be required to cease operations;
- Accommodated future landfill-related features such as landfill gas (LFG) perimeter probes, LFG collection header lines;
- Modified the desilting basin locations for Zone 4 to avoid sensitive biological resources and unstable areas;
- Implemented measures needed to ensure the long-term success of the environmental mitigation and restoration components of the overall GDP. In order to facilitate the assessment of biological impacts from future landfill operations within both Zones 1 and 4 and coordinate pre-mitigation of these impacts, the limits of disturbance around each zone were refined to accommodate the above features. Biological mitigation measures for landfill project impacts within the revised potential disturbance areas were also incorporated; and
- Updates to landfill phasing within previously approved limits.

Also included within Amendment No. 2 was the development of a comprehensive biological pre-mitigation plan for the site, which would allow landfill operations to continue seamlessly, as mitigation of operational impacts on biological resources occur before the impacts occurred. Additionally, on-site regional enhancement opportunities were identified for offsetting environmental impacts of other County (or third party) projects.

Amendment No. 3 presented updates to the Landfill, Circulation and Recreation Plan elements which modified the GDP to show the Los Patrones Parkway Extension (LPPE) proposed alignment from Cow Camp Road to Avenida La Pata and its designation as a Primary Arterial Highway (LPPE Alignment). On January 12, 2021, the Board of Supervisors amended the Orange County General Plan, Transportation Element, Circulation Plan to include the LPPE Alignment. The Orange County Transportation Authority (OCTA) also added the LPPE Alignment to the Master Plan of Arterial Highways (MPAH). Zone 5A was created in Amendment No. 3 to identify the LPPE Alignment as a future use on the property.

Supplemental EIR (SEIR) No. 2 to FEIR 575 ~~addresses~~ addressed the environmental impacts of the following project components ~~proposed~~ in Amendment No. 4 to the 2001 GDP~~, herein referred to as "Amendment No. 4". The Amendment No. 4 proposed project components to~~ that allow for the following uses at the Prima Deshecha Landfill:

Allow for concurrent operations in both the Zone 1 and Zone 4 landfill areas to allow landfilling activities to shift between the two landfill development areas based on seasonal environmental conditions to minimize the potential for noise, dust and odor impacts that may occur to existing residential developments located near the landfill site. While both the Zone 1 and Zone 4 landfill areas will be considered active from a regulatory standpoint, Zone 1 and Zone 4 will not be accepting refuse for disposal at the same time and the landfill will continue to have only one active working face area on a daily basis for landfill disposal operations. Several months per year will be spent landfilling in Zone 1 before moving into Zone 4, and vice versa.

There is currently 9 million cubic yards of hard rock material called the San Onofre Breccia located in Zone 4 Phases A and B development areas. Due to the nature of this material, to prepare the area for landfilling, it will have to be blasted, excavated, crushed/pulverized, relocated and stockpiled on-site. Since the San Onofre Breccia material is unsuitable for use as landfill daily cover, but is suitable for other types of construction, the stockpiled material will be transported off-site to end markets.

During construction of new landfill development phases, a significant amount of soil for liner construction is imported. Amendment No. 4 as evaluated in SEIR No. 2 to FEIR 575 considers soil import trips and the duration of soil importation during liner construction for each future development phase of Zone 4.

While the overall landfill airspace capacity and footprint of the refuse prism in Zone 4 may change based on Amendment No. 3 to the GDP (as further discussed in Section 2.1.2,) the ~~proposed~~ project components ~~as presented~~ in Amendment No. 4 ~~will~~ did not change the overall landfill airspace capacity, maximum daily waste intake, footprint~~,~~ of the refuse prism, or final landfill post-closure elevations.

Subsequent EIR to EIR 575 addresses the environmental impacts of the changes in Amendment No. 5 to the 2001 GDP, herein referred to as "Amendment No. 5". Amendment No. 5 increased the permitted daily operations at the landfill from 4,000 tons per day (tpd) to 8,000 tpd and allowed for concurrent operations in Zone 1 and Zone 4 with two active working faces.

1.2 SITE LOCATION

The 1,530-acre Prima Deshecha Landfill site is located in south Orange County (see Figure 1). The County-owned site includes acreage within the jurisdictions of the cities of San Juan Capistrano (570 acres) and San Clemente (133 acres). The remaining 827 acres are within unincorporated Orange County. The operator of the site, OC Waste & Recycling (OCWR), has prepared this GDP Amendment No. ~~4~~ 5 for the site. The GDP is a planning document to guide coordinated long-term implementation of both interim and ultimate site development uses.

The Prima Deshecha site lies in the hills of southeastern Orange County. Ground elevations on the site range from 230 feet above mean sea level (amsl) at the southwest boundary of the site to a maximum elevation of 1,125 feet amsl at the northeast boundary of the site. The Prima Deshecha Cañada watercourse traverses the site from the northeast to the southwest. Two major utility easements, including a 150-foot wide San Diego Gas and Electric (SDG&E) easement and a 200-foot wide Southern California Edison (SCE) easement, extend through the central portion of the site which separate the western (Zone 1) and eastern (Zone 4) components of the landfill property. These features are illustrated in Figure 2.

1.3 CURRENT SITE STATUS

WMU1 (see Figure 2), and lined waste disposal areas, Phases A, A1, A2, B, B1, C1, C2, C3, D1, and D2 located north, east and southeast of WMU1 overlie approximately 193 acres of the western portion of the site and are located entirely within the City limits of San Juan Capistrano. Landfilling of municipal solid waste with some biosolids (i.e., digested sewage sludge) continues at the site, with a total in-place air space volume (as of December 31, 2020) of 38.6 million cubic yards (mcy) (see Table 1). Refuse has also been landfilled in WMU2 (see Figure 2). Prior to construction of Avenida La Pata. WMU2 was believed to encompass 33 acres. As part of the La Pata Avenue Gap Closure Project, it was determined that WMU2 was actually larger in size than previously estimated. Therefore, the clean closure area for WMU2 was expanded. After construction of the La Pata Avenue Gap Closure Project, the remaining acreage of WMU2 is 26.42 acres (see Figure 16). The majority of WMU2 is to the east of Avenida La Pata, approximately 25.59 acres and a small portion of waste was left in place on the west side of Avenida La Pata (approximately 0.83 acres). Of the approximate 26.42 acres of WMU2, approximately 14 acres is within the limits of Zone 4 (this acreage is unchanged) and the area outside of Zone 4 is currently approximately 12.4 acres. The first lined waste disposal area for the site, referred to as Phase A in Zone 1, was developed in 1998 and is located east of WMU1. Landfilling has proceeded into Phases A, A1 and A2; B and B1; C1, C2, and C3. Phase D construction started in fiscal year (FY) 2017/2018. Phase D~~1~~ is currently utilized for waste acceptance ~~and Phase D2 is slated for construction in late 2021~~.

The development of Zone 4 is conceptually proposed to be developed in nine major phases (see Figure 15). In order to minimize the potential for noise, dust and odor impacts that may occur to existing residential developments located near the landfill site based on seasonal conditions, OCWR may commence refuse fill operations in Zone 4 before completion of Zone 1 (exhaustion of refuse capacity). Operations and development of Zone 4 would proceed in a counterclockwise direction, with a series of excavation and refuse fills (Phases A through I) until the final grades are achieved.

The Prima Deshecha Landfill is a state-designated Class III facility which is permitted for the disposal of non-hazardous municipal solid waste and biosolids. No liquid or hazardous wastes are accepted or proposed for on-site disposal. OCWR currently operates under Waste Discharge Requirements (WDR R9-2003-0306, R9-2006-0036 and R9-2012-0001) issued by the San Diego Regional Water Quality Control Board (SDRWQCB), a Solid Waste Facility Permit (SWFP) (No. 30-AB-0019) issued by the County Health Care Agency, Environmental Health Division which is the Local Enforcement Agency (LEA) and concurred on by CalRecycle, a Cooperative Agreement

with the City of San Juan Capistrano, and a MOU with the City of San Clemente, as well as other permits required for environmental monitoring and control systems.

In addition to the landfilling operations, related facilities and activities at the site include:

- Personnel facilities, site office/crew quarters, equipment maintenance facilities, and storage building.
- An energy recovery facility (ERF) that converts landfill gas to electricity.
- A Household Hazardous Waste Collection Center (HHWCC) and a facility for the temporary storage of hazardous materials.
- Three fee booths and six scales. One third scale is designated for unattended use.
- A landfill gas collection and flaring system for the site, which consists of vertical and horizontal gas extraction wells, collection piping and a flaring facility.
- Groundwater monitoring wells located in the vicinity of the current and future refuse disposal areas.
- A groundwater extraction system located downstream of WMU1, consisting of a pump station and four groundwater extraction wells within the alluvial material of the Prima Deshecha Cañada watercourse.
- A leachate collection and recovery system (LCRS) for the lined areas, including two 15,000-gallon collection tanks.
- Perimeter and interior drainage facilities.
- Biological mitigation sites to the west and south of Zone 1 and south of Zone 4.
- A major detention/desilting basin for Zone 1.
- A greenwaste and organic waste composting facility (this facility is covered under a separate SWFP and CEQA coverage was provided by a Mitigated Negative Declaration SCH# 2020019030).

Since the site began landfill operations in 1976, there has been substantial residential development in the area, particularly to the south within the City of San Clemente and most recently to the north within the City of San Juan Capistrano. The 2001 GDP and subsequent amendments take the current and projected proximity of urban development into account.

1.4 SUMMARY OF THE 2001 GDP

The Prima Deshecha 2001 GDP provides for the effective management of multiple uses on the site, including solid waste disposal, various regional park and recreational uses, and implementation of a key arterial highway and road extension included in the Master Plan of Arterial Highway (MPAH), Orange County Circulation Plan (OCCP), and Circulation Elements of the Cities of San Juan Capistrano and San Clemente.

The GDP divides the total 1,530-acre site into six zones for planning purposes as shown on Figure 3 and briefly described below:

Zone Descriptions:

Zone 1: This zone includes the currently active refuse disposal area. As of December 31, 2020, the Zone 1 ~~landfill is projected to be completely filled in approximately 30 years, or in the year~~ permit projects landfill operations will occur through 2050~~, the Zone 1 landfill is projected to be completely filled~~. After closure activities have been completed, satisfactory access established, and sufficient settlement has occurred, the ultimate recreational uses in Zone 1 as identified in a needs analysis could be implemented. The closure year for Zone 1 is 2050 should landfill operations stay only in that zone until final grades are achieved. Landfill operations are proposed to move to Zone 4 prior to Zone 1 reaching final grades, however, the ultimate closure year for the Prima Deshecha Landfill (2102) will not change.

Zone 2: This zone identifies all of the recreational trails that traverse the property. On-site city trails around Zone 1 can be used throughout the development of Zones 1 and 4 as long as the protection of public health and safety can be provided. Trails depicted along the perimeter of Zone 4 will be closed to the public during the filling operations in Zone 4 for the protection of the public. Alignment of trails around Zone 4 will be assessed upon closure of Zone 4. The trails along the perimeter of Zone 4 are restricted by the RMV agreements to ten (10) feet below and to the south and west of the existing ridgeline between the Prima Deshecha property and adjacent RMV property. The GDP proposes to eventually connect the

County trail along Zone 4 with on-site City trails proposed along Zone 1 to provide a complete loop for trail users. Connection between trails east of Avenida La Pata and south of Zone 4 and existing City trails along Zone 1 west of Avenida La Pata is currently provided by a trail crossing over Avenida La Pata to the south. Discussions with representatives of the Cities of San Juan Capistrano and San Clemente have identified specific trail alignments around Zone 1. In 2006 and 2009, OCWR issued a trail easement to the Cities of San Juan Capistrano and San Clemente respectively for on-site trails within the Zone 1 area of the landfill.

Zone 3: This zone contains native vegetation, including coastal sage scrub habitat used by the California gnatcatcher, and mixed chaparral. The intent of the GDP is to retain the majority of Zone 3 in a native state. Some habitat enhancement has been implemented in Zone 3, where portions of these areas have been disturbed in the past or to compensate for lost habitat associated with the development of the GDP or with other development in Orange County. GDP Amendment No. 2 incorporated much of Zone 3 into a pre-mitigation area for landfill impacts or regional environmental enhancement area.

Zone 4: This zone is planned for future refuse disposal. In order to minimize the potential for noise, dust and odor impacts that may occur to existing residential developments located near the landfill site, OCWR may commence refuse fill operations in Zone 4 before completion of Zone 1 (exhaustion of refuse capacity). The western boundary for this zone was established to provide for the extension of Avenida La Pata through the site. This zone serves as the final refuse disposal site on the property after Zone 1 is closed. Following closure of Zone 4, planned for the year 2102 and after sufficient settlement has occurred, implementation of the ultimate recreational activities can begin. These activities would be determined through a needs analysis and park plan undertaken near the time of closure. The current post-closure general plan designated land use for Zone 4 is a regional park.

Zone 5: This zone encompasses the area of disturbance for construction of Avenida La Pata. The boundaries of Zone 5 in the 2001 GDP were defined based on a conceptual alignment design and the assumption that Avenida La Pata would be constructed prior to the Zone 4 landfill (see Figure 3).

OC Public Works completed construction of the Avenida La Pata extension through the landfill and opened the road to the public in August 2016. As shown on Figure 3, Avenida La Pata bisects through the landfill, southward from the original landfill entrance. The La Pata Avenue Gap Closure project was constructed to extend the road alignment going through WMU2 where the waste on the west side of WMU2 was excavated and reconsolidated in Zone 1 to accommodate the new roadway. The western slope of WMU2 received a final cover during grading of the road extension because a small portion of waste under the power easement and landfill access road could not be removed at the time. South of WMU2, the road extension alignment is located east of Zone 1 (Phase D) and west of the future Zone 4.

Zone 5A: This zone encompasses the area of disturbance for construction of the LPPE. The boundaries of Zone 5A in the GDP were defined based on a conceptual alignment design (see Figures 3 and 4B). Figure 4B shows this alignment with the assumption that the LPPE would be constructed prior to the Zone 4 landfill. Should the Zone 4 landfill be constructed first, substantial revisions would be required to the currently proposed LPPE alignment.

The GDP does not specify a defined set of uses for the remaining property outside the boundaries of the six zones. This remaining property is currently used for ancillary landfill operations (i.e., landfill gas flare facility, energy recovery facility [ERF]), landfill infrastructure (i.e., scalehouse, field offices) and viewshed protection. This area can also accommodate additional uses such as landslide remediation, temporary stockpiles, trails, biological mitigation, flood control facilities, recreational trail staging area(s) and open space buffer. It was the intent of Amendment No. 2 to define a conservative increase in the temporary limits of disturbance around Zones 1 and 4 that would accommodate these features.

The landfill plan for Zones 1 and 4 provides a total airspace of 171.6 mcy, including a remaining airspace volume of 132 mcy (as of December 31, 2020) (see Table 1). Features accommodated by the GDP for continued development of the landfill include a liner and leachate collection and removal system (LCRS) in future areas of the landfill zones, relocation of the HHWCC (completed in 2005), continued expansion of the landfill gas control system, modifications to the landfill gas control flare station, an ERF and potable and non-potable water lines. The GDP also identifies locations for detention basins and permanent LCRS facilities. The desilting basin system for Zone 4 was modified in Amendment No. 2 to minimize biological impacts to sensitive resources.

Biological mitigation requirements for the landslide remediation element of the 2001 GDP resulted in the establishment of approximately 28 acres of on-site mitigation under an approximately 70.7-acre conservation easement at the Prima Deshecha Landfill. Final recordation of this easement is pending and anticipated to be completed prior to Zone 4 construction. In addition, as a signatory to the SSHCP, OCWR has also installed approximately 205 acres of additional habitat as pre-mitigation to offset landfill related developments covered under the GDP and has established a 486.4-acre conservation easement over the supplemental open space areas of the landfill property. Figures 4A and Figure 4B illustrate the location of these sites, which offset project impacts to riparian, wetland, coastal sage scrub, and upland habitats.

Recreational uses would ultimately be provided in two of six zones on the site. The GDP also accommodates the extension of Camino de los Mares, Avenida La Pata, and LPPE through the site, consistent with approved alignments shown on the MPAH. As indicated above, the final alignment for the LPPE will be determined through the completion of approvals and final design.

1.5 PURPOSE AND NEED FOR THE PROJECT

The shortage of landfill space in the urban areas of Southern California is well documented and the value of the Prima Deshecha site to the Southern California Region as a permitted landfill is to be preserved and maintained.

A GDP is a planning document to guide coordinated long-term implementation of both interim and ultimate site development uses. The GDP for the Prima Deshecha site also provides for effective management of multiple uses on the site which include solid waste management, regional park, and recreational development, and major roadway links identified in the MPAH. The GDP enables concurrent

implementation of these activities through a phasing program which allows multiple uses to be adequately separated or buffered during site development.

The GDP describes numerous operational needs, planning issues, opportunities, and constraints, which have influenced the configuration and phasing of the GDP. It should be recognized that meeting solid waste disposal needs is the most important function on the site and will take precedence over other possible uses. To that end, the general development concept is for the site to function primarily as a solid waste disposal facility and, secondly, to provide interim and ultimate recreational opportunities for the general public as well as provide biological mitigation opportunities. No priority issue is foreseen with implementation of the MPAH, which is accommodated by the two landfill zones.

Amendment No. 2 and Final SEIR 597 further modified the GDP with the incorporation of the following elements which in aggregate, addressed the entire property and were necessary to (1) provide for slope stability measures, without which the Prima Deshecha Landfill would be required to cease operations; (2) accommodate future landfill-related features such as LFG perimeter probes, LFG collection header lines; (3) modify the desilting basin location for Zone 4 to avoid sensitive biological resources and unstable areas; and (4) implement measures needed to ensure the long-term success of the environmental mitigation and restoration components of the overall GDP. In order to facilitate the assessment of biological impacts from future landfill operations within both zones and coordinate pre-mitigation of these impacts, the limits of disturbance around each zone have been refined to accommodate these features.

Also included within Amendment No. 2 was the development of a comprehensive pre-mitigation plan for the site, which allows landfill operations to continue seamlessly, as mitigation of operational impacts on biological resources will have occurred before the impact happens. Additionally, on-site regional enhancement opportunities have been identified for offsetting environmental impacts of other County (or third party) projects.

Amendment No. 3 included updates to the Landfill, Circulation, and Recreation Plan elements for the LPPE Alignment.

Amendment No. 4 and SEIR No. 2 to FEIR 575 modifieds ~~s~~ the 2001 GDP for the following activities ~~(discussed in detail previously in Section 1.1)~~:

- Allow for concurrent operations in both the Zone 1 and Zone 4 landfill areas.

- Blasting, excavation, processing, on-site stockpiling and transport off-site to end markets of approximately 9 million cubic yards of San Onofre Breccia material in Zone 4 Phases A and B development areas San Onofre Breccia material.
- Soil importation trips during liner construction for each future development phase of Zone 4.

Amendment No. 5 and Subsequent EIR to EIR 575 modified the 2001 GDP to increase the permitted daily operations at the Landfill from 4,000 tpd to 8,000 tpd, allow concurrent operations in Zone 1 and Zone 4 with two active working faces.

1.6 PROJECT OBJECTIVES OF THE GENERAL DEVELOPMENT PLAN

Implementation of the 2001 Prima Deshecha GDP is intended to achieve several solid waste management, circulation, and recreation objectives. The objectives identified below were utilized in the preparation of the GDP, particularly with regard to the landfill design and operations. These objectives continue to apply to the 2001 GDP, as amended.

1.6.1 SOLID WASTE MANAGEMENT OBJECTIVES

- Optimize the use of the site as a long-term waste disposal facility.
- Provide for consistency with the County of Orange Integrated Waste Management Plan (CIWMP), adopted County and applicable City General Plans, zoning regulations and compliance with City MOU design and operational conditions.
- Provide a long-term, regional solid waste management facility with appropriate safeguards to protect public health and safety as well as water, air, soil, and other important resources which exist on-site and on surrounding property.

1.6.2 CIRCULATION OBJECTIVES

- Provide for regional as well as local access to landfill operations and recreational activities on the site.
- Accommodate adopted MPAH arterial highway alignments through the site.

1.6.3 RECREATION OBJECTIVES

- Identify preferred activities that include a variety of passive and limited active recreational uses which respond to the changing recreational needs in the region.
- Provide a phased recreation concept for implementation of both interim and ultimate recreational uses as solid waste management activities allow.

- Consider recreation goals and objectives of the Orange County Master Plan of Regional Parks as well as with those identified in the San Juan Capistrano and San Clemente General Plans.
- Provide opportunities for the benefit of the public to develop and operate recreation facilities within the regional park.
- Preserve regionally significant habitat on the site which will be set aside as natural reserves, and which can be utilized throughout the region for educational purposes.
- Provide essential linkages to the existing multiple use trails in the area which will also serve the recreation elements of the GDP.

SECTION 2.0

2.0 GDP ELEMENTS

The 2001 Prima Deshecha GDP encompasses the following three elements:

- Landfill Plan
- Circulation Plan
- Recreation Plan

The 2001 Prima Deshecha GDP provides for the effective management of multiple uses on the site, including solid waste disposal, implementation of key arterial highway and road extensions included in the MPAH, OCCP, and Circulation Elements of the Cities of San Juan Capistrano and San Clemente and various regional park and recreational uses.

The three elements are considered together in the 2001 GDP in order to allow for compatible existing, interim, and ultimate uses on the site as well as to achieve the goals and objectives of approved local and regional plans and policies. It is important to note that unless stated otherwise, references made to the GDP refer to all three of the elements listed above. Amendment No. 2 to the GDP only amended the Landfill Plan element of the 2001 GDP. Amendment No. 3 to the GDP amended the Landfill, Circulation, and Recreation Plan elements to show the LPPE Alignment. Amendment No. 4 to the GDP ~~amends~~ amended the Landfill Plan element to allow for concurrent Zone 1 and Zone 4 operations; breccia material blasting, processing, removal, and transport; and soil importation for liner installation during future phase development. Amendment No. 5 amended the Landfill Plan element to increase the daily permitted operations at the landfill from 4,000 tpd to 8,000 tpd and allow concurrent Zone 1 and Zone 4 operations with two active working faces.

2.1 LANDFILL PLAN

2.1.1 INTRODUCTION

The 2001 GDP divides the total 1,530-acre Prima Deshecha site into six zones for planning purposes as shown on Figure 3. Two zones are designated for landfilling. The Zone 1 refuse disposal area ultimately provides for 269.2 total acres (see

Figures 4A/4B) and the 2001 GDP identifies total disturbance areas (including cut slopes) around Zone 1 of 327 acres (see Figure 3). The total updated acreage for Zone 1 including potential landslide remediation areas identified in Amendment

No. 2 is 437 acres (see Figures 4A/4B). Zone 4 is designated for the development of a future landfill area in the east central portion of the site (see Figures 4A/4B). Zone 4 consists of 409 acres (including 14 acres of the original WMU2 disposal area) to be

filled with refuse and would be in active operation through the year 2102. In order to minimize the potential for noise, dust and odor impacts that may occur to existing residential developments located near the landfill site, OCWR may commence refuse fill operations in Zone 4 before completion of Zone 1 (exhaustion of refuse capacity). ~~While b~~Both the Zone 1 and Zone 4 landfill areas will be considered active from a regulatory standpoint~~, Zone 1 and Zone 4 will not~~ and may be accepting refuse for disposal at the same time. ~~and t~~The landfill ~~will~~ may have ~~continue to have only one~~ two active working face areas on a daily basis for landfill disposal operations. The closure year for Zone 1 is 2050 should landfill operations stay only in that zone until final grades are achieved. Moving to Zone 4 prior to Zone 1 reaching final grades will extend operations in Zone 1 past that closure year; however, the ultimate closure year of 2102 for the Prima Deshecha Landfill (combined Zones 1 and 4) will not change. The total disturbance acreage for Zone 4 identified in the 2001 GDP (including cut slopes) was 473 acres. This area was updated in Amendment No. 2 to a potential disturbance area of 641 acres (Figures 4A/4B). The potential disturbance area is based on acreage that may be needed for future landslide remediation, stockpiling, trails, and other ancillary facilities. Amendment No. 3 to the GDP presented the LPPE Alignment extending from the RMV property through the southeastern portion of the Prima Deshecha Landfill and intersecting with Avenida La Pata and discussed anticipated changes to landfill area and capacity (see Figures 3 and 4B).

Pursuant to Amendment No. 2, t~~T~~he Prima Deshecha landfill is permitted to accept up to 4~~8~~,000 ~~tons per day (~~tpd~~)~~ of waste. The site life for Zones 1 and 4 is based on an initial tonnage of approximately 400,000 ~~397,068 tons per year (1,289 tpd based on 308 operating days)~~ increasing and decreasing ~~to 280,117 tons per year (910 tpd) in 2026~~ due to the ~~anticipated~~ expiration of ~~out-of-county~~ import agreements, subject to renewal~~. Daily tonnage is expected to increase for Zone 4 to 2.2 million tons per year (7,143 tpd) by 2072 due to~~, and the anticipated closures of the Olinda Alpha and Frank R. Bowerman Landfills. ~~Any~~ The daily tonnage increase ~~over~~ to 4~~8~~,000 tpd in accordance with Amendment No. 5 will ~~would~~ require a SWFP revision and ~~a negotiated~~ updates to the MOUs with the Cities of San Juan Capistrano and San Clemente. Details on these assumptions are presented in Section 2.1.2.

The entrance facilities, field offices, ERF and landfill gas flare station are located in the north central portion of the site just west of Zone 4. The HHWCC, which is utilized to collect household hazardous waste (HHW) generated by households within the County, was located in Zone 1 but has been relocated near the field offices. The collected HHW is temporarily stored on-site and disposed off-site or recycled appropriately. The HHW is not disposed in the landfill.

The Capistrano Greenery located on the Zone 1 Landfill currently accepts approximately 100 tpd of processed green material. The Capistrano Greenery (operational as of 2021) is a green waste composting operation that is permitted to receive up to 204 tpd of processed green material, processed agricultural material, and manure for composting (see Figure 3). The Capistrano Greenery composting operation has a separate Solid Waste Facility Permit from the Landfill. The maximum 204 tpd for the Capistrano Greenery is in addition to the ~~4~~8,000 tpd daily limit for the Landfill operation. The Capistrano Greenery was analyzed under a separate CEQA action from the rest of the site in the form of a Mitigated Negative Declaration (SCH No. 2020019030) certified on May 5, 2020.

2.1.2 DESIGN CRITERIA

Prior to preparing refined plans for the future landfill operations in Zones 1 and 4, a number of landfill design criteria were developed. The criteria balanced applicable regulatory standards with surrounding land use compatibility and on-site environmental considerations. Although these criteria reduce the potential capacity of the site for landfilling, the GDP does provide for a substantial landfill life of approximately 82 years, as of December 31, 2020. The established criteria are considered critical to creating an optimal relationship between waste disposal operations and other site uses.

The landfill development criteria consider grading and height limits, site capacity, and design issues, as described in the following sections.

Landfill Grading and Height Limits

The first step in preparing plans for landfilling operations was to determine the boundaries of areas that could be made available for landfilling. Establishment of the landfill footprints has primarily been driven by geotechnical recommendations for slope stability. Consideration has also been given to minimizing impacts on environmentally sensitive areas, ridgelines, areas that have high visibility from current and future development, transmission line corridors and future roadway easements. The Southern California Edison Company (SCE), San Diego Gas and Electric Company (SDG&E), and existing and future public roadway easements through the site were to be avoided in establishing refuse boundaries. Grading and height limits imposed by an MOU with the City of San Clemente and a Cooperative Agreement with the City of San Juan Capistrano, as stated in the agreements with these Cities and by the RMV agreements discussed in Section 1.1, are reflected below:

City of San Clemente Requirements (MOU dated July 1997)

Grading and Height Limits:

- The final grading elevation in Zone 1 is to be at a height below the level of the ridgeline behind Zone 1 as viewed from Truman Benedict Elementary School located at 1251 Calle Sarmentoso, San Clemente, California 92673.
- The final grading elevation of Zone 4 is to be no higher than 1,010 feet, thereby minimizing the visual impact to residents of the City.
- It is understood that the side slopes of the landfill may be steeper than what is reflected in EIR No. 548 as may be determined by the County to be necessary to offset landfill capacity lost due to the height limits described above and in the MOU.

Zone Boundary Adjustments:

- The boundaries of Zone 1 to be adjusted from the Zone 1 boundaries described in EIR No. 548, with the understanding that additional boundary adjustments may be required for Zone 1 due to geotechnical conditions, drainage, and other environmental constraints provided such adjustment does not result in a final grading plan with a height limit greater than that specified above and in the MOU.
- The boundaries of Zone 4 to be adjusted as may be determined by the County to be necessary to offset landfill capacity lost due to the height limits described above and in the MOU, provided that any additions to the landfill resulting from the modification of the Zone 4 boundaries are not visible from within the City limits.

City of San Juan Capistrano Requirements (Cooperative Agreement dated November 2018)

For that portion of the site within the boundaries of the City of San Juan Capistrano, the following conditions apply:

- According to the Cooperative Agreement landfill operations through build-out are as anticipated and analyzed in FEIR 575, Final SEIR 597, SWFP 30-AB-0019, Addendum No. 6 to FEIR 575, Addendum No.2 to Final SEIR 597, physical key design parameters for the approved landfill design as provided in the GDP and its amendments, and any future environmental documentation for revised closure dates for Zone 1 and Zone 4 and the corresponding revision to SWFP 30-AB-0019 through build-out.

- The City agrees to cooperate and support the County's effort to revise the estimated landfill closure dates previously included in FEIR 575 and Final SEIR
- 597 from 2019 to 2050 for the Zone 1 landfill development area and from 2067 to 2102 for the future Zone 4 landfill development area, as reflected in Addendum No. 6 to FEIR 575 and Addendum No. 2 to Final SEIR 597 and all future revisions to the closure dates, and accompanying SWFP revisions so they more accurately reflect current estimates of when the two landfill development zones will reach their ultimate design capacity as reflected in Physical Key Design Parameters.

Rancho Mission Viejo, LLC (RMV) Requirements

The RMV agreements contain grading and fill restrictions on a Landfill Operations Area and a Restricted Area within 945 acres of the east portion of the Prima Deshecha Landfill to minimize effects of the landfill operation on RMV's Benefited Property to the north and east of the landfill property (see Section 1.1 for a description of those areas).

A Covenant and Declaration of Restrictions:

- Height Restriction – The height of any waste or refuse placed within the Landfill Operations Area shall not exceed one thousand and ten (1,010) feet above mean sea level unless and until appropriate measures (including any measures required by Applicable Laws) are taken to screen from view any portion of such waste or refuse that is visible from RMV's Benefited Property.
- Design Adjustments – The County shall adjust the design of any landfill within the Burdened Property and/or take such other steps as may be necessary to prevent or mitigate any landfill-related costs and impacts on the Benefited Property.
- Site Grading and/or Soil Filling – The County may perform site grading and/or soil filling (to maximize capacity) within the Restricted Area in support of Landfill Operations so long as the same are not visible from the Benefited Property.
- Ridgeline Buffer – So as to maintain a buffer zone and natural barrier to minimize viewing, noise, dust, litter, and other effects, if any, of Landfill Operations on the Benefited Property, the height and natural contour of the existing ridge lines most immediately contiguous to the boundary line between the Prima Deshecha Landfill property and the RMV Benefited Property shall not be materially modified by the County; provided, nothing in this provision shall preclude the installation and maintenance of landscaping along said ridge line.

Settlement Agreement:

- Zone 4 Phasing of Landfill Activities – County anticipates that landfill operations within the Landfill Operations Area will occur in phases moving in a west to east progression, and that the placement of refuse within the easterly portion of the Landfill Operations Area will not commence until after the year 2025. County, shall in good faith, consider any alternatives or suggestions tendered by RMV prior to materially altering the general west-to-east phasing scheme.
- Viewshed Analysis – County is required to conduct a viewshed analysis with respect to the impacts of Zone 4's development on the RMV Benefited Property, and, if needed, prepare and implement a viewshed protection and landscaping plan ("VPL Plan").

Based on these limitations, two landfill zones have been established which represent approximately 1,078 total acres of the 1,530-acre site (see Figures 4A/4B). It should be noted that not all of the 1,078 acres may be actually needed for landfill activities, or disturbed. Zone 1 consists of a total of 437 acres in the western portion of the site, of which 271 acres will be refuse fill areas. The final landfill grades for Zone 1 are below the major ridgelines which form the northern and western edges of the landfill site boundary as viewed from Ortega Highway, the valleys of San Juan Capistrano and the Truman Benedict Elementary School in San Clemente. Line of sight cross-sections for the Zone 1 final landfill grades are presented in Figures 5, 6 and 7 from a viewpoint in San Juan Capistrano and from the Truman Benedict Elementary School in San Clemente.

Zone 4 consists of a total of 641 acres in the east central portion of the site. The Zone 4 refuse fill area, including 14 acres of the previously filled WMU2, is 409 acres. The Zone 4 landfill has a maximum elevation of 1,010 feet as previously described in EIR 548 and in accordance with MOU requirements of the City of San Clemente, and the Settlement Agreement with RMV. The Zone 4 footprint has been established to avoid impacts to Segunda Deshecha Cañada and to minimize visual impacts from the south. It is anticipated that landslide remediation activities included in Amendment No. 2 to the GDP will temporarily affect the Zone 4 Landfill Operations Area and Restricted Area as defined by the RMV agreements. However, these activities will be consistent with the conditions and approved uses for the property as summarized above. Zone 4 final slopes and deck area have been modified to provide a more natural, undulating appearance.

The GDP anticipated that Zone 4 of the Landfill would be developed after Zone 1 reached capacity and closed. Amendment No. 4 and SEIR No. 2 to FEIR 575 ~~modify~~ modified the GDP to allow for concurrent operations in both Zones 1 and 4 so that

landfilling activities may shift between the two zones based on seasonal environmental conditions to minimize any potential noise, dust, and odor impacts that may occur to existing residential developments located near the Landfill. With implementation of Amendment No. 5, ~~While~~ both Zone 1 and Zone 4 would be considered active from a regulatory standpoint~~, Zone 1 and Zone 4 would not~~ and may be accepting refuse for disposal at the same time. ~~, and t~~The Landfill ~~would~~ may ~~continue to~~ have ~~only~~ two~~one~~ active working face areas on a daily basis for daily landfill disposal operations. ~~OCWR would spend several months per year landfilling in Zone 1 before moving into Zone 4, and vice versa.~~ Concurrent landfilling operations within Zones 1 and 4 is anticipated to begin in ~~2024~~2026.

During the construction of new Landfill development phases in Zone 4, OCWR would import a significant amount of soil for liner construction. Approximately 8,108 cubic yards (cy) of soil would be imported for each new development phase. Soil import trips would begin in 2023 and would occur for approximately 20 operating days every 10 to 15 years as phases are constructed (two of the later phases may be constructed at a lesser interval of 5 years). Soil import trips would continue throughout construction of all of the Zone 4 phases during liner installation, with the last Zone 4 development phase (which will include a new liner in Phase H) anticipated to be constructed in approximately 2088–2089. An additional Phase I will be constructed after this, but it will be a vertical expansion only, with no new liner or liner soil requirements.

The LPPE Alignment (Zone 5A), would modify the southern boundary of Zone 4 of the landfill (see Figures 3 and 4B). Per the analysis of the conceptual alignment as presented in the Addendum to FEIR 575, FEIR 584, and FEIR 589, this would reduce the area of Zone 4 by approximately 3.05 acres and the capacity for refuse disposal by approximately 300,000 to 600,000 cy (these estimated impacts are subject to additional design on the LPPE alignment that is yet to be performed). Construction of the LPPE Alignment would require a reconfiguration of the planned detention/ desilting system in the southern portion of Zone 4 (see Figures 4A). Based on the conceptual roadway alignment and the current concepts for basin locations, construction of the LPPE Alignment would require the relocation of proposed Basin 4C, located along the southern edge of Zone 4 and Basin 5D near the proposed intersection of the LPPE and Avenida La Pata (see Figure 4B). Basin 4C is a 1.2-acre basin with a proposed desilting capacity of 4.1 acre feet and a storm water storage capacity of 2 acre-feet (assumes half of the total basin would be available for soft bottom storage). Basin 5D is a 1.7-acre basin with a proposed desilting and storm water storage capacity of 14.4 acre feet. The precise location of the relocated basins would be determined based on revisions to the landfill engineering plans that factor in the sequencing of the fill operations for Zone 4 in an effort to capture the

maximum amount of drainage for the landfill area. Modifications to the Zone 4 landfill design plans have not been initiated at this time as the LPPE Alignment is conceptual and subject to further design that is yet to be completed. The LPPE as proposed has been incorporated into the County of Orange General Plan, Transportation Element, and an amendment to the MPAH has been approved by OCTA. More detailed construction design will be undertaken in the near future.

Criteria Used to Determine Site Capacity

The following site capacity criteria was developed for planning purposes to estimate the associated site life and potential impacts of landfilling on regional traffic, air quality, etc.:

- Zone 1 initial tonnage of 397,068 tons per year (approximately 1,289 tpd) and decreasing to 280,117 tons per year (approximately 910 tpd) in 2026 due to the anticipated expiration of out-of-county import agreements, subject to renewal.
- Zone 4 average daily refuse input assumed to be 280,117 tons per year (910 tpd) and increasing to 2.2 million tons per year (7,143 tpd) by 2072 due to the anticipated closure of Frank R. Bowerman Landfill. Any daily tonnage increase over 48,000 tpd would require a SWFP revision and a negotiated update to the MOUs with the Cities of San Juan Capistrano and San Clemente.
- Average daily refuse input includes up to 350 tpd of biosolids, over a six-day week. The biosolids input meets or exceeds the current and projected needs of the South Orange County Wastewater Authority (SOCWA) and other agencies.
- Airspace Utilization Factor (AUF) per OCWR reporting information of 0.5695 tons/cy.
- Soil cover material usage based on a volume ratio of disposed refuse to cover soil of 3.5:1, including the use of tarps or other alternative daily covers.
- The capacity and life of the site could be increased or decreased based on changes in landfill design standards and regulations, changes in daily cover use and final cover requirements, changes in refuse density, changes to the assumed refuse inflow rates and other similar changes.

Another provision to protect the future solid waste disposal capacity of landfills in California is the California Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939) requirement to maximize the diversion of recyclable materials from landfills. Materials such as plastics, paper, aluminum, and vegetative matter, if diverted, can result in a substantial reduction in the amount of refuse deposited in landfills. In addition to AB 939, impacts from requirements for organics (green and food waste) diversion as required in Senate Bill 1383 (SB 1383) regulations will also

impact disposal rates. In consideration of the policy to use landfill capacity for revenue by importing refuse from adjacent counties, the current estimates for solid

waste disposal under the GDP represent an estimated maximum disposal rate for the near future, notwithstanding implementation of AB 939 and SB 1383 requirements for the diversion of recyclable and organic materials from landfilling.

Criteria Related to Site Design

The following principal design criteria for development of the landfill are based on State minimum standards:

- Minimum top deck slope of three (3) percent.
- Finished surface slopes of a maximum 3:1 between benches, 3.5:1 gross (see Figure 8).
- Interior interim surface slopes – maximum of 3.5:1.
- Access roadway width - 50 feet.
- Maximum access roadway slope – seven (7) percent.
- Cut slopes inclined as permitted by geology and liner stability. The maximum depth will be used under these constraints.
- Bottom slope – approximately two (2) percent minimum and maximum as permitted by fill stability and constructability.
- Maintenance and drainage benches - 15 feet wide measured level from the flow line. Final maintenance and drainage benches - spaced at 50-foot maximum vertical intervals, assuming 20-foot lifts.

Geotechnical Design Criteria

The Prima Deshecha site is part of the Peninsular Ranges Province of Southern California. Exposed bedrock materials consist predominantly of marine and nonmarine sedimentary rock of the Capistrano and Monterey formations and the San Onofre Breccia which are overlain by bedrock-derived landslides, modern alluvial deposits in the main drainage channels and various types of native soils. Economically useful geologic resources do not occur on-site, with the exception of materials which may be suitable for daily and final cover or liner construction for development of the landfill.

Given the low strength of some bedrock units and the potential instability of numerous landslides on the site, new slope failures and reactivation of existing

landslides are possible. In fact, a landslide occurred in 1998 in a Zone 1 stockpile area and portions of a number of the larger landslides on the east portion of the site display evidence of recent movement under existing conditions. The footprints for Zones 1 and 4 have been configured to enhance stabilization of refuse fills. Other stabilization measures for unstable cut slopes in the various units of bedrock and landslide debris include construction of low angle (2:1) or shallower cut slopes, buttress and/or stabilization fills, shear keys and structurally reinforced fills. The GDP, as amended, provides for these types of stabilization measures within Zones 1 and 4 by increasing the potential limits of disturbance associated with these features based upon available geotechnical information. Although there is a possibility that further geotechnical analyses and detailed engineering design may result in the determination that additional area is required for landslide stabilization in the future, an effort was made to include conservative limits of disturbance in the GDP Amendment No. 2.

The Zone 4 landfilling area includes approximately 9 ~~million cubic yards (~~mcy~~)~~ of San Onofre Breccia hard rock material. The location of the San Onofre Breccia material is shown on Figure 17. The San Onofre Breccia removal was originally analyzed in Addendum No. 1 to Final SEIR 597 (April 2010). Addendum No. 1 analyzed blasting of this hard rock material in Zone 4 with an average of two blasts per month for a minimum of 10 years (or 3,000 ~~cubic yards [~~cy~~]~~ per day). The analysis in Addendum No. 1 to Final SEIR 597 assumed the blasted material would be transported via conveyor belt or transfer trucks and would either be stockpiled on site for later crushing or placed directly into a crusher operation. Crushed rock would be stockpiled on site for future use or exported off-site for use as road base, asphalt, concrete, or other uses. Off-site trips were assumed to not exceed the thresholds identified in FEIR 575.

Amendment No. 4 and SEIR No. 2 to FEIR 575 analyzed off-site trips associated with the proposed ~~project~~ modifications and propose~~d~~s that the San Onofre Breccia material ~~will~~ be blasted, excavated, and relocated on site in the future Zone 4 Phase C area. The ~~proposed~~ project anticipate~~d~~s approximately one blast per month for the duration of rock excavation. Operations related to the Breccia began in 2024 and are anticipated to ~~begin in approximately 2023 and~~ continue until 205~~0~~42 (a duration of approximately 25~~0~~ years). Transfer trucks ~~would~~ travel approximately 0.5 miles within the Landfill boundaries to relocate the rock material. The ~~proposed project does~~activities do not include the use of conveyor belts. Once relocated to the Zone 4 Phase C area, the rock material will be pulverized into soil and then stockpiled. The Zone 4 Phase C stockpile area will accommodate up to 3.3 mcy of soil material. From this location, since the San Onofre Breccia soil will be unsuitable for use as landfill daily cover but may be used for other construction purposes, the stockpiled soil may

be transported off site to end markets. ~~The proposed project~~Amendment 4 resulted in an ~~is~~ anticipated ~~to result in~~ on-site relocation to Phase C and off-site exportation of approximately 1,466 cy per day, generating approximately 81 truck trips per day for the entire ~~20~~25-year duration.

2.1.3 ENVIRONMENTAL PROTECTION ELEMENTS

The design for landfill operations under the GDP includes a number of environmental protection elements which respond to the established GDP goals and applicable local, state, and federal regulations. These elements include compliance with surface and groundwater monitoring requirements and air and gas monitoring requirements. These controls are described below:

Groundwater Protection Systems

Leachate is liquid which passes through the landfill, coming in contact with disposed wastes and possibly absorbing contaminants. The sources of moisture in a landfill may include: (1) rainfall which infiltrates the surface cover; (2) moisture in the refuse; and (3) moisture generated by decomposition.

Landfill regulations minimize the production of leachate by preventing infiltration. Infiltration reduction is accomplished by prohibiting disposal of liquid wastes in the landfill, effective drainage management which diverts surface water flows away from the landfill, separating the bottom of the landfill from groundwater by means of a liner, placing cover over waste on a daily basis and placing a low-permeability final cover.

Drainage improvements for the site include perimeter storm drain channels around the fill areas, downdrains, and terrace drains on the slopes and desilting basins. Final storm drain improvements are designed to accommodate flows from a 24-hour, 100-year storm event. The existing desilting basin at the south portion of Zone 1 was enlarged and improved for future development of Zone 1. A detention/desilting basin between Zones 1 and 4 was conceptually proposed in the 2001 GDP to meet stormwater detention/desilting requirements for ultimate development of the landfill in Zone 4. GDP Amendment No. 2 proposed desilting basins around the perimeter of Zone 4 in lieu of a basin downstream of Zone 4 (between Zones 1 and 4) in order to avoid sensitive biological resources. The perimeter basins ~~proposed for Zone 4 were updated in April 2016 as part of a~~ are required to comply with applicable Water Quality Certification Permits ~~No. R9-2020-0031~~that are approved by the ~~SDRWQCB on March 16, 2020~~. Interim desilting basins will also be constructed as part of on-going landfill operations.

WMU1 contains no liner or underlying LCRS, since landfill operations in this area were initiated in 1980, before the 1984 adoption of the California Code of Regulations (CCR) Title 23, Chapter 15 (now Title 27) which established standards for leachate control. The existing groundwater extraction system was constructed as a condition for acceptance of bio-solids at the landfill. The system consists of four groundwater extraction wells, which are situated in a line roughly perpendicular to the Prima Deshecha Cañada streambed and slightly downstream of the toe of WMU1. The purpose of these wells is to extract groundwater, which is flowing down gradient, away from the landfill, in the alluvium within the canyon bottom. The wells are situated so that groundwater flowing down gradient under WMU1 through the alluvial aquifer can be captured.

The collected leachate, if any, is tested and disposed off-site or applied to the surface of the lined portion of the landfill as a dust control measure. The final methods of disposal of landfill leachate are approved by the SDRWQCB and the LEA. Eventually, depending on the quantities and composition of the leachate, including the degree of contamination, an on-site leachate treatment facility may be installed with the effluent being discharged to the public sanitary sewer system or used as on-site dust control. To date, the extracted groundwater has not been found to be affected by leachate and is used for landfill operational purposes.

In accordance with Title 27, new areas landfilled under the GDP will be underlain by a liner and LCRS. For the development of Zone 1, an alternative liner design petition was prepared and approved by the SDRWQCB in WDR 93-86, Addendum No. 1 and was further modified in WDR R9-2003-0306, Addendum No. 1. The liner system design meets the requirements for alternative designs provided in Section III.A.1.b and Section III.A.3 of the State Water Resources Control Board Resolution No. 93-62. A typical cross-section of the currently approved alternative liner design is included in Figure 9.

Any variations of this design approach for the liner and LCRS will be submitted to the SDRWQCB for approval. Liquid percolating through the landfill will be collected and will flow by gravity through the LCRS to storage tanks that are located at the base of the landfill. Leachate collected in storage tanks may be transported off-site for treatment and disposal by a licensed hauler or used on-site for dust control in lined areas only as approved by the SDRWQCB. Alternate uses of the collected leachate will need approval by the SDRWQCB.

Air Quality Protection Systems

Landfill gas in the active fill area is currently collected by an active gas extraction system of horizontal collection piping and vertical wells. The gas is piped to the existing flare station ~~and beyond that facility to an on-site Energy Recovery Facility (ERF)~~. OCWR ~~has~~ previously provided for energy recovery as an alternative to continued flaring of the landfill gas. An ERF ~~has been~~ was designed, built, ~~and is currently~~ owned, and operated by Fortistar. Fortistar owned~~s~~ the rights to all the gas from the landfill which rights reverted back to OCWR in 2022. The ERF ~~i~~was located north of WMU2 and northeast of the current scale house and is now decommissioned. The ERF accomplished~~es~~ two objectives:

- ~~The ERF provides~~Provided additional capacity for the destruction of increasing quantities of landfill gas, a by-product of the decomposition of buried refuse.
- ~~The ERF converts~~ Converted the gas to electricity, which ~~is~~ was sold to SDG&E. Sufficient power may have been generated to supply approximately 3,000 homes.

OCWR is planning a new energy recovery facility which will be developed at a later date. As the landfill continues to receive refuse, the system will be expanded through the installation of both horizontal collection piping and vertical wells. Collected landfill gas will continue to be converted to energy and/or renewable natural gas (RNG) with additional flares installed as back-up as capacity requirements dictate.

Some minor grading of the area may be necessary to create pads for LFGTE, RNG, additional flares, and piping improvements. Additional above-grade piping would be required to transport landfill gas from newly developed areas to the existing flare station and on to the LFGTE facility. At closure, the site will still require a flare station and/or a gas utilization facility until landfill gas is no longer produced by the landfilled waste.

As gas flows through the landfill gas collection system, it cools and condenses, resulting in a liquid called condensate. Condensate is separated from the landfill gas and is currently collected in tanks for off-site disposal. The condensate may eventually be treated in a leachate/condensate treatment system prior to discharge or it may be piped to the flare station for combustion. The final disposal methods of landfill gas condensate must be approved by the SDRWQCB, SCAQMD and the LEA.

2.1.4 INTERIM AND FINAL REVEGETATION/LANDSCAPING

An important consideration of the landfill development, for erosion control as well as visual enhancement, is revegetation and landscaping of completed surfaces.

Requirements for revegetation and landscaping for the Prima Deshecha Landfill are imposed by State requirements and by the Cities of San Clemente and San Juan Capistrano. Interim revegetation and landscaping requirements are included in the Cooperative Agreement with the City of San Juan Capistrano and the MOU with the City of San Clemente as summarized below:

Cooperative Agreement with City of San Juan Capistrano Requirements

- The County will employ operational practices which will minimize the visual impact of the existing landfill. Such practices may include use of berms and accelerated front face phasing plan and strategically placed landscape material.

MOU with San Clemente Requirements

- Trees have been planted to screen the landfill in a location which has been approved by the City. The design of the treescape is described in plans and specifications titled "Prima Deshecha Landfill Mass Excavation Grading Plans for Zone 1 - Phase A," approved by the Board of Supervisors on May 13, 1997 and shall be in accordance with the "Tree Planting Plan" contained in those plans and specifications dated March 23, 1997.
- Interim landscaping treatment is to be provided consistent with erosion control measures required by current regulations.

In addition to the above requirements of the MOU, a Viewshed Protection Plan (VPP) was prepared in November 2008 to mitigate views of Zone 4 from San Clemente (to the south) as a condition of approval for FEIR 575. The VPP was cooperatively prepared between the City of San Clemente and OCWR prior to development of Zone 4. The intent of the VPP was to provide screening of the projected landfill grades above the ridgeline located to the south of Zone 4, which has been identified as visually sensitive area by the City of San Clemente. This plan has been implemented, with irrigation, 240 coast live oak trees (Quercus agrifolia), and native grass understory installed in 2015 along the ridgeline to provide screening for the anticipated landfill grades in Zone 4. A portion of this viewshed planting area will be impacted by the proposed LPPE Alignment along the ridgeline between Zones 3 and 4. Design and construction of the LPPE Alignment will require additional coordination with the City of San Clemente to replace impacted viewshed plantings and to develop landscaping and additional viewshed protection measures appropriate to the changed ridgeline with the proposed roadway alignment.

As required by CCR, Title 27, final landscape plans are included in the existing Preliminary Closure and Post-Closure Maintenance Plan (2018). The vegetation proposed in the Preliminary Closure and Post-Closure Maintenance Plan is a selected

plant species at closure which includes native seasonal grasses. Landfill landscaping will not include exotic plant species that may be invasive to native habitats including species on lists A1, A2 and B of the California Exotic Pest Plant Council's list of "Exotic Pest Plants of Greatest Ecological Concern in California as of October 1999" as required in the site's Section 1601 Streambed Alteration Agreement.

The Final Closure Plan for each zone will be prepared two years prior to closure of each landfill zone and will include existing or modified landscape plans. The proposed pre-mitigation program in Amendment No. 2 to FEIR 575 will be completed years in advance of closure, and there will be no other landscaping obligations associated with other regional planning efforts. A discussion of funding for final closure and post-closure improvements including landscaping is included in Section 2.1.5.

2.1.5 FINAL CLOSURE AND POST-CLOSURE MAINTENANCE FUNDING

In order to ensure that landfill operators are able to fund final closure improvements for their sites, Title 27 of the CCR requires that operators establish financial assurance mechanisms for both closure and post-closure.

The following describes OCWR's funding for landfill closure/post-closure costs in accordance with the CCR, Title 27.

Closure

Title 27 of the CCR requires that OCWR establish a Closure Escrow Account for each active landfill and to fund each escrow annually so that sufficient funds are set aside for estimated closure costs at the time of closure. The amount required for closure is based on a Preliminary Closure Plan with cost estimates developed by OCWR and approved by CalRecycle/SDRWQCB in accordance with State regulations. The OCWR sets aside ~~$1.15~~a set dollar amount per ton of imported refuse disposed at each of its three active landfills for closure funding. The funds are deposited into a trust account and transferred annually to each landfill's Closure Escrow Account. The escrow amounts are calculated by dividing annual refuse tonnage disposed by remaining permitted landfill capacity and multiplying the result by the remaining closure cost amount. ~~The Preliminary Closure Plan cost for the entire Prima Deshecha site approved by the SDRWQCB/CalRecycle in 2018, is $68,257,950.~~ A closure date of 2102 for the site has been calculated. The balance of the escrow account fluctuates on a daily basis. ~~As of December 31, 2020, Zone 1 closure is anticipated in approximately 30 years and Zone 4 in approximately 52 years. As of July 31, 2020, the Prima Deshecha Landfill Closure Escrow Account balance is $21,847,493.~~

Post-Closure

Under Title 27, Chapter 6, Article 2 Financial Assurance for Post Closure Maintenance, Section 22210 allows the OCWR to guarantee post-closure funding for the landfills through an approved financial assurance mechanism known as a Pledge of Revenue. The Pledge of Revenue financial assurance mechanism allows the OCWR to forego funding of the post-closure costs in advance and pay the costs as they are incurred, beginning when closure construction is complete and continuing annually through a minimum 30-year post-closure maintenance period.

OCWR elected to use a Pledge of Revenue financial assurance mechanism and has entered into a formal agreement with CalRecycle, in accordance with provisions under Title 27. There is not a need or statutory requirement to include OCWR's current funding for post closure maintenance, because the decision to pre-fund post closure maintenance care is an OCWR administrative policy decision.

Integrated Waste Management System Financial Stability

OCWR maintains an ongoing Fifteen-Year Financial Plan (Plan). Under the Plan, OCWR has developed tonnage and revenue assumptions and projections that incorporate both operations and regulatory compliance cost obligations, which include funds set aside for closure and post-closure activities as described above. An Independent Engineer has validated the assumptions and projections and concluded that OCWR cashflow and net operating income support the operation and maintenance of the disposal system, under its current per ton tipping fee.

2.2 CIRCULATION AND ROADWAY PLAN

2.2.1 INTRODUCTION

A key element of the GDP is the identification of the circulation and roadway improvements necessary to support the landfilling and recreation uses and to accommodate the arterial highway needs detailed in the currently approved MPAH, OCCP and City Circulation Plans. Internal, local circulation networks will be developed, as necessary, for the phased landfill operations and interim recreation use activities on site. Provisions for the extension of Avenida La Pata through the site (Figure 11) as a major regional arterial link of the MPAH (Figure 1) were included in Amendment No. 2 to the 2001 GDP. The currently approved MPAH and OCCP identify the approved ultimate capacity and conceptual alignment for this roadway. Amendment No. 3 to the GDP presented the LPPE Alignment extending from the RMV property through the southeastern portion of the Prima Deshecha Landfill and

intersecting with Avenida La Pata and designation as a Primary Arterial Highway (see Figures 3, 4B and 11).

Other roadways identified in the GDP include the extension of Camino de los Mares through the southwest corner of the site (see Figure 11). The circulation plans for the Cities of San Clemente and San Juan Capistrano identify the alignment for Camino de los Mares, which is proposed to connect to Camino Las Ramblas in San Juan Capistrano. As currently reflected on the MPAH, Camino Las Ramblas would be extended from its current terminus in a northeasterly alignment to the west and north of the landfill boundaries, eventually joining Avenida La Pata.

None of the arterial highway extensions will be constructed by the OCWR as part of the landfill development. The County's construction of Avenida La Pata and the LPPE are neither contingent nor dependent on the development of the site in accordance with the GDP. Although not all of these circulation improvements will be implemented in conjunction with the GDP, it is important that the GDP not preclude the future development of these approved roadway extensions.

2.2.2 ARTERIAL EXTENSIONS

The following section describes each component of the arterial circulation system (see Figure 11) including the alignment for the connection of Avenida La Pata through the site, the ability to extend Camino de los Mares and Camino Las Ramblas and development of the LPPE, given the configuration of the GDP. Although these roadways would not be developed as part of the GDP, the GDP landfilling and recreational uses can accommodate the conceptually proposed alignments for these roadways as depicted in the MPAH, OCCP and City Circulation Plans.

La Pata Avenue (renamed Avenida La Pata)

The northern portion of Avenida La Pata consisted of a 1.5-mile long, three-lane road which provided access to the landfill between the northerly limits of the landfill and Ortega Highway. It provided two southbound (uphill) lanes and one northbound (downhill) lane. An extension of Avenida La Pata through the landfill was proposed in the MPAH and OCCP which is a new arterial highway accommodating regional transportation demands and also serves current and future development of the landfill. The roadway extension included some realignment and widening of the previous Avenida La Pata. Within the aforementioned limits, the MPAH classifies Avenida La Pata as a Primary Arterial Highway from Ortega Highway to just south of the southerly landfill property where it is then classified as a Major Arterial Highway to Avenida Pico. The San Juan Capistrano Circulation Element classifies Avenida La Pata between the landfill's southerly limits and Ortega Highway as a Secondary

Arterial Highway which provides equivalent traffic capacity as the County's Primary Arterial Highway. The San Clemente Circulation Element classifies Avenida La Pata as a Primary Arterial Highway.

OC Public Works completed the planned construction of the Avenida La Pata extension through the landfill and opened the road to the public in August 2016. As shown on Figure 3, Avenida La Pata transects through the landfill, southward from the original landfill entrance. The La Pata Avenue Gap Closure project was constructed to extend the road alignment going through WMU2 where the waste on the west side of WMU2 was excavated and reconsolidated in Zone 1 to accommodate the new roadway. The western slope of WMU2 received a final cover during grading of the road extension because a small portion of waste under the power easement and landfill access road could not be removed at the time (see Figure 16). South of WMU2, the road extension alignment is located east of Zone 1 (Phase D) and west of the future Zone 4.

Ultimate MPAH and OCCP improvements upgraded Avenida La Pata to its current designation of Primary Arterial Highway. The project included a new four-lane extension of Avenida La Pata through the landfill to join the existing Avenida La Pata in San Clemente. The completion of Avenida La Pata between Ortega Highway and Avenida Pico completed a major segment of the MPAH and OCCP and improved north- south circulation in the area. Various improvement alternatives for the Avenida La Pata alignment through the site were previously identified and compared, including alternatives analyzed in Final EIR 548. The County conducted a feasibility study (the La Pata Avenue Gap Closure Study) which identified the preferred alignment based upon current project objectives and site conditions. Amendment No. 2 of the GDP was closely coordinated with studies on the Avenida La Pata extension to ensure that consistency and compatibility was maintained between both projects.

Camino de los Mares

The existing Camino de los Mares roadway located within the City of San Clemente consists of a four-lane roadway terminating at the southern property line of the site. The extension of Camino de los Mares (north of its existing terminus in Forster Ranch at the southwest landfill boundary) to Camino Las Ramblas would create a secondary arterial highway as designated on the Cities' Circulation Plans. This road extension is shown on Figure 11 in the southwest corner of the property. There is property available within the GDP boundaries, unaffected by landfill operations, to allow extension of this arterial highway. However, a biological mitigation site and conservation easement are in close proximity to the conceptual alignment. The conservation easement contains provisions/permissions that allow the roadway to

cross through the easement area. Should mitigation areas be affected, these resources will need to be replaced in a manner approved by the biological resource agencies with jurisdiction. If this extension is constructed, a connection for alternate (southern) access to Zone 1, after closure of the landfill, could be developed. However, in accordance with the MOU with the City of San Clemente, in no event will haulers utilizing the landfill for the disposal of solid waste be permitted to use Camino de los Mares as an access route.

Camino Las Ramblas

The MPAH indicates that Camino Las Ramblas will continue in a northeasterly direction from its intersection with the proposed Camino de los Mares extension and proceed adjacent to the westerly and northerly landfill boundaries, eventually joining Avenida La Pata (see Figure 1). The City of San Juan Capistrano passed a resolution on December 14, 1999 that stipulates the City's intention to pursue deletion of the Camino Las Ramblas extension to Avenida La Pata. Therefore, the City must submit a request to the OCTA to amend the MPAH. Prior to any action taken by OCTA, the City of San Juan Capistrano would be required to prepare and process a General Plan Amendment (i.e., Circulation Element) and appropriate CEQA documentation. If the amendment is approved by the City of San Juan Capistrano, the amendment would then be forwarded to the OCTA Board for action.

An amendment to the MPAH as a result of actions taken by the City of San Juan Capistrano and/or San Clemente regarding the alignment of these arterial roadways may also necessitate a revision to the 2001 GDP to ensure consistency between the 2001 GDP Circulation Component and the MPAH.

The County and the City of San Juan Capistrano through the GMA process will analyze the need for this facility in the future.

Los Patrones Parkway Extension (LPPE)

Modification to extend Los Patrones Parkway (Los Patrones Parkway Extension [LPPE]) from its current terminus at Cow Camp Road south to Avenida La Pata to accommodate north-south travel has been included in the County of Orange General Plan, Transportation Element The conceptual LPPE Alignment would traverse the Ranch Plan Planned Community (Ranch) and a portion of the Prima Deshecha Landfill property. Overall, the LPPE Alignment would cross through less than 1% of the Prima Deshecha landfill's 1,530-acre site (the proposed LPPE alignment including grading limits will cover approximately 69 acres going through Zones 3 and 4 of the landfill property, amounting to approximately 10% of the property in Zones 3 and 4 east of Avenida La Pata, combined; additional detail on acreage of impacts in

Zone 3 are described in Section 2.3.4 below). The roadway has been designated as an unconstructed Primary Arterial Highway in the County General Plan and MPAH. In revising the circulation network to extend Los Patrones Parkway from its current terminus at Cow Camp Road, the originally intended north-south mobility goal would be achieved and would be consistent with Special Consideration 3.10.2 of the Guidance for Administration of the Orange County MPAH, which states, "Arterials should be continuous between two connecting arterials." Los Patrones Parkway north of Cow Camp Road and the LPPE south of Cow Camp Road to Avenida La Pata would serve the transportation demand that would have been provided by the extension of the SR-241.

The LPPE Alignment will cross through a biological mitigation site and conservation easement. The conservation easement contains provisions/permissions that may allow the roadway to cross through the easement area. An amendment to the SSHCP will be required in coordination with USFWS.

2.2.3 INTERNAL CIRCULATION SYSTEM

The general development concept is for the site to function primarily as a solid waste disposal facility and, secondly, to provide interim and ultimate recreational opportunities for the general public. To this end, the following criteria has been established for the internal roadway circulation plan:

- Landfill operations shall remain uninterrupted.
- Landfill operations traffic shall be separated from on-site recreational traffic.
- Landfill operations must be allowed to cross under the SDG&E and SCE electrical transmission lines without interrupting traffic flow on Avenida La Pata, if constructed.
- Refuse truck traffic will be approaching the landfill from the north via Ortega Highway and Avenida La Pata.
- Some trucks collecting refuse in San Clemente may access the landfill from the south through Avenida La Pata. However, in accordance with the MOU with the City of San Clemente, haulers utilizing the landfill for refuse disposal cannot use Camino de los Mares as an access route. Also, in the event that the County's existing contracts with haulers to import waste to the landfill from outside Orange County require access to the landfill via San Clemente City streets, approval of a designated haul route shall first be obtained from the City of San Clemente, which shall be compensated for that access in accordance with the MOU.

Other issues considered in developing the internal circulation system include protection of sensitive biological resources, aesthetic considerations regarding ridgeline impacts, geotechnical constraints and physical constraints associated with the existing utility easements.

The conceptual circulation plan, shown in Figure 11, identifies individual on-site access roads and includes the constructed alignment for Avenida La Pata and the proposed extension of Camino de los Mares through the site.

The proposed site access and circulation system is intended to segregate existing and future landfill-related traffic from traffic generated by interim recreational uses. The goal of segregation is complicated by the dynamic nature of landfill-related circulation patterns which will continue to change as the fill area elevation increases and as operations shift between Zones 1 and Zone 4. Currently, landfill access is provided by Avenida La Pata which bisects the site and extends from Ortega Highway in San Juan Capistrano to Calle Extremo in San Clemente.

After the Zone 1 landfill is closed, recreational traffic accessing the regional park or golf course in Zone 1 and multiple-use trail staging areas will need to be accommodated. Landfill traffic may access future Zone 4 from a new scalehouse location off of Avenida La Pata that may be developed, or via enhancements made to the existing scalehouse in Zone 1 depending on site needs (see Figure 11). The enhanced existing scalehouse or potential new entrance facilities in the middle of the property could ultimately be used for Zone 4 recreational uses following closure.

2.3 RECREATION ACTIVITIES PLAN

2.3.1 INTRODUCTION

Proposed recreational uses on the Prima Deshecha Landfill site should respond to the needs of south Orange County residents. Various agency groups representing the Cities of San Juan Capistrano and San Clemente, the Talega Valley Reserve and the County of Orange have previously recommended that the proposed recreational uses on the site take into consideration the existing recreational activities adjacent to or near the project site (i.e., multiple use trails). These uses should also be consistent with the County of Orange Master Plan of Regional Recreational Facilities which identifies proposed future recreational facilities. Amendment No. 3 to the GDP presented the proposed alignment of the LPPE extending from the RMV property through the southeastern portion of the Prima Deshecha Landfill and intersecting with Avenida La Pata and changes to recreational uses described in the GDP (see Figures 3 and 4B).

2.3.2 RECREATIONAL USE POTENTIAL

Given the variety of possible recreational uses on the site, research was previously conducted to determine whether the recreational uses would be compatible with adjacent land uses designated on the General Plans of the adjacent cities and the County of Orange. Specifically, the OC Public Works/OC Parks section of OC Community Resources (OCCR) (previously Orange County Resources and Development Management Department/Harbors, Beaches and Parks) and the Cities of San Juan Capistrano and San Clemente, through the public review process for EIR 548, developed a list of possible recreational uses including a regional staging area and multiple use trails which were appropriate to meet the demands of county-wide residents at the time. However, these demands may change by the time the site closes. They will, therefore, be re-evaluated in a needs analysis prior to the time of landfill closure, when the recreational needs can be assessed with greater certainty.

2.3.3 PHASING FOR INTERIM AND ULTIMATE RECREATIONAL USES

The purpose of the recreation component of the GDP is to identify opportunities and locate sites for various interim and ultimate recreational uses in the context of pre- and post-closure landfill operations. Figure 3 shows areas designated for recreational development and landfill operations. The GDP is divided into five zones which delineate current and future landfill operations, and potential interim and ultimate recreational areas. Previous discussions with representatives of the Cities of San Clemente and San Juan Capistrano have been focused on identifying specific trail alignments around Zone 1. Interim uses are those recreational activities which can occur during landfilling operations on the site. The primary use of the site is as a landfill. While waste management operations are occurring, however, limited interim and ultimate recreational activities can occur on other locations at the site depending on the status of landfill activities, satisfactory access and protection of public health and safety.

As previously illustrated, Figure 3 identifies alignments for regional and local riding and hiking trails throughout the site in areas designated as Zone 2. Although some sections of these trails have been constructed, the majority are not yet built. For the majority of these trails, final alignments have not yet been determined. Therefore, it is not possible to predict when each trail would be completed and open for use by the public. Trails depicted along the perimeter of the Zone 4 landfill area will be available as interim recreational use only during filling operations of the Zone 1 landfill. Once landfill operations are moved to Zone 4, it is proposed that this perimeter trail be closed to the public based on protection of public health and safety. OC Public Works/OC Parks may evaluate the possibility of relocating this trail away from landfill

operations. This would depend upon its use and importance as a regional trail and the existence of a through trail along the western perimeter of the site at that time. The LPPE Alignment is conceptually shown as extending through a portion of Zone 2 and adjacent to Zone 4. Once Zone 4 is complete, the trail alignment can be developed and integrated into the ultimate recreation plan for the regional park. The expected timing of the trail is not until post-2102 and the LPPE Alignment would not preclude the future implementation of the trail. Final alignment of the proposed trails would be determined post-2102 after the closure of Zone 4 and development of LPPE.

A regional park or golf course (see Figure 10) for Zone 1 can be accommodated on the deck of the Zone 1 landfill once it is closed, sufficient settlement has occurred and concessionaires (in the case of a golf course) are identified. However, a recreation needs analysis will be performed just prior to Zone 1 closure before a final use plan is adopted. As mentioned above, trails may also be implemented in those areas which are unaffected by landfill operations or where landfilling has been completed and formally closed. This allows for staging of recreational uses over an extended time frame when landfill operations would also be occurring on the site.

The LPPE Alignment would not have any direct or indirect impacts on the Zone 1 area.

The 2001 GDP proposed a regional park recreational use, (the proposed 'Prima Deshecha Regional Park' as depicted on the Master Plan of Regional Recreational Facilities of the Recreation Element) for Zone 4. Although the Prima Deshecha Landfill site has been designated as "Regional Park" by the County on the adopted Land Use Element, ultimate regional park recreational uses have not been identified for Zone 4. However, Zone 4 will not be available for regional park use until after the closure of the Zone 4 landfill, which is not anticipated until about 2102.

Consequently, a commitment to implement specific uses is not included in the 2001 GDP since recreational demand for this park might be quite different by that time. A needs analysis and park plan reflecting the recreational needs of south Orange County residents will be more appropriately developed nearer to the time of closure of Zone 4. In addition, biological mitigation and environmental enhancement actions within and around Zone 4 may result in a more passive recreational post-closure use.

The LPPE Alignment would traverse the portion of the landfill south of Zone 4 and east of Avenida La Pata. Similar to Avenida La Pata, the LPPE would traverse area identified for future park development. Given the size of the future park, improved access and internal circulation would be required. The LPPE could be incorporated

into the design of the recreational facilities as an additional access route to the park. The LPPE would provide a boundary for the portion of Zone 3 east of Avenida La Pata, which is identified as being retained in its natural state in concert with the SSHCP. The LPPE would not preclude the implementation of the future park following closure of Zone 4.

2.3.4 NATURAL OPEN SPACE

In addition to recreational uses, Zone 3 areas of the site will be retained as natural open space. Zone 3 contains natural areas on the site (see Figure 3) which will not be impacted by landfill refuse filling operations and should be protected and retained in their natural state in concert with the Orange County Southern Sub-Region Habitat Conservation Plan (SSHCP) program being administered by the County of Orange, landowners, environmental groups and resource agencies. These natural areas include habitat used by the California gnatcatcher which is an avian species protected by the Federal Endangered Species Act. Final SEIR 597 for Amendment No. 2 to the GDP contained an extensive biological pre-mitigation program as well as a regional environmental enhancement program that identified biological resource enhancement opportunities onsite consistent with the HCP (see Figure 4). These programs will assist in facilitating streamlined continuation of landfill activities through project build-out, while ensuring the long-term protection and enhancement of biological resources at the site in a manner consistent with local, State and Federal regional planning objectives.

Construction of the LPPE Alignment would result in permanent and restorable impacts in the Prima Deshecha Supplemental Open Space (SOS) as designated through participation in the SSHCP. Generally, while SOS is not part of the Habitat Reserve, it contributes to the SSHCP Conservation Strategy by providing additional open space supporting habitat for Covered Species and contributing to wildlife connectivity and refugia which supplement the overall function of the Habitat Reserve. However, as stated in the SSHCP, "The long-term function of the proposed Habitat does not depend on the SOS..." (p. 10-46 of the SSHCP).

Construction of the LPPE Alignment would result in a total of approximately 44.2 acres of impact within Prima Deshecha SOS lands, including 7.2 acres of permanent roadway impacts and 36.9 acres of restorable impacts. Permanent impacts in Prima Deshecha SOS includes 4.9 acres of grassland and 0.2 acres of coastal sage scrub as well as 0.2 acres of coastal sage scrub restoration area, 0.1 acres of native grassland restoration area, and 1.9 acres of oak visual screening area (as required by the Viewshed Protection Plan prepared cooperatively with the City of San Clemente per mitigation measures outlined in EIR 575). Restorable

impacts in Prima Deshecha SOS includes 30.3 acres of grassland and 2.5 acres of coastal sage scrub as well as 1.2 acres of coastal sage scrub restoration area, 1.4 acres of native grassland restoration area, and 1.6 acres of oak visual screening area.

Previous environmental analyses for activities associated with implementation of the Prima Deshecha GDP found that permanent and temporary impacts to coastal sage scrub and grassland would be mitigated below a level of significance through implementation of habitat preservation, replacement, or enhancement at a 1:1 ratio. Further, any temporary impacts to restored coastal sage scrub or native grassland in SOS would be mitigated below a level of significance through restoration of the disturbed areas on a 1:1 basis the next growing season following completion of the impacts. Consistent with previous environmental analyses, the LPPE would result in impacts to existing coastal sage scrub and grassland vegetation communities and restored coastal sage scrub and grassland, which would be considered significant if determined to conflict with the SSHCP conservation strategy and absent necessary mitigation measures. Implementation of the Biological Resources Construction Plan (BRCP) Measures, Measures to Avoid and Minimize Indirect Effects, and Measures to Maintain SOS Habitat Value would reduce this impact to less than significant and would not result in a new or substantially more severe impact.

In compliance with the SSHCP, restoration of all impacts to SOS mitigation areas would be conducted. All installed SOS mitigation areas would be recreated in either non-impacted SOS lands or within the Habitat Reserve. Restoration of the Prima SOS roadway slopes with Conserved Vegetation Communities would be conducted for the LPPE on Prima Deshecha lands. Priority would be given to SOS lands. As required by Appendix U of the SSHCP, a detailed Restoration Plan would be prepared for USFWS review and approval. The restoration plan would specify the amount and location of all vegetation communities that would be planted, along with the site preparation and planting methods, maintenance and monitoring methods, and performance standards that would be achieved for all restoration and revegetation areas.

Implementation of the Mitigation Program, including the provisions outlined in Appendix U of the SSCHP will mitigate the impacts on vegetation communities on County lands. An amendment to the SSHCP will be required to incorporate the proposed LPPE and analysis described above.

2.3.5 REGIONAL PARK FINANCING PLAN

OC Public Works/OC Parks provides administrative, planning, and operational services for the County regional park system. Funding for OC Public Works/OC Parks

is provided from a percentage of County property tax revenues dedicated to the regional park system. OC Public Works/OC Parks Capital Project funds are allocated based upon rating and ranking criteria specified within their Five-Year Capital Plan.

The Five-Year Capital Plan is updated annually. County regional park programs and construction of other potential recreational improvements are identified and implemented in conjunction with this Five-Year Capital Plan. Prima Deshecha Landfill is currently designated on the County Master Plan of Regional Recreational Facilities as a proposed regional park. The Five-Year Capital Plan is reviewed by the OC Public Works/OC Parks Commission and presented to the Board of Supervisors for approval as part of the County's annual budget process.

County regional parks are designed for passive, open space use; in contrast, urban community parks provide for active recreational uses. If the needs assessment for a regional park indicates that active recreational programs are needed over and above those provided by the County regional park system, those programs become the responsibility of the local municipality park and recreational planning process. The goal of County Regional Recreational Park programs is to accommodate Orange County's regional recreation needs. However, County parks have provided leased space for active community uses within regional parklands (i.e., Mile Square Park in Fountain Valley and Yorba Regional Park in Yorba Linda), with the local municipality providing for the programming and operations of these facilities.

Zones 1 and 4 Regional Park Financing

OCWR will begin preparation of a Final Closure and Post-Closure Maintenance Plan approximately five years prior to the cessation of waste acceptance in Zones 1 and 4. These documents will be submitted to CalRecycle two years prior to the planned closure as required per CCR, Title 27. The closure plan, including final end use, must be approved by regulatory agencies prior to initiation of closure activities. During the five-year period prior to closure, the OC Public Works/OC Parks should include the Prima Deshecha Regional Park in their Five-Year Capital Plan. The process will involve a needs analysis for regional, and as appropriate, local uses undertaken in cooperation with adjacent cities and interest groups. A definitive cost study will also be conducted as part of this process once the proposed uses are established.

Zone 2 Trail Financing

The Recreational Element of the County General Plan includes a Master Plan of Regional Riding and Hiking Trails Component. County trail development, maintenance and operations are funded as part of the OC Public Works/OC Parks Five-Year Capital Program (Fund No. 405 of the County Service Area No. 26 annual

budget). Other funding sources include new, private developments and the cities. The City trails proposed in Zone 2 of the GDP are funded by the individual cities.

SECTION 3.0

3.0 GDP PHASING

3.1 OVERVIEW

The implementation of the GDP landfill plan, as amended herein, is proposed to be phased over a span of approximately 82 years from December 2020 to 2102. Active landfilling will continue in Zone 1 concurrently with the development of trails for recreational use around the perimeter of Zone 1. When landfilling in Zone 1 has ceased, closure activities have been completed, satisfactory access has been established, sufficient settlement has occurred, and landfilling is occurring in Zone 4, the ultimate recreational use(s) for Zone 1, as identified in a needs analysis, can be developed. When landfilling in Zone 4 is complete, the ultimate recreational uses can be developed for that site after closure activities have been completed and sufficient settlement has occurred. The only long-term landfill related activities that will occur on the site after Zone 4 is filled will be associated with the continued collection and disposal of leachate and landfill gas, ongoing maintenance of the landfill final cover, drainage controls and groundwater monitoring.

The proposed phasing and factors affecting phasing for the landfill, recreation and circulation uses on the site are described in Sections 3.2 through 3.5. In Section 3.6, actions subsequent to approval of the 2001 GDP as amended to plan, design and implement the GDP uses are identified.

3.2 LANDFILL PLAN PHASING

Zone 1 includes the lateral (eastward) and vertical development of the original WMU1 refuse area from 100 acres to 271 acres (see Figures 4A/4B) over a period of approximately 30 years from December 31, 2020. This time span is based on assumptions presented in Section 2.1.2 and Table 2. The closure year for Zone 1 is 2050 should landfill operations stay only in that zone until final grades are achieved. Moving to Zone 4 prior to Zone 1 reaching final grades will extend operations in Zone 1 past that closure year; however, the ultimate closure year for the Prima Deshecha Landfill (combined Zones 1 and 4) will not change. Zone 4 encompasses a refuse footprint of 409 acres in the east portion of the site, which would be in active operation through the year 2102. The total life of the site for landfill purposes, as of December 31, 2020 is estimated to be approximately 82 additional years or to 2102. The total in-place and remaining refuse capacity for the site is summarized in Table 1. The site life could be extended if less refuse is accepted for disposal than the projected amount and/or if new technologies are developed which have the effect of increasing the landfill capacity. One such technology is the use of tarps, currently utilized at the landfill, as well as alternative approaches to daily cover on the active

face of the landfill. However, soil for daily cover will continue to be necessary. Alternatives to landfilling such as composting and material recovery facilities may also extend landfill capacity.

As the owner/operator of the landfill, the County of Orange is required to provide amendments to operating permit documentation to the LEA at least every five years, or more frequently, to discuss any changes in the site design, operations plan and/or the remaining life of the landfill.

For operational guidance and to allow a closer examination of the environmental impacts of the GDP over time, phasing scenarios were developed for the landfill which include four major phases of development for Zone 1 (Phases A through D) and a nine major phase plan for the development of Zone 4 (Phases A through I). Smaller sub-phases of development are implemented based on operational needs and capital budgeting requirements. Table 2 presents a summary of information on refuse capacity, and projected life for Zones 1 and 4. Figures 12 through 15 illustrate the sequential major phases of landfilling activities at the site through the end of landfilling operations under the GDP. These major phases will be developed in sub-phases as operations progress. Figures 12 and 13 present the phasing limits of excavation and refuse filling for Zone 1, respectively. Figures 14 and 15 present the phasing limits of excavation and refuse filling for Zone 4, respectively. The excavation phasing limits have been modified for both Zones 1 and 4 in Amendment No. 2 to reflect a greater potential disturbance limit for landslide remediation. The design is intended to minimize the need for stockpiling and double handling of cover material (soil), although substantial stockpiling will be necessary. In general, soil is excavated in new development areas on the site and is stockpiled in future disposal areas and/or is used as daily cover for ongoing operations. It is intended that all excavated soil be used on-site, and that no exporting or importing of soil will be necessary with the exception of the San Onofre Breccia and import of soil for liner installation the environmental impacts of which are analyzed in the SEIR No. 2 to

FEIR 575. Should there be a need to import or export additional soil in the future, that plan would be subject to future CEQA documentation.

3.2.1 ZONE 1 - LANDFILLING

Eight sub-phases of excavation within major Phases A through D are currently proposed for the full development of Zone 1 (refer to Figure 13). Filling has occurred in landfill areas designated as WMU1 (Summer 1980), Phases A (February, 1999), A1 (November, 2000), C1 (July, 2002), and B (July, 2004), A2 (September 2005), B1 (December 2005), C2 (October 2006), C3 (February 2015) and D1 (August 2019)

with future development continuing to the east of Phase D1 with Phase D2 as the last lateral development phase of the Zone 1 landfill. The ultimate development of Zone 1 will provide a total area of 271 acres for refuse fill. The following describes the lined phases of development for Zone 1 (as of January 2021).

Phase A and A1

The first phase (Phase A) of lateral development in Zone 1 extended to the east of WMU1 and was the first lined cell in Zone 1. A liner and LCRS were installed prior to refuse filling in Phase A, which began in February 1999.

The Phase A development required the excavation of approximately 4.1 mcy of soil, the majority of which (2.4 mcy) was stockpiled to the north and west of WMU1 (Stockpile 2). Approximately 1.7 mcy of the material excavated from Phase A was stockpiled in a 17-acre area to the south of the landfill (Stockpile No. 1), adjacent to the Prima Deshecha Cañada water course running through the site. As a result of unusually heavy rains during early 1998, a landslide developed in Stockpile No. 1.

As a result of the landslide, a Phase A1 area was developed to ensure ongoing operations during the approval process for the landslide remediation plan. Phase A1 is a lined area and is located north of WMU1 (previously Stockpile No. 2) and provided an additional 1.8 years of airspace capacity.

Phase A2

The Phase A2 area construction was completed in September 2005 and encompasses approximately 7.5 acres of grading and 3.1 acres of liner area and required the excavation of approximately 60,000 cy of soil material, 5,000 cy of fill and subsequent lining of the subgrade. Phase A2 was developed to eliminate a low area created from the adjacent refuse fill. This facilitated operational access and improved drainage. The Phase A2 development area provided a small increment of additional airspace (estimated at 680,000 cy) for the area between Phases A1 and C1 (see Figure 13). The primary purpose of lining this area was to improve operations and drainage, with additional refuse fill. A majority of the cut slope excavation for the Phase A2 liner subgrade was completed for Phase A1 with the majority of grading proposed for Phase A2 (cut and fill) required to tie in adjacent bench grades and to accommodate a perimeter drainage system.

The additional liner placed for Phase A2 required realignment of two existing concrete v-ditches to provide perimeter drainage control for the expanded liner. The interim perimeter drainage control system for Phase A2 was designed to accommodate a 100-year, 24-hour storm event and to minimize erosion.

Phase B

The excavation for Phase B occurred along the southern boundary of Zone 1 (see Figure 12). The design basis for the excavation of Phase B was the remediation of the landslide in Stockpile No. 1 which included realignment of the Prima Deshecha Cañada channel to the south. The remediation project included the removal of alluvial and stockpile material and recompaction of soil fill to stabilize the landslide, and the realignment of the natural open channel so that it conveys water to the east and south of Zone 1.

Phase B excavation involved the complete removal of approximately 1.7 mcy of stockpiled material and recompaction of approximately 1.0 mcy to stabilize the landslide, achieve realigned channel grades, and provide the liner subgrade. The realigned natural stream channel is in excess of six acres, varying in width from 50 to 101 feet and is approximately 3,100 feet long. The approximate 85 to 101 foot width of the majority of new channel corridor is adjacent to a 25-foot wide landfill perimeter maintenance road, improved drainage channel and a setback for a final cover keyway. The realigned stream is located outside the area of landfill operations, thus minimizing indirect impacts on streambed biological resources from daily landfill operations and providing opportunity to establish additional riparian habitat.

Part of the area to the south of Phase A and future Phases C and D were excavated for Phase B; however, only the west portion of the Phase B excavation was lined initially for refuse filling (see Figure 13). The remaining area of Phase B was completed in May 2004. Phase B filling extended north into the WMU1 fill area.

Phase B1

The Phase B1 area construction was completed in December 2005 and encompasses approximately 10.1 acres of excavation and 7.2 acres of liner area and required the excavation of approximately 450,000 ~~cubic yards (~~cy~~)~~ of soil material and subsequent lining of the subgrade. The Phase B1 liner area unifies filling operations between Phase B to the south and Phase C1 to the north (see Figure 13). This area could not be lined previously with either Phase C1 or Phase B due to a delay in relocating the site's HHWCC located within Phase B1. The HHWCC was relocated to the site entrance facility area and Phase B1 filled in the gap left between Phases B and C1, thereby, facilitating refuse fill operations in that area. The Phase B1 development area provided approximately 4.0 mcy of airspace capacity resulting in an estimated two years of life.

Phase C

Phase C extends to the east of Phase A (see Figure 13) and is comprised of sub-phases C1, C2, and C3. Due to delays in obtaining the landslide remediation and Phase B development project permits and approvals, an interim solution of developing Phase C1 to provide refuse airspace was necessary. Phase C1 was developed in July 2002 ahead of Phase B, as it did not require any permit action other than CEQA compliance. Phase B was, therefore, developed after Phase C1. Phase C1 comprises 34 acres including 21 acres of lined area.

The Phase C2 liner area provided additional airspace and time for OCWR excavation of the northerly cut slopes of Zone 1 for Phase C3. The Phase C2 development area provided up to 2.8 ~~million cubic yards (~~mcy~~)~~ of airspace capacity resulting in approximately 1.6 years of life. The Zone 1-Phase C2 development area extended operations from Phase B and B1 to the east in an area previously occupied by a temporary desilting basin constructed during Phase B1/A2. The eastern edge of the Phase C2 excavation abuts the Phase B stockpile. The northern and western limits of Phase C2 join the existing landfill subgrade elevations and connect with the existing liner systems in Phases B and B1. The Phase C2 liner system construction was completed in October 2006.

Development of Phase C3 began during the 2013/2014 fiscal year. The Zone 1, Phase C3 development area extends the landfill subgrade elevations, liner limits and operations from Phases A2, C1, and B1 to the east and Phase C2 to the north. A paved haul road, standpipe, and existing 36-inch corrugated steel pipe, along with ancillary drainage features within the Phase C3 area, was removed as part of the construction project. Flows along the northern slopes of Phase C3 are directed in a series of benches with V-ditches to the proposed eastern PSD system. A portion of an existing City of San Juan Capistrano water main was relocated outside of grading limits along the north slope of Phase C3. Excavated material from Phase C3 was placed in stockpiles for use as daily cover or slope repair. The disturbed area for Phase C3 is approximately 39.22 acres. The lined area for Phase C3 is about 13.08 acres and will provide approximately 3 mcy of total airspace capacity.

Phase D

The fourth and final phase of Zone 1 (Phase D) extends to the east of Phases B and C. The construction of the liner system in Phase D will occur in two sub-phases (Phases D1 and D2). Phase D1 consisted of 2.4 mcy of excavation and a buttress fill with remedial grading for slope stabilization which resulted in approximately 9 mcy of total airspace capacity. Construction of Phase D1 was completed in August 2019

and fill activities are currently occurring in Phase D1. Phase D2 will be the final phase of development for Zone 1.

Phases C and D involved the excavation and stockpile of materials for daily cover in the west portion of Phase B and over previous fill areas. Filling in Phase D will reach the remaining final grades in Zone 1.

The Zone 1 final grades are based on an MOU with the City of San Clemente and a Cooperative Agreement with the City of San Juan Capistrano. Excavation of the first phase in Zone 4 will commence before the end of filling Phase D of Zone 1.

Amendment No. 4 proposes concurrent operations in Zones 1 and 4. OCWR would spend several months per year landfilling in Zone 1 before moving into Zone 4, and vice versa. Concurrent landfilling operations within Zone 4 is anticipated to begin in ~~2024~~2026.

In addition to the four major phases of liner development in Zone 1, the existing desilting basin at the toe of Zone 1 was enlarged in 2005 and concrete lined. A permanent LCRS facility was also completed south of Zone 1 to support ongoing operations.

3.2.2 ZONE 4 - LANDFILLING

The current phasing scenario for Zone 4 proposes to begin operations in the northwestern corner (see Phase A in Figure 15). Operations and development of the landfill would then generally proceed alphabetically through the phases~~in a west to east direction~~, with a series of excavations (see Figure 15) and refuse fills (Phase A through I) until the final grade at 1,010 feet amsl (consistent with the San Clemente MOU) is reached. A more detailed phasing scenario will be developed prior to filling in Zone 4 based on geotechnical stability analyses for each incremental phase. Figure 4A presents the final grades of the completed landfill.

Zone 4 will be excavated in phases to provide for required refuse capacity and daily cover soil as operations progress, thereby minimizing construction costs and stockpile area requirements. Excavated soil will either be stockpiled for later use or it will be immediately used as daily and/or interim cover with the exception of San Onofre Breccia material which is proposed to be exported offsite for end market use. The San Onofre Breccia will be stockpiled in future Zone 4 Phases B and C areas prior to transporting off site to end markets.

During the construction of new landfill development phases, OCWR would import a significant amount of soil for liner installation. Approximately 8,108 cubic yards of

soil would be imported for each new development phase. The duration of soil importation during liner installation for each development phase is approximately 20 operating days per month in duration and would result in approximately 23 truck trips per day. Soil import trips would begin in 2023 and would occur approximately every 10 to 15 years as phases are constructed (two of the later phases may be constructed at a lesser interval of 5 years). Soil import trips would continue throughout construction of all of the Zone 4 phases during liner installation, with the last Zone 4 development phase (which will include a new liner in Phase H) anticipated to be constructed in approximately 2088–2089.

3.3 RECREATIONAL PLAN PHASING

The phasing and implementation of recreational uses at the site are constrained in that the landfilling activities and uses will always take precedence over the recreation and circulation improvements on the site and will always govern the timing of uses proposed to occur in areas that were formerly used for landfilling. In addition, the decision to proceed with an interim or ultimate recreational use must be supported by evidence that these uses will not impact ongoing landfilling operations on the site and that public health and safety can be protected. When the active disposal of solid waste on the site is completed, the ultimate recreational uses proposed to be implemented cannot interfere with or adversely affect long-term landfill management activities, including cover maintenance, landfill gas collection and disposal, leachate collection and recovery, groundwater well monitoring and other ongoing landfill maintenance and post-closure activities. Recreational uses are proposed for Zones 1 and 4 based on a Needs Analysis to be conducted closer to landfill closure in those zones with trail uses proposed in Zone 2 (including a trail crossing across Zone 5) as described below.

3.3.1 PHASING OF RECREATIONAL USES IN ZONE 1

Zone 1 is an area where current landfilling takes place. The area now being filled will continue to be filled in an eastward direction to include all of the 271 acres designated for landfilling in Zone 1. The closure year for Zone 1 is 2050 should landfill operations stay only in that zone until final grades are achieved. However, current plans to move operations to Zone 4 prior to Zone 1 reaching final grades will extend operations in Zone 1 past that closure year. After closure activities have been completed, satisfactory access established, and sufficient settlement has occurred, the ultimate recreational uses as identified in a Needs Analysis to be completed closer to Zone 1 being closed could be implemented.

3.3.2 PHASING OF TRAIL USES

OC Public Works/OC Parks will coordinate the development of trails on the Prima Deshecha site with connector trails outside the site proposed by the Cities of San Clemente and San Juan Capistrano. OC Public Works/OC Parks' proposed Regional Riding and Hiking Trails traverses the Prima Deshecha site along the northeastern perimeter of the property around Zone 4 as shown on Figure 3. The County trail will connect directly with the Cristianitos, University of California and the Regional Riding and Hiking Trails, which themselves provide connections to other trails in the area to the south and north, respectively. The off-site connections for the County trails are shown on Figure 3.

As discussed in Section 2.3.4, trails depicted along the perimeter of Zone 4 will be available as interim recreational use only during filling operations of Zone 1. Discussions with representatives of the Cities of San Clemente and San Juan Capistrano have focused on identifying specific trail alignments around Zone 1. Upon commencement of filling operations in Zone 4, these trails will be closed to the public for the protection of public safety. OC Public Works/OC Parks may evaluate the possibility of relocating these trails away from landfill operations. This would depend upon their use and importance as a regional trail and the existence of a through trail along the western perimeter of the site at that time. Development of the LPPE will impact these trails as shown on Figure 3. The final trail alignment will be determined upon landfill closure and post-LPPE construction. Placement of the trails will be accommodated by landfill and road design. Trail heads are proposed directly west of the current entrance facilities to be developed after Zone 1 is closed and directly east of the current entrance facilities after Zone 4 is closed.

On-site City trails around Zone 1 are shown on Figure 3 and can be used throughout the development of Zones 1 and 4. Also identified in Figure 3 are the off-site connections to City trails. The GDP proposes to eventually connect the County trail along Zone 4 with on-site City trails proposed along Zone 1 to provide a complete loop for trail users. These on-site trail connections would not occur until Zone 4 is closed (upon cessation of landfilling) and will utilize a trail crossing over Avenida La Pata in Zone 5 that has been constructed to the south.

3.3.3 PHASING OF RECREATIONAL USES IN ZONE 4

Zone 4 is the largest zone on the site, covering approximately 409 acres of refuse area. No interim uses are proposed for Zone 4, although trail uses are proposed during the operational life of Zone 1. After all landfilling operations have been completed in Zone 4, satisfactory access is established and sufficient settlement has

occurred, the planning and implementation of the ultimate recreational activities could begin. The ultimate recreational uses for Zone 4 include a wide range of possibilities, and at this time, the designated use for this zone is a regional park. Depending on the demand for recreational uses at the time of implementation, a Needs Analysis would be conducted, and a park plan developed consistent with these demands and adjacent land uses in the area. In addition, biological mitigation, and environmental enhancement actions within and around Zone 4 may result in a more passive recreational post-closure use. The park plan could be prepared concurrently with development of the final closure plan.

3.4 CIRCULATION PLAN PHASING

OC Public Works undertook a Feasibility Study and subsequently prepared an Environmental Impact Report (EIR) for the preferred alignment of the La Pata Avenue Gap Closure project. OC Public Works completed the planned construction of the Avenida La Pata extension through the landfill and opened the road to the public in August 2016. As shown on Figure 3, Avenida La Pata transects through the landfill, southward from the original landfill entrance. .

Construction of the extension of Camino de los Mares through the southwest corner of the site would be initiated by the Cities of San Clemente and/or San Juan Capistrano. Construction of any roadways through the site would be coordinated among the cities and OCWR.

OC Public Works undertook the preparation of a CEQA Addendum to Final EIRs 584, 589, and 575 for an amendment to the General Plan, Transportation Element Amendment to add the conceptual LPPE, which was approved by the OC Planning Commission on December 9, 2020, and approved by the Board of Supervisors on January 12, 2021. Addition of the LPPE Alignment from its current terminus at Cow Camp extending to La Pata was approved by the OCTA board to be added to the MPAH on January 11, 2021. The proposed alignment is conceptual at this time, and further design of the project will be required.

The timing and phasing of construction of the LPPE (Zone 5A) is not known at this time. Because the timing and phasing of construction is currently unknown, coordination is ongoing between OCWR and OC Public Works to minimize potential conflicts between the LPPE alignment and the development of impacted Zone 4 phases. ~~It is currently anticipated that LPPE may be constructed prior to the construction of the majority of Zone 4, dependent on the availability of funding. Should the Zone 4 landfill be constructed first, substantial revisions would be required to the currently proposed LPPE alignment.~~ The precise timing and phasing of

the LPPE construction will be determined during the engineering design phase ~~of the LPPE Project~~.

3.5 FACTORS AFFECTING PHASING

The implementation and phasing of the GDP landfilling, recreational and circulation uses may be affected by factors that could either change in the future or that are otherwise outside the control of OCWR, OC Public Works/OC Parks and other interested agencies and parties. Some of these potential factors are discussed in this section.

3.5.1 FACTORS AFFECTING LANDFILL PHASING

The phasing and staging of the landfilling uses under the GDP could be affected by the following factors:

- Increase or reduction in the rate of disposal could result in landfilling operations occurring for a shorter or longer period on the site.
- The capacity and life of the site could be increased or decreased based on detailed geotechnical analysis and final design, changes in landfill design standards and regulations, changes in daily cover use and final cover requirements, changes to the permitted refuse inflow rate and other similar changes.
- Increased recycling and waste diversion activities could result in a reduction in the volume of solid waste disposal in the landfill.

3.5.2 FACTORS AFFECTING CIRCULATION PHASING

The phasing of the circulation and roadway improvements under the GDP could be affected by the following factors:

- Timing and construction of other arterial or freeway improvements in the area.
- Availability of funding to extend Camino de los Mares and Camino Las Ramblas, and to construct the LPPE.
- Phasing of the recreational uses.
- Amendments to arterial highway extensions in the MPAH and changes to City general plan circulation elements.
- Amendments to the SSHCP.

3.5.3 FACTORS AFFECTING RECREATION PHASING

The phasing of the implementation of the recreational uses under the GDP could be affected by the following factors:

- Changes in the life of Zones 1 and 4 due to factors discussed in Section 3.5.1.
- Phasing of the on-site circulation improvements and the access roads to the individual recreational zones.
- Changes in the existing and future demand for recreational resources in south Orange County, including changes in the demand for the types of recreational uses proposed for the site.
- Receipt of a satisfactory proposal by a concessionaire to develop and operate a golf course on Zone 1 if that is the final selected use for the area.

3.6 SUBSEQUENT ACTIONS

After certification of Final SEIR 597 and approval of Amendment No. 2 to the GDP, the following permits were obtained to implement a biological pre-mitigation program prior to future landfill impacts on biological resources:

- Individual 404 Permit from the U.S. Army Corps of Engineers including a Biological Opinion from the United States Fish and Wildlife Service (issued January 20, 2021).
- 401 Permit from the Regional Water Quality Control Board, San Diego Region (issued March 16, 2020).
- 1602 Streambed Alteration Agreement from the California Department of Fish and Wildlife. This permit will not be required upon approval of the SNCCP/MSAA/HCP (issued November 24, 2020).
- 2080.1 Consistency Determination for Federally listed species. This determination is required as the SNCCP/MSAA/HCP was approved by the U.S. Fish and Wildlife Service (USFWS).
- Incidental Take Permit for Prima Deshecha Landfill Operations and Extension of Adjacent La Pata Road in Orange County, CA, 2081-2011-074-05 (issued August 2012) from the California Department of Fish and Wildlife.

Full implementation of the 2001 GDP landfill plan will also require the following landfill regulatory agency permit actions:

- Amended Waste Discharge Requirements from the Regional Water Quality Control Board, San Diego Region.

- Revised Solid Waste Facility Permit from the County of Orange Health Care Agency and concurred on by the California Integrated Waste Management Department.
- Permits to Construct/Operate Landfill Gas Control System facilities for ongoing operations from the South Coast Air Quality Management District.
- Annual Update to the General Permit to Discharge Stormwater Associated with Industrial Activity – Water Quality Order ~~No. 97-03-DWQ. I~~issued by the State Water Resources Control Board.

~~It is likely that these landfill operation p~~Permits ~~revisions will be issued~~are being obtained as required as operations in Zone 4 near initiation.

In addition to permit revisions, the site is subject to a Solid Waste Facilities Permit reviewed at least once every five years. In addition, the LEA inspects the site monthly, the SCAQMD quarterly, the SDRWQCB at least annually (and during and after construction of groundwater protection liner systems), and CalRecycle every 18 months for compliance with permit conditions and regulatory standards under each agency's jurisdiction.

- Other subsequent actions for the site include:
- On-going CEQA Mitigation Monitoring.
- Liner Construction Design Reports for each phase of development.
- Final Circulation Element Permit Approvals, Design, and Improvements.
- Needs Analysis and Plans for Interim and Ultimate Recreational Uses.
- Construction of Interim and Ultimate Recreational Improvements.
- Preparation of Final Closure and Post-Closure Maintenance Plans.

Implementation of the LPPE Alignment as covered under the Addendum to FEIRs 584, 589, and 575 and Amendment No. 3 to the GDP would require various approvals and permits from local, State, and federal agencies with jurisdiction over specific elements of the LPPE Project. Following further design of the LPPE, the County will complete an analysis to determine whether additional environmental review of the LPPE is required, aside from the prepared and certified Addendum to FEIRs 584, 589, and 575.

Implementation of the Project components described in SEIR No. 2 to FEIR 575, and this Amendment No. 4 to the GDP ~~would~~ required various approvals and permits from local, State, and federal agencies with jurisdiction over specific elements of the

Project (Table 3). The discretionary approvals by the County, as the Lead Agency, ~~would~~ included the following:

- Certification of SEIR No. 2 to EIR 575 and approval of Amendment No. 4 to the GDP by the Orange County Board of Supervisors
- Approval of concurrent operation of Zones 1 and 4 at the Prima Deshecha Landfill

Implementation of Amendment No. 5 also requires various approvals and permits from agencies with jurisdiction (Table 3). The discretionary approvals by the County, as the Lead Agency, would include the following:

- Certification of Supplemental EIR to EIR 575 and approval of Amendment No. 5 to the GDP by the Orange County Board of Supervisors
- Approval of Amendment No. 5 to the 2001 Prima Deshecha GDP
- Approval of the project to Increase Maximum Daily Operations at the Prima Deshecha Landfill

3.6.1 OTHER MINISTERIAL ACTIONS

Ministerial permits/approvals (e.g., grading permits and building permits) would be issued by the County, or other appropriate agencies or utilities, to allow LPPE Project site preparation, connections to utility infrastructure, paving, and other project features subject to ministerial permits.

3.6.2 PROBABLE FUTURE ACTIONS BY RESPONSIBLE AGENCIES

Because the LPPE Project also involves approvals, permits, or authorization from other agencies, these agencies are considered “Responsible Agencies” under the California Environmental Quality Act (CEQA). Section 15381 of the State Guidelines for the Implementation of CEQA of 1970 (State CEQA Guidelines) which defines Responsible Agencies as public agencies other than the Lead Agency that will have discretionary approval power over the Project or some component of the Project, including mitigation.

For activities proposed as part of Amendment No. 4 these agencies include, but are not limited to, the agencies with jurisdiction over landfill development and operations identified in Table 3.

Table 3: Anticipated Permits and Authorizations

Agency	Permit/Authorization
Amendment No. 4	
Regional Water Quality Control Board (RWQCB)	• Construction General Permit (Order 2009-0009-DWQ, amended by 2010-0014-DWQ and 2012-0006-DWQ) • Amended Waste Discharge Requirements for the Prima Deshecha Landfill (current Order No. R9-2003-0306) • General Permit for Storm Water Discharges • Associated with Industrial Activities (Order 2014-0057-DWQ).
South Coast Air Quality Management District (SCAQMD)	• New Source Performance Standards/Emission Guidelines • Title V (1990 Clean Air Act) Permit Revision • Rule 1150 (Excavation of Landfill Sites) • Rule 1150.1 (Landfill Gas Emissions) • Rule 431.1 (Sulfur Content of Gaseous Fuels) • Rule 431.2 (Sulfur Content of Liquid Fuels) • Permits to Construct and Operate Landfill Gas Control Systems
Local Enforcement Agency with Concurrence by California Department of Resources Recycling and Recovery (CalRecycle)	• Solid Waste Facilities Permit Revision
Orange County Fire Authority	• Permits for on-site activities such as explosives • Blasting Plan Approval
Orange County Sheriff's Department	• Blasting Plan Approval
Amendment No. 5	
Regional Water Quality Control Board (RWQCB)	• Waste Discharge Requirements for the Prima Deshecha Landfill (current Order Nos. R9-2025-0004 and R9-2025-0006) • General Permit for Storm Water Discharges Associated with Industrial Activities (Order 2014-0057-DWQ).

Table 3: Anticipated Permits and Authorizations

Agency	Permit/Authorization
South Coast Air Quality Management District (SCAQMD)	• New Source Performance Standards/Emission Guidelines • Title V (1990 Clean Air Act) Permit • Rule 1150 (Excavation of Landfill Sites) • Rule 1150.1 (Landfill Gas Emissions) • Rule 431.1 (Sulfur Content of Gaseous Fuels) • Rule 431.2 (Sulfur Content of Liquid Fuels)
Local Enforcement Agency with Concurrence by California Department of Resources Recycling and Recovery (CalRecycle)	• Solid Waste Facilities Permit Revision • Amendment to the Joint Technical Document

Source: Compiled by LSA Associates, Inc. (~~2020~~2025).

SECTION 4.0

4.0 LANDFILL REGULATIONS

The Prima Deshecha Landfill is a Class III landfill which is permitted for the disposal of non-hazardous municipal solid waste and digested sewage sludge (biosolids). State law requires that landfills operate under the authority of CalRecycle which exercises its authority through approval of a SWFP issued by a LEA. Organizationally, the LEA for Orange County landfills is a department within the County of Orange Health Care Agency, Environmental Health Division. The SDRWQCB also regulates landfill operations and design to ensure protection of surface and groundwater. The SDRWQCB exercises its authority through issuance of WDRs. The SCAQMD also regulates landfill operations related to landfill emissions control and monitoring and fugitive dust control.

The basis for the issuance of a SWFP is continuously reviewed during the life of the landfill and the permit may be modified, revised or revoked at any time. The system of landfill operation review (and imposed adjustment, as necessary) is accomplished through a reporting and monitoring procedure established by state statute. The basic elements of this reporting and monitoring system are:

- Joint Technical Document (JTD) (Title 27, California Code of Regulations [27 CCR] 21585 and 21590). The JTD is a document which fully describes the landfill site operations, design and future plans and is the primary regulatory support document for a SWFP and WDRs. The information contained in the JTD is used by the LEA and RWQCB to monitor compliance with a SWFP or WDR, respectively. In order to maintain a valid permit, the operator must keep the JTD current, through the filing of amendments to keep the information current.
- Review of Permits (27 CCR 21675). The SWFP is reviewed and, if necessary, revised from the date of last issuance at least once every five years. A permit review report is prepared by the LEA to determine if any permit changes have occurred at the site which require a permit action to be taken by the operator.
- Recordkeeping Requirements (27 CCR 20515). The disposal site operator must maintain operational records which are open to inspection by the LEA and any other authorized regulatory or enforcement agency during normal business hours.
- State Minimum Standards (27 CCR). Title 27 CCR minimum standards are administered by CalRecycle, the LEA and the local RWQCB. These regulations are oriented toward refuse disposal operations and site design including provisions for odor and litter control, hazardous waste exclusion, protection of surface water and groundwater quality, landfill gas control, and closure and post-closure care.

Although CalRecycle has primary oversight and regulatory responsibilities for the site and has designated the County of Orange Environmental Health Care Agency, Environmental

Health Division as its LEA, the site is regulated at other federal, state and local levels. The site must also comply with regulatory and administrative requirements set forth by the U.S. Environmental Protection Agency (USEPA), the USFWS, the United States Army Corps of Engineers (USACE), the DFG, CEQA, the SDRWQCB, the SCAQMD, the Orange County Fire Authority, OC Public Works, City MOUs and Land Use Permits. The following are descriptions of these agencies and the regulations or requirements they are responsible for at the site.

4.1 FEDERAL LEVEL

4.1.1 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

On October 9, 1991, the USEPA promulgated Subtitle D changes to the Resource Conservation and Recovery Act providing for nationwide minimum standards for landfilling municipal solid waste which became effective October 9, 1993. The regulations include requirements relating to daily cover, liners, landfill gas control, recordkeeping, groundwater monitoring, and closure and post-closure maintenance. After the USEPA approves a state plan, the regulations allow discretion on the part of state regulators to grant some flexibility to landfill operators in implementing Subtitle D regulations. California has been designated an "Approved State".

In addition, the USEPA is responsible for implementation of the Federal Clean Air Act (CAA). The CAA was first enacted in 1955 and has been amended numerous times in subsequent years. Under the authority granted by the CAA, USEPA has established National Ambient Air Quality Standards (NAAQS) for the following criteria pollutants: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM_{10} and $PM_{2.5}$), and sulfur dioxide (SO_2).

The CAA also specifies future dates for achieving compliance with the NAAQS and mandates that states submit and implement a State Implementation Plan (SIP) for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met. The 1990 amendments to the CAA identify specific emission reduction goals for air basins not meeting the NAAQS. These amendments require both a demonstration of reasonable further progress toward attainment and incorporation of additional sanctions for failure to attain or meet interim milestones.

4.1.2 U.S. ARMY CORPS OF ENGINEERS

The USACE Regulatory Branch is responsible for assuring compliance with Section 404 of the Clean Water Act with respect to wetlands resources. Most activities involving wetland impacts require the approval of an individual 404 permit by the USACE.

4.1.3 U.S. FISH AND WILDLIFE SERVICE

The USFWS reviews and comments on all federal actions that affect wetlands and waters of the United States, including all 404 permitting applications submitted to the USACE to assure compliance with the Federal Endangered Species Act (FESA) which concerns activities that affect plant or animal species listed in the FESA. USFWS implements the FESA through various mechanisms such as the Natural Community Conservation Plans, Interim Habitat Loss Mitigation Plans, and Habitat Conservation Plans.

4.2 STATE AND LOCAL LEVEL

4.2.1 CALIFORNIA AIR ACT/CALIFORNIA AIR RESOURCES BOARD (CARB)

The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the State to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practical date. The CAAQS are at least as stringent, and often more stringent, than the NAAQS.

The CARB has been granted jurisdiction over a number of air pollutant emission sources that operate in the State. Specifically, CARB has the authority to develop emission standards for on-road motor vehicles, as well as for stationary sources and some off-road mobile sources. In turn, CARB has granted authority to the regional air pollution control and air quality management districts to develop stationary source emission standards, issue air quality permits, and enforce permit conditions.

4.3 CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

Any activity that affects a river, stream, or lake may require a Lake or Streambed Alteration Agreement in accordance with the provisions of Sections 1600-1607 of the DFG Code.

Section 2080.1 of the California Fish and Game Code authorizes the Director, California Department of Fish and Wildlife (CDFW) to consider a request for incidental take of species listed as endangered by both the CDFW and the Department of the Interior for which an incidental take permit has been issued pursuant to Section 1539 of Title 16 of the United States Code authorizing the taking of an endangered species or a threatened species that is listed pursuant to Section 1533 of Title 16 of the United States Code that is an endangered species, threatened species, or candidate species pursuant to this chapter. OCWR has obtained incidental take permit authorizations from the Department of the Interior through the provisions of Section 7 of the Federal Endangered Species Act in association with the USACE

Section 404 permit required to address impacts to wetlands and Waters of the United States that are under the jurisdiction of this federal agency.

Once the Section 7 Consultation was completed between the USACE and the USFWS and a biological opinion (BO) was issued to the USACE by the USFWS, a Consistency Determination with the BO was issued for the incidental take permit pursuant to the federal Endangered Species Act of 1973 (16 U.S.C.A. Sec. 1531 et seq.).

4.4 CALIFORNIA ENVIRONMENTAL QUALITY ACT

County landfill projects are required to be in compliance with CEQA. When approving landfill projects, the County is required to adopt adequate environmental documentation in order to comply with this law.

4.5 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

The SCAQMD has jurisdiction over an area of 10,743 square miles consisting of Orange County, the non-desert portions of Los Angeles, Riverside and San Bernardino counties, and the Riverside County portions of the Salton Sea Air Basin and Mojave Desert Air Basin.

Southern California Air Basin (SCAB) is a subregion of the SCAQMD's jurisdiction, which covers an area of 6,745 square miles and includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. While air quality in this area has improved, the basin requires continued diligence to meet air quality standards.

The SCAQMD has adopted a series of Air Quality Management Plans (AQMPs) to meet the CAAQS and NAAQS. These plans require, among other emissions-reducing activities, control technology for existing sources; control programs for area sources and indirect sources; a permitting system designed to ensure no net increase in emissions from any new or modified permitted sources of emissions; transportation control measures; sufficient control strategies to achieve a five percent or more annual reduction in emissions (or 15 percent or more in a three-year period) for Reactive Organic Compounds (ROC),[1] Nitrogen Oxides (NO_X), CO, and PM_{10}; and demonstration of compliance with the CARB's established reporting periods for compliance with air quality goals.

[1] Reactive organic compounds (ROC) and volatile organic compounds (VOC) are designations made by CARB and USEPA, respectively, for organic compounds that can react with NO_X in the presence of sunlight to form O3.

Certain stationary sources of air pollution at the Prima Deshecha Landfill require permits from the SCAQMD. Emission increases related to those sources may also be subject to SCAQMD Regulation XIII or Regulation XXX (Title V).

In addition to the AQMP and its rules and regulations, the SCAQMD published a handbook (*CEQA Air Quality Handbook*; most recent version: November 1993) that is intended to provide local governments with guidance for analyzing and mitigating project-specific air quality impacts for both land use and permitting projects. The Handbook provides standards, methodologies and procedures for conducting air quality analyses in EIRs. The SCAQMD is currently (as of January 2021) in the process of developing an "Air Quality Analysis Guidance Handbook" to replace the 1993 CEQA Air Quality Handbook. The 1993 is still available; however, some sections are obsolete. Other supplemental information is provided on the SCAQMD website to assist in conducting air quality analysis for CEQA for which the new handbook is being prepared.

The California Clean Air Act, Federal Clean Air Act and the Lewis-Presley Air Quality Management Act authorize the adoption of rules and regulations for air quality permits and govern the enforcement of those permits and rules. These acts are all administered and enforced by the SCAQMD. Various rules apply to landfill operations, including landfill emissions control and monitoring, sulfur emissions monitoring, and fugitive dust control.

The SCAQMD conducts periodic inspections of the site and, similar to the RWQCB, may impose civil liabilities for permit violations.

United States Environmental Protection Agency (USEPA) New Source Performance Standards/Emission Guidelines (NSPS/EG): On March 12, 1996, the USEPA promulgated standards of performance for new municipal solid waste landfills and emission guidelines for existing municipal solid waste landfills. These standards/ guidelines for active landfills are intended to limit gaseous emissions to prevent public nuisance and possible detriment to public health caused by exposure to such emissions.

USEPA Regulation XXX - Title V Permits: This regulation prohibits construction, modification, relocation, or operation of a Title V facility, or equipment located at a Title V facility, without first obtaining a Title V permit or permit revision that allows such construction, modification, relocation or operation. Title V is part of the 1990 Clean Air Act Amendments and consists of a single air permit, which consolidates and replaces all the previously issued air permits for a facility. The USEPA granted interim approval of the SCAQMD Title V program in February, 1997 and the program became

effective March 31, 1997. NSPS Rule under Title 40 Code of Federal Regulations (40 CFR) Part 60, Subpart XXX and an EG rule under 40 CFR Part 60, Subpart Cf affect newly-defined NSPS sites (i.e., "new" landfills that are new or modified (expanded in capacity) after July 17, 2014) and EG sites (i.e., "existing" landfills that have not been expanded after July 17, 2014), respectively.

The new rules will eventually replace the existing NSPS rule (40 CFR Part 60, Subpart WWW) and EG rules (40 CFR Part 60, Subpart Cc and state-equivalent rules) after a transition period. The new rules took effect on October 28, 2016, with compliance obligations under the NSPS Subpart XXX rule beginning November 28, 2016.

Title 40 Code of Federal Regulations (CFR) Part 63, Subpart AAAA, and the National Emission Standard for Hazardous Air Pollutants (NESHAPs) for municipal solid waste (MSW) Landfills: In accordance with NESHAPs all MSW landfills with a design capacity equal to or greater than 2,5 million Mgs and 2.5 million m^3 and estimated non-methane organic compounds (NMOC) equal to or greater than 50 Mg/yr must comply with the regulation.

SCAQMD Rule 1402 – Control of Toxic Air Contaminants from Existing Sources: The purpose of this rule is to reduce the health risk associated with emissions of toxic air contaminants from existing sources by specifying limits for maximum individual cancer risk (MICR), cancer burden, and noncancer acute and chronic hazard index (HI) applicable to total facility emissions and by requiring facilities to implement risk reduction plans to achieve specified risk limits, as required by the Hot Spots Act and this rule. The rule also specifies public notification and inventory requirements. This rule applies to any facility that has been notified by the Executive Officer to prepare an Air Toxics Inventory Report, Health Risk Assessment or Risk Reduction Plan or is subject to the Hot Spots Act.

SCAQMD Rule 1401 – New Source Review of Toxic Air Contaminants: This rule prohibits the air district from issuing an authority to construct or a permit to operate to any facility that would create an unacceptable public health risk from the emissions of toxic air contaminants. Unacceptable individual cancer risk from a permitted source is one change in a million. If Toxics-Best Available Control Technology (T-BACT) is employed, the allowable risk is increased to 10 in one million. The rule is applicable to applications for new, relocated, or modified permit units on or after June 1, 1990. New, relocated, or modified equipment not requiring a written permit (in accordance with SCAQMD Rule 219) may still require New Source Review (NSR) for the air toxics if the risk from the equipment is significant, as determined by Rule 1401.

SCAQMD Regulation XIII – New Source Review: This regulation is applicable for new, modified or relocated facility to ensure the operations of the facilities are aligned with the national ambient air quality standards. The ultimate goal of the regulation is for no net increase from new or modified permitted sources of nonattainment air contaminants or their precursors. This regulation requires that Best Available Control Technology (BACT) be utilized to reduce pollutants from stationary sources.

SCAQMD Rule 1150.1 - Landfill Gas Emissions: The purpose of the current Rule 1150.1 for active and inactive landfills is to prevent public nuisance and possible detriment of public health caused by exposure to landfill gas emissions, such as non-methane organic compounds (NMOC), volatile organic compounds (VOC), toxic air contaminants (TAC) as well as methane emissions, a greenhouse gas. The SCAQMD rewrote these rules to meet the federal NSPS/EG requirements.

SCAQMD Rule 431.1 - Sulfur Emissions: The purpose of this rule is to reduce sulfur oxides (SOx) emissions from the burning of gaseous fuels in stationary equipment and requires a permit to operate from the SCAQMD. The SCAQMD rewrote the Rule to raise the average daily limit of 40 parts per million (ppm) to 150 ppm effective June 12, 1998 for landfill gas.

SCAQMD Rule 403 - Fugitive Dust Emissions: The purpose of this rule is to reduce the amount of particulate matter entrained in the ambient air as a result of man-made fugitive dust sources by requiring actions to prevent, reduce or mitigate fugitive dust emissions.

SCAQMD Rule 402 - Nuisance: This rule prohibits annoying odors, quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public from landfill operations.

SCAQMD Rule 1118.1 - Control of Emissions from Non-Refinery Flares: The purpose of this rule is to reduce emissions from non-refinery flares located at facilities such as landfills. The rule establishes requirements to reduce NOx and VOC emissions from flares and encourages alternatives to flaring such as energy generation, transportation fuels, or pipeline injection.

4.6 SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD

Under the Porter-Cologne Water Quality Act (California Water Code Section 13000 et. seq.) (Porter-Cologne), the County is required to report waste discharges that could affect water quality. Porter-Cologne is administered and enforced by the State of

California Water Resources Control Board and Regional Water Quality Control Boards. The SDRWQCB regulates the Prima Deshecha Landfill.

Waste Discharge Requirements: Pursuant to Porter-Cologne, the RWQCBs issue WDRs containing terms and conditions of permitted discharges for landfills. The WDRs typically mandate a regular self-monitoring program to detect pollutants. In the event of a violation of a WDR, the RWQCB may issue either a cease and desist order or a cleanup and abatement order which mandate deadlines for remedial action. A landfill operator's failure to comply with a RWQCB order or reporting requirements may result in administrative or judicial civil liabilities ranging up to $25,000 a day.

National Pollutant Discharge Elimination System: National Pollutant Discharge Elimination System (NPDES) is a federal program of the Clean Water Act, administered by the RWQCB which regulates non-point storm water pollution. The state of California regulates NDPES compliance for industrial facilities under the Industrial General Permit (IGP) which was issued July 1, 2015. OC Waste & Recycling has filed a notice of intent to gain coverage for the Prima Deshecha Landfill under the IGP.

4.7 ORANGE COUNTY FIRE AUTHORITY

The Orange County Fire Authority regulates the storage and use of flammable or combustible liquids and the adequacy of fire breaks and modified fuel zones at the site.

4.8 OC PUBLIC WORKS

OC Public Works regulates the construction of structures at the site and issues grading, building, mechanical, electrical, plumbing and utility connection permits for certain projects on the landfill property.

4.9 CITIES OF SAN CLEMENTE AND SAN JUAN CAPISTRANO

The MOU with the City of San Clemente establishes GDP guidelines (including grading and height limits, zone boundary adjustments and landscape treatment), provides for the development of a joint feasibility study to determine appropriate flood control infrastructure for the Prima Deshecha Cañada watershed from the landfill to Interstate 5 and addresses certain water quality issues.

The City of San Juan Capistrano Cooperative Agreement (November 2018) supersedes the MOU with the City. The Cooperative Agreement ultimately results in: (1) Termination of prior agreements and understandings of the Parties regarding the

landfill as provided in documents such as the 1995 MOU between City and County and its amendments; (2) Initiation of required actions by City to rescind the Conditional Use Permit ("CUP") as provided in City Resolution 95-12-5-1 and its subsequent amendments; (3) Restatement, in one document, the duties and procedures required to be followed by County to reasonably mitigate the impacts on City caused by operations at the Landfill; (4) Identification of City obligations regarding cooperation with County in its efforts to comply with existing and anticipated legislation and regulation related to landfill operations; and (5) Addressing other financial matters of mutual concern required to fully mitigate the impacts associated with continuation of landfill operations through build-out of the Landfill.

The City agreed to cooperate and support the County's effort to revise the estimated landfill closure dates previously included in FEIR No. 575 and Final SEIR No. 597 from 2019 to 2050 for the Zone 1 landfill development area and from 2067 to 2102 for the future Zone 4 landfill development area, as reflected in Addendum No. 6 to FEIR No. 575 and Addendum No. 2 to Final SEIR No. 597 and all future revisions to the closure dates, and accompanying SWFP revisions so they more accurately reflect current estimates of when the two landfill development zones will reach their ultimate design capacity as reflected in the Physical Key Design Parameters.

A CUP (No. 95-4) was also issued by the City of San Juan Capistrano for that portion of the site within the City boundaries. The permit placed conditions on the landfill use and landfill- related uses for Zone 1. As mentioned above, the City of San Juan Capistrano Cooperative Agreement (2018), discussed above, supersedes the CUP with the City and initiates any required actions necessary to rescind all iterations of the CUP (City Resolution 95-12-5-1 and subsequent amendments) for the landfill.

4.10 RANCHO MISSION VIEJO, LLC (RMV)

The RMV agreements between the County and Rancho Mission Viejo, LLC place restrictions on the eastern 945 acres of the Prima Deshecha property including Zone 4. These restrictions are contained in a Settlement Agreement and Covenant and Declaration of Restrictions.

The Settlement Agreement contains requirements for County's use of restricted area on PDL property and RMV use of a no-build area adjacent to the PDL property on RMV lands.

The Covenant and Declaration of Restrictions contains restrictions on the landfill operations area and restricted area on PDL property as well as requirements for maintenance, dust and litter controls for Avenida La Pata.

The project described in the GDP as amended can be implemented under the requirements in the Settlement Agreement and Covenant & Declaration of Restrictions.

SECTION 5.0

5.0 TECHNICAL REFERENCES

BonTerra Consulting, *Supplemental Environmental Impact Report 597, Second Amendment to the 2001 Prima Deshecha General Development Plan,* prepared for Orange County Integrated Waste Management Department (June 19, 2007).

Bryan A. Stirrat & Associates, Inc. and Bonterra Consulting *Prima Deshecha Landfill Amended 2001 General Development Plan,* prepared for County of Orange (January 2001 – Amendment No. 1: October 2002, Amendment No. 2: August 2006).

City of San Juan Capistrano General Plan (December, 1999, Amended May 7, 2002).

City of San Clemente Centennial General Plan (Adopted February 2014, Amended December 2016).

Converse Consultants, *Geology and Soils Environmental Impact Report – Prima Deshecha Landfill – County of Orange, California*, prepared for P & D Technologies (June 17, 1992).

County of Orange, *Master Plan of Regional Recreation Facilities* (October 5, 2012). County of Orange, OC Waste & Recycling, Prima Deshecha Landfill LEA 2020 Annual Capacity Report, Reporting Period January 1, 2020 through December 31, 2020.

County of Orange, *Revised Draft Environmental Impact Report No. 548*, Prima Deshecha Landfill General Development Plan, September, 1995.

GeoLogic Associates, *Geotechnical Investigation Report – Zone 1 Master Plan*, prepared for County of Orange, Integrated Waste Management *Department* (October, 1999).

GeoLogic Associates, *Geotechnical Investigation Report – Zone 4 Master Plan*, prepared for County of Orange, Integrated Waste Management *Department* (January, 2002).

GeoLogic Associates, *Alternative Liner Petition for the Zone 1 Expansion*, prepared for County of Orange, Integrated Waste Management *Department* (1997).

Keeton Kreitzer Consulting, *Final Program Environmental Impact Report No. 575, SCH No. 99041035*, prepared for Orange County Integrated Waste Management Department (November 6, 2001)

LSA, Initial Study for Potential Supplement EIR No. 2 to Final EIR No. 575 for the Prima Deshecha General Development Plan - Zone 4 Landfill Construction Projects and

Organic Waste Recycling Facility, Orange County, California, submitted to OC Waste & Recycling (July 2020).

OC Public Works, OC Survey Section, Major Riding & Hiking Trails and Off-Road *Paved* Bikeways (April 2014).

Psomas, *Transportation Element Amendment 20-2 Los Patrones Parkway Extension (Planning Application No. 20-0072)*, prepared for OC Public Works (November 23, 2020).

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SWT Engineering, *Joint Technical Document Prima Deshecha Landfill Volumes I, II, III, IV, and V*, prepared for OC Waste & Recycling (June 2011; Amended: November 2018).

SWT Engineering, *Joint Technical Document Prima Deshecha Landfill Volumes I, II, III, IV, and V (Draft)*, prepared for OC Waste & Recycling (June 2011; Amended: November 2018; Amended: February 2021).

TABLES

TABLE 1

PRIMA DESHECHA LANDFILL AMENDMENT NO. 4
TO GENERAL DEVELOPMENT PLAN SUMMARY OF TOTAL AIRSPACE
(AS OF DECEMBER 31, 2020)

Landfill Area	Airspace Filled [1] (mcy)	Remaining Total Airspace [1] (or Capacity) (mcy)	Total Airspace (or Capacity) (mcy) [2]
Zone 1	38.6	14.5	53.1
Zone 4	1 [3]	117.5 [3]	118.5
Total	**39.6**	**132.0**	**171.6**

The following assumptions are the basis for Table 1 and are subject to change as operations progress: mcy = million cubic yards.

(1) Airspace filled based on OCWR 2020 Annual Capacity Report as of December 31, 2020.
(2) Permitted Gross Airspace capacity for Zone 1 and Zone 4, excluding the approximately 0.52 mcy occupied WMU 2 capacity outside of Zone 4 footprint.
(3) Based on JTD, dated June 2011, Amended: November 2018, Appendix C.

TABLE 2

PRIMA DESHECHA LANDFILL AMENDMENT NO. 4 TO GENERAL DEVELOPMENT PLAN SUMMARY OF REMAINING CAPACITY AND LIFE (AS OF DECEMBER 31, 2020)

Landfill Area	Remaining Total Airspace (or Capacity) (mcy) [1]	Remaining Net Airspace (mcy) [2]	Remaining Refuse Tonnage (million tons) [3]	Remaining Life (years) [4]
Zone 1	14.5	14.4	8.2	30 [5]
Zone 4	117.5	112.3	64	52
Total	**132**	**126.7**	**72.2**	**82**

The following assumptions are the basis for Table 2 and are subject to change as operations progress:

mcy = million cubic yards

(1) See Table 1.

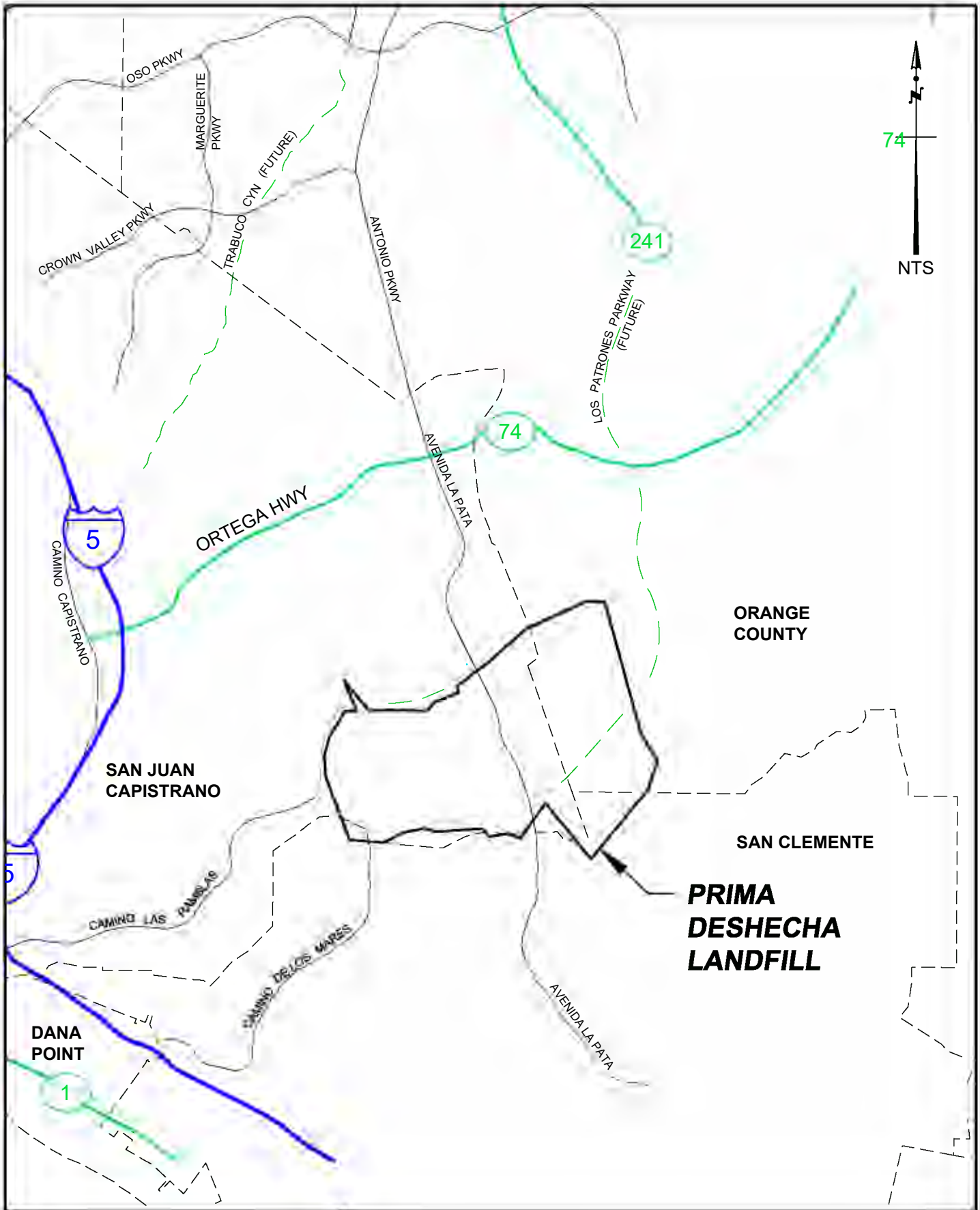
(2) Conversion to net airspace is Total Airspace – volume to be occupied by protective layer of soil and LCRS for future phases (D) of Zone 1 (97,000 cy) and Zone 4 (5,200,000 cy).

(3) Assumes an Airspace Utilization Factor (AUF) of 0.5965 for Zones 1 and 4 as calculated in the JTD, dated June 2011, Amended: November 2018, Appendix C.

(4) The site life for Zones 1 and 4 is based on an initial tonnage of 397,068 tons per year and decreasing to 280,117 tons per year in 2026 due to out-of-county import agreements terminated. Daily tonnage is expected to increase for Zone 4 to 2.2 million tons per year in 2072 due to the closure of Frank R. Bowerman Landfill as noted in the JTD, dated June 2011, Amended: November 2018, Appendix C.

(5) The closure year for Zone 1 is 2050 should landfill operations stay only in that zone until final grades are achieved. Moving to Zone 4 prior to Zone 1 reaching final grades will extend operations in Zone 1 past that closure year; however, the ultimate closure year of 2102 for the Prima Deshecha Landfill (combined Zones 1 and 4) will not change.

FIGURES



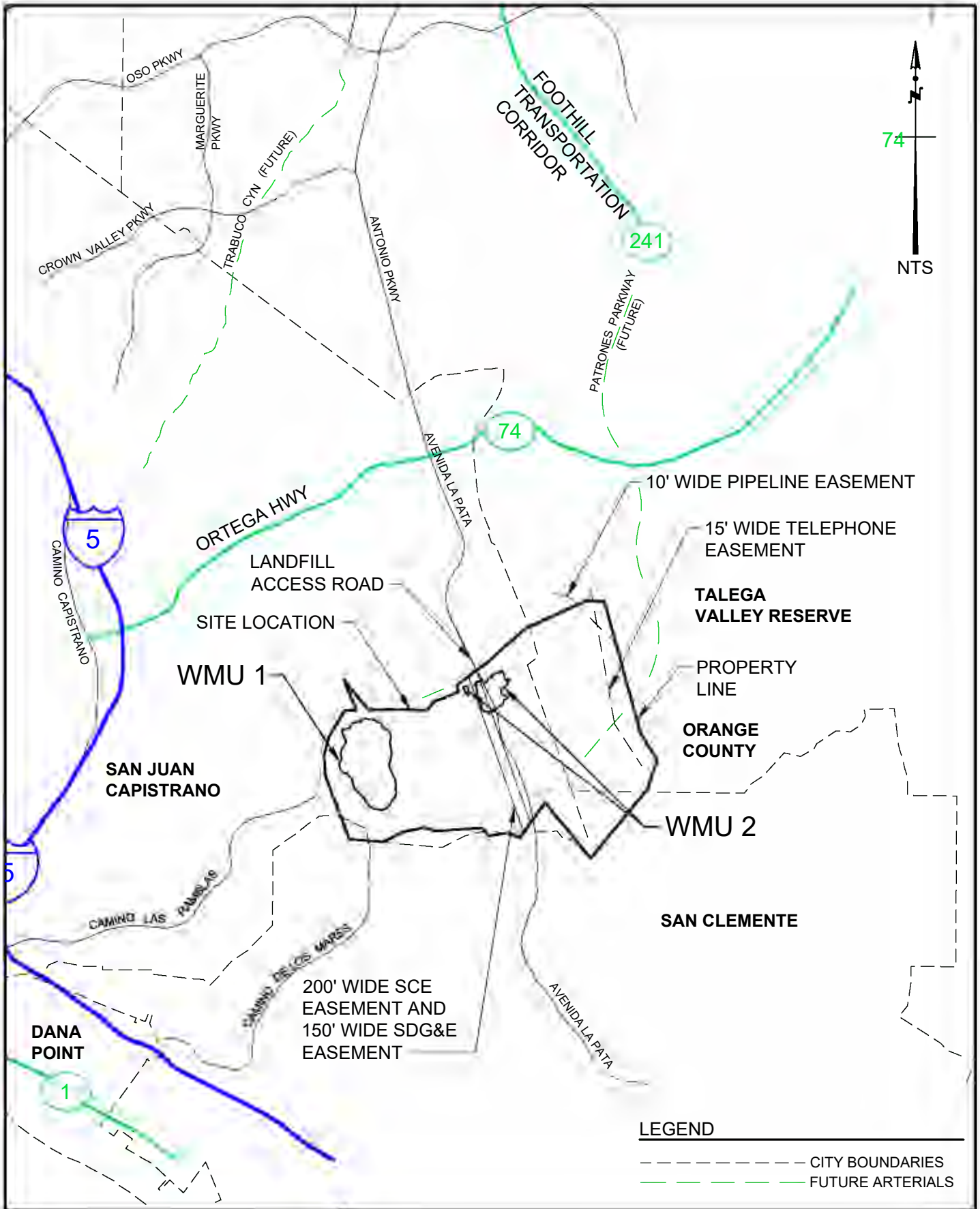
P:\OC\WR\PRIMA\GENERAL DEVELOPMENT PLAN\CAD\SHEETFILES\FIGURES\FIGURE 1 REGIONAL LOCATION.DWG 6/17/2021 11:27 AM

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

PRIMA DESHECHA LANDFILL

GENERAL DEVELOPMENT PLAN
REGIONAL LOCATION

FIGURE 1



P:\OC\WR\PRIMA\GENERAL DEVELOPMENT PLAN\CAD\SHEETFILES\FIGURES\FIGURE 2 SITE LOCATION.DWG 6/17/2021 11:27 AM

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

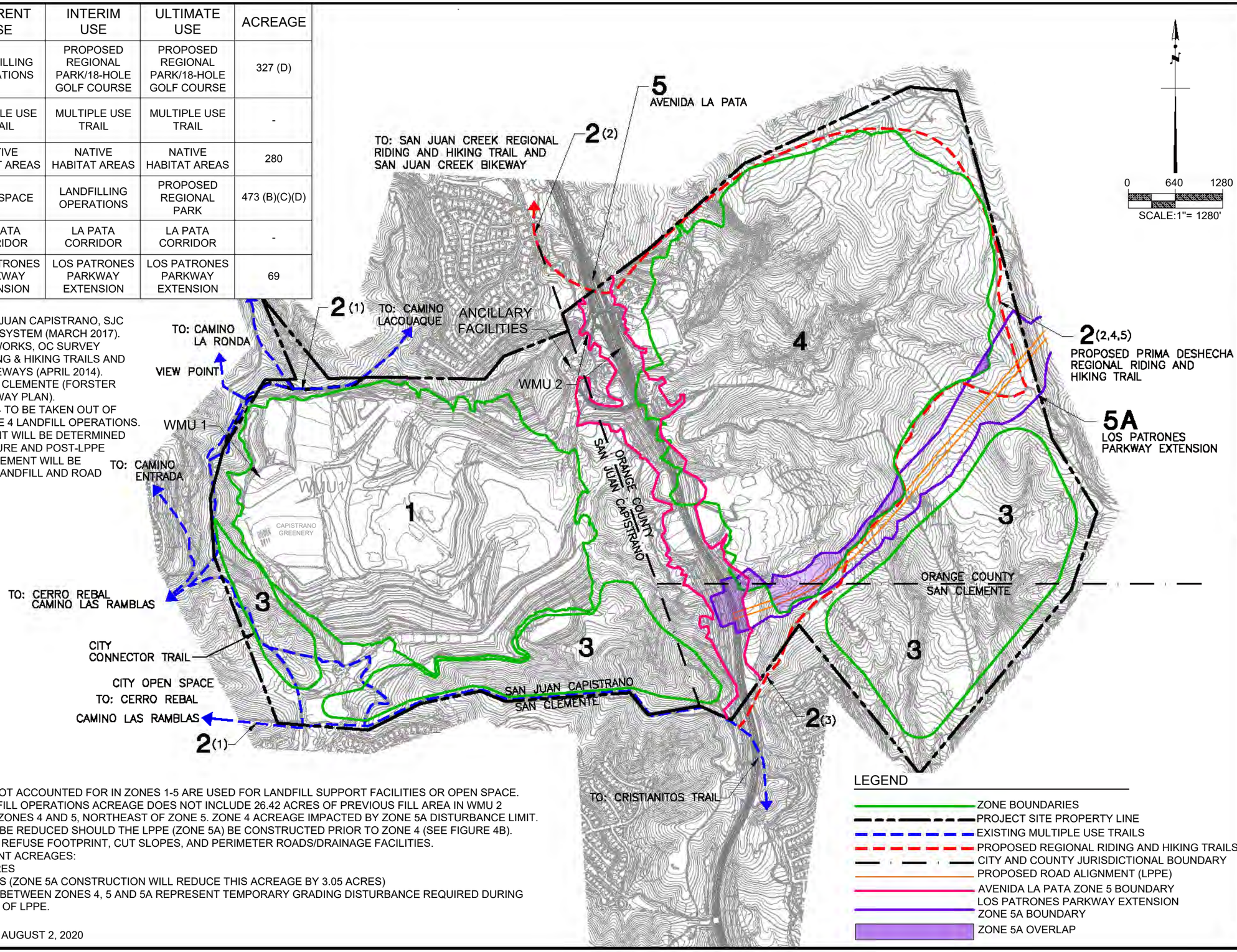
PRIMA DESHECHA LANDFILL

GENERAL DEVELOPMENT PLAN
SITE LOCATION

FIGURE 2

ZONE (A)	CURRENT USE	INTERIM USE	ULTIMATE USE	ACREAGE
1	LANDFILLING OPERATIONS	PROPOSED REGIONAL PARK/18-HOLE GOLF COURSE	PROPOSED REGIONAL PARK/18-HOLE GOLF COURSE	327 (D)
2	MULTIPLE USE TRAIL	MULTIPLE USE TRAIL	MULTIPLE USE TRAIL	-
3	NATIVE HABITAT AREAS	NATIVE HABITAT AREAS	NATIVE HABITAT AREAS	280
4	OPEN SPACE	LANDFILLING OPERATIONS	PROPOSED REGIONAL PARK	473 (B)(C)(D)
5	LA PATA CORRIDOR	LA PATA CORRIDOR	LA PATA CORRIDOR	-
5A	LOS PATRONES PARKWAY EXTENSION	LOS PATRONES PARKWAY EXTENSION	LOS PATRONES PARKWAY EXTENSION	69

TRAIL NOTES:
1. SOURCE:CITY OF SAN JUAN CAPISTRANO, SJC RECREATIONAL TRAIL SYSTEM (MARCH 2017).
2. SOURCE: OC PUBLIC WORKS, OC SURVEY SECTION, MAJOR RIDING & HIKING TRAILS AND OFF-ROAD PAVED BIKEWAYS (APRIL 2014).
3. SOURCE: CITY OF SAN CLEMENTE (FORSTER RANCH, TRAIL, & BIKEWAY PLAN).
4. TRAIL AROUND ZONE 4 TO BE TAKEN OUT OF SERVICE DURING ZONE 4 LANDFILL OPERATIONS.
5. FINAL TRAIL ALIGNMENT WILL BE DETERMINED UPON LANDFILL CLOSURE AND POST-LPPE CONSTRUCTION. PLACEMENT WILL BE ACCOMMODATED BY LANDFILL AND ROAD DESIGN.



NOTES:
A. ALL OTHER AREAS NOT ACCOUNTED FOR IN ZONES 1-5 ARE USED FOR LANDFILL SUPPORT FACILITIES OR OPEN SPACE.
B. FINAL FUTURE LANDFILL OPERATIONS ACREAGE DOES NOT INCLUDE 26.42 ACRES OF PREVIOUS FILL AREA IN WMU 2 LOCATED BETWEEN ZONES 4 AND 5, NORTHEAST OF ZONE 5. ZONE 4 ACREAGE IMPACTED BY ZONE 5A DISTURBANCE LIMIT.
C. THIS ACREAGE WILL BE REDUCED SHOULD THE LPPE (ZONE 5A) BE CONSTRUCTED PRIOR TO ZONE 4 (SEE FIGURE 4B).
D. ACREAGE INCLUDES REFUSE FOOTPRINT, CUT SLOPES, AND PERIMETER ROADS/DRAINAGE FACILITIES.
   REFUSE FOOTPRINT ACREAGES:
   ZONE 1: 269.2 ACRES
   ZONE 4: 409 ACRES (ZONE 5A CONSTRUCTION WILL REDUCE THIS ACREAGE BY 3.05 ACRES)
E. AREAS OF OVERLAP BETWEEN ZONES 4, 5 AND 5A REPRESENT TEMPORARY GRADING DISTURBANCE REQUIRED DURING THE CONSTRUCTION OF LPPE.

DATE OF TOPOGRAPHY: AUGUST 2, 2020

LEGEND
- ZONE BOUNDARIES
- PROJECT SITE PROPERTY LINE
- EXISTING MULTIPLE USE TRAILS
- PROPOSED REGIONAL RIDING AND HIKING TRAILS
- CITY AND COUNTY JURISDICTIONAL BOUNDARY
- PROPOSED ROAD ALIGNMENT (LPPE)
- AVENIDA LA PATA ZONE 5 BOUNDARY
- LOS PATRONES PARKWAY EXTENSION ZONE 5A BOUNDARY
- ZONE 5A OVERLAP

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

OC WASTE & RECYCLING
PRIMA DESHECHA LANDFILL

DESIGNED BY : T.T.
DRAWN BY : K.A. / A.K.
CHECKED BY : A.N.P.
APPROVED BY : V.B.
DATE: 02-24-2021
PROJ. NO.: 197-2020-0119

GENERAL DEVELOPMENT PLAN ZONE USES

FIGURE 3

P:\OCWR\Prima\General Development Plan\CAD\SheetFiles\Figures\Figure 3 Zone Uses

LEGEND

- PROPERTY LINE
- LIMIT OF REFUSE
- 50 MAJOR CONTOUR
- MINOR CONTOUR
- 50 EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED ROAD ALIGNMENT
- ZONE BOUNDARIES, EIR 575
- EXISTING BIOLOGICAL MITIGATION AREAS
- ZONE 1 DISTURBANCE AREA, SEIR 597 (437 ACRES)
- ZONE 4 DISTURBANCE AREA, SEIR 597 (641 ACRES)
- ZONE 5A (69 ACRES)
- ZONE 4 DESILTING BASINS

* NOTE: AREAS OF OVERLAP BETWEEN ZONES 1 AND 4 REPRESENT TEMPORARY DISTURBANCE ONLY.

POTENTIAL LANDSLIDE REMEDIATION AREA

PROPOSED CONCRETE DESILTING BASIN (4A)

AVENIDA LA PATA

PROPOSED CONCRETE DESILTING BASIN (4B)

POTENTIAL LANDSLIDE REMEDIATION AREA

ZONE 4

POTENTIAL LANDSLIDE REMEDIATION AREA

PLANNED DRAINAGE MITIGATION

PROPOSED DESILTING BASIN (4D)

ZONE 1

WMU1

BIO-MITIGATION CHANNEL WITH GABION DROP STRUCTURE (1D)

PROPOSED DESILTING BASIN (4C)

PROPOSED DESILTING BASIN (5D)

SITE C

AREA 3

AREA 1

SITE A

AREA 2

SEGUNDA DESHECHA MITIGATION AREA

SITE B

POTENTIAL TRAIL AREA/LANDSLIDE REMEDIATION AREA

EXISTING CONCRETE DESILTING BASIN (1C)

LANDSLIDE REMEDIATION AREAS

0 500 1000

SCALE:1"= 1000'

DATE OF TOPOGRAPHY: AUGUST 2, 2020

P:\OCWR\Prima\General Development Plan\CAD\SheetFiles\Figures\Figure 4A Proposed Final Grading Plans

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

OC WASTE & RECYCLING

DESIGNED BY :	T.T.
DRAWN BY :	K.A. / A.K.
CHECKED BY :	A.N.P.
APPROVED BY :	V.B.
DATE:	02-24-2021
PROJ. NO.:	197-2020-0119

PRIMA DESHECHA LANDFILL

GENERAL DEVELOPMENT PLAN WITHOUT ZONE 5A

FIGURE 4A

LEGEND

- PROPERTY LINE
- LIMIT OF REFUSE
- 50 MAJOR CONTOUR
- MINOR CONTOUR
- 50 EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED LPPE ALIGNMENT
- ZONE BOUNDARIES, EIR 575
- EXISTING BIOLOGICAL MITIGATION AREAS
- ZONE 1 DISTURBANCE AREA, SEIR 597 (437 ACRES)
- ZONE 4 DISTURBANCE AREA, SEIR 597 (641 ACRES)
- ZONE 5A (69 ACRES)
- ZONE 4 DESILTING BASINS
- ZONE 5A OVERLAP WITH ZONES 3 AND 4
- CONCEPTUAL ZONE 4 RELOCATED DESILTING BASINS

NOTE 1: ULTIMATE GRADING AND BASIN LOCATIONS, IN THIS SCENARIO WILL BE DETERMINED ONCE THE LPPE ALIGNMENT HAS BEEN APPROVED.
NOTE 2: ZONE 4 DISTURBANCE AREA ACREAGE WILL BE REDUCED SHOULD ZONE 5A BE CONSTRUCTED PRIOR TO ZONE 4.
NOTE 3: IMPACTED HABITAT AREAS WILL BE REPLACED IN SUPPLEMENTAL OPEN SPACE (SOS) OR HABITAT RESERVE.
NOTE 4: AREAS OF OVERLAP BETWEEN ZONES 4 AND 5A REPRESENT TEMPORARY GRADING DISTURBANCE AND AREAS WHERE MODIFICATIONS WILL BE MADE TO ZONE 4 LIMITS AFTER FURTHER DESIGNS ARE PREPARED OF LPPE.

POTENTIAL LANDSLIDE REMEDIATION AREA
PROPOSED CONCRETE DESILTING BASIN (4A)
AVENIDA LA PATA
PROPOSED CONCRETE DESILTING BASIN (4B)
POTENTIAL LANDSLIDE REMEDIATION AREA
ZONE 4
POTENTIAL LANDSLIDE REMEDIATION AREA
ZONE 5A
PLANNED DRAINAGE MITIGATION
ZONE 1
PROPOSED DESILTING BASIN (4D)
BIO-MITIGATION CHANNEL WITH GABION DROP STRUCTURE (1D)
SITE C
AREA 3
AREA 1
SITE A
AREA 2
SITE B
CONCEPTUAL DESILTING BASIN (4C)
CONCEPTUAL DESILTING BASIN (5D)
SEGUNDA DESHECHA MITIGATION AREA
LANDSLIDE REMEDIATION AREAS
POTENTIAL TRAIL AREA/LANDSLIDE REMEDIATION AREA
EXISTING CONCRETE DESILTING BASIN (1C)

DATE OF TOPOGRAPHY: AUGUST 2, 2020

0 500 1000
SCALE:1"= 1000'

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

OC WASTE & RECYCLING

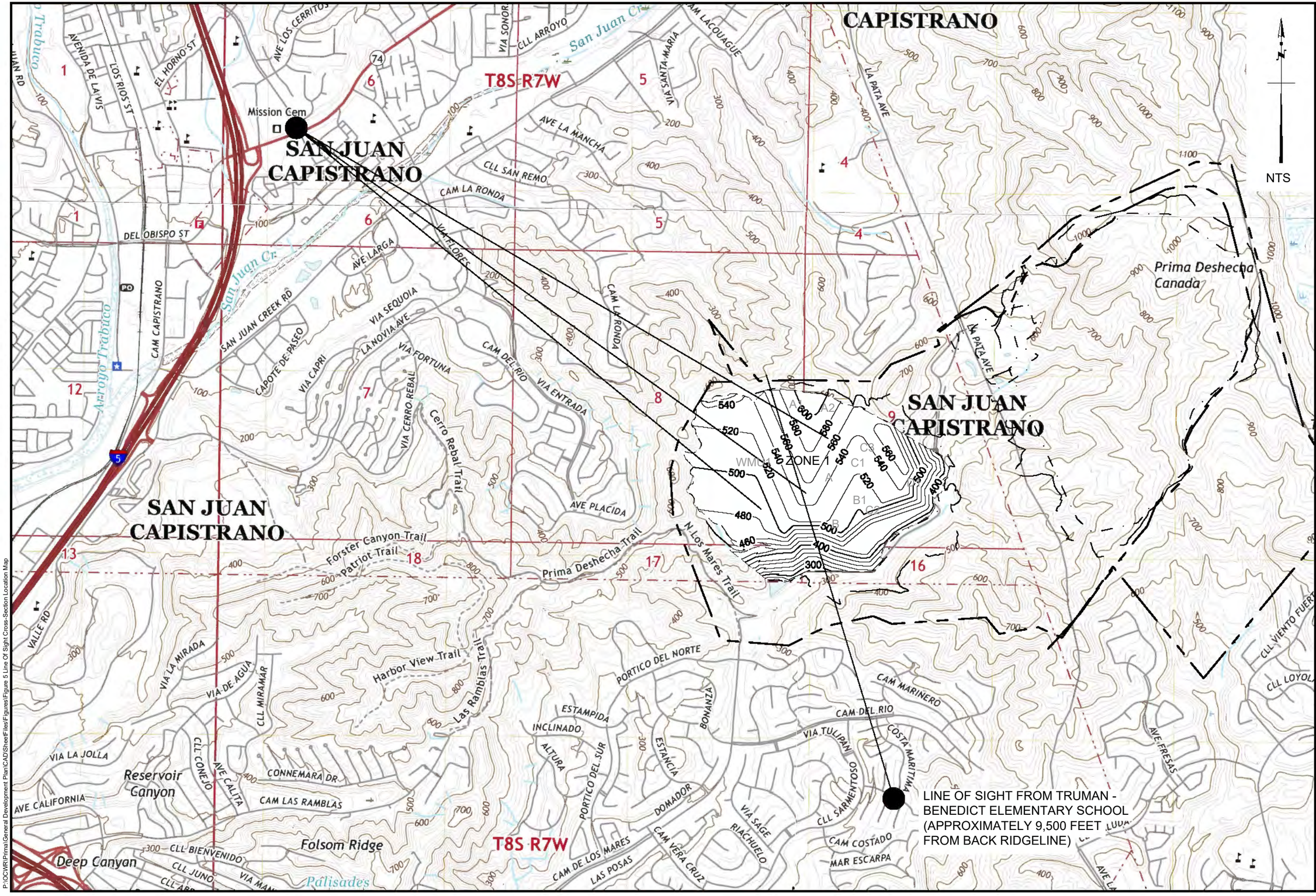
DESIGNED BY :	T.T.
DRAWN BY:	K.A. / A.K.
CHECKED BY :	A.N.P.
APPROVED BY :	V.B.
DATE:	02-24-2021
PROJ. NO.:	197-2020-0119

PRIMA DESHECHA LANDFILL

GENERAL DEVELOPMENT PLAN WITH ZONE 5A CONSTRUCTED PRIOR TO ZONE 4

FIGURE 4B

P:\OCWR\Prima\General Development Plan\CAD\SheetFiles\Figures\Figure 4B Proposed Final Grading Plans



P:\OCWR\Prima\General Development Plan\CAD\SheetFiles\Figures\Figure 5 Line Of Sight Cross-Section Location Map

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

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DRAWN BY:	K.A. / A.K.	PROJ. NO.:	197-2020-0119
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PRIMA DESHECHA LANDFILL

GENERAL DEVELOPMENT PLAN
LINE OF SIGHT CROSS-SECTION LOCATION MAP

FIGURE 5

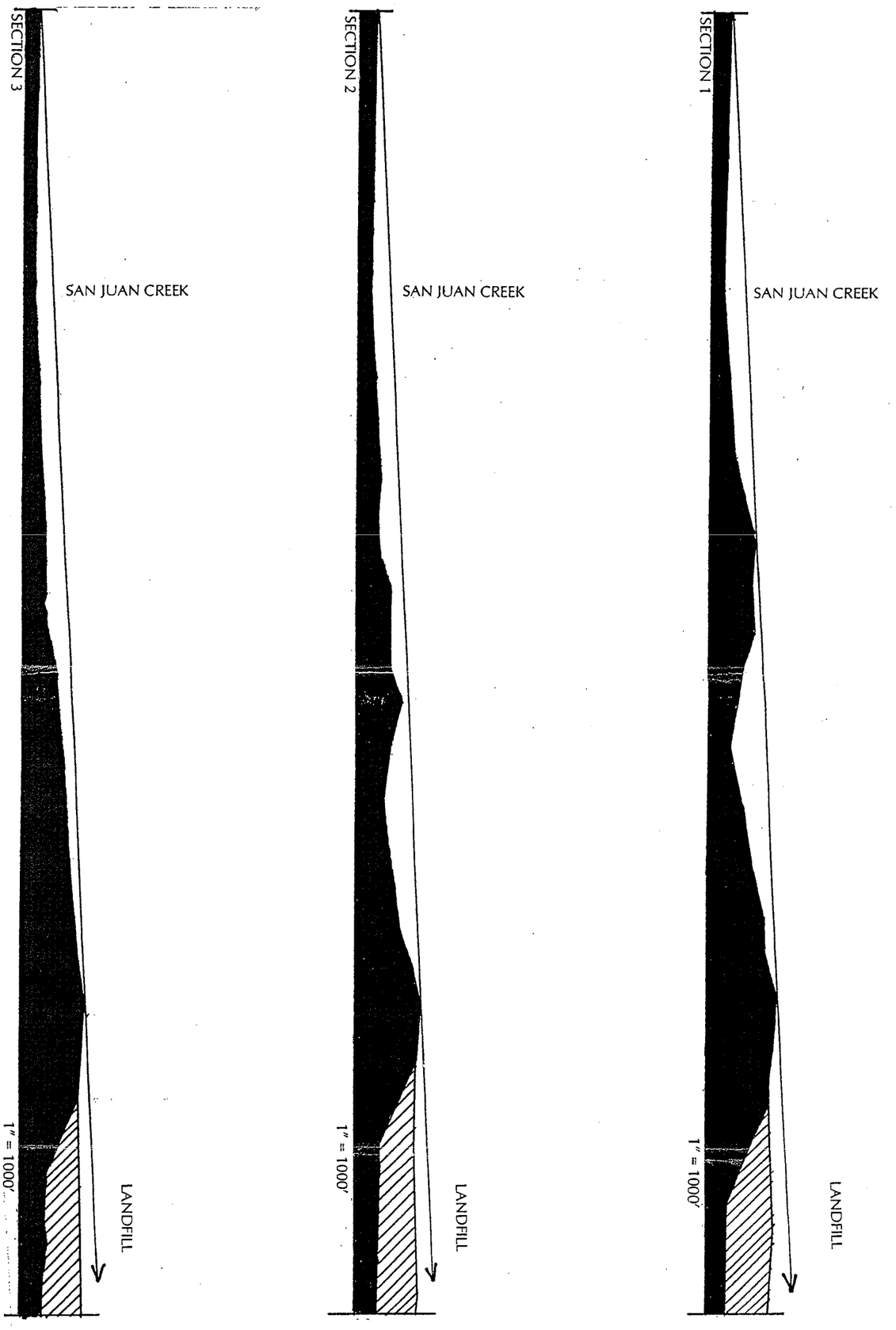

FIGURE 6

PRIMA DESHECHA LANDFILL

LINE OF SIGHT CROSS-SECTIONS
FOR SAN JUAN CAPISTRANO

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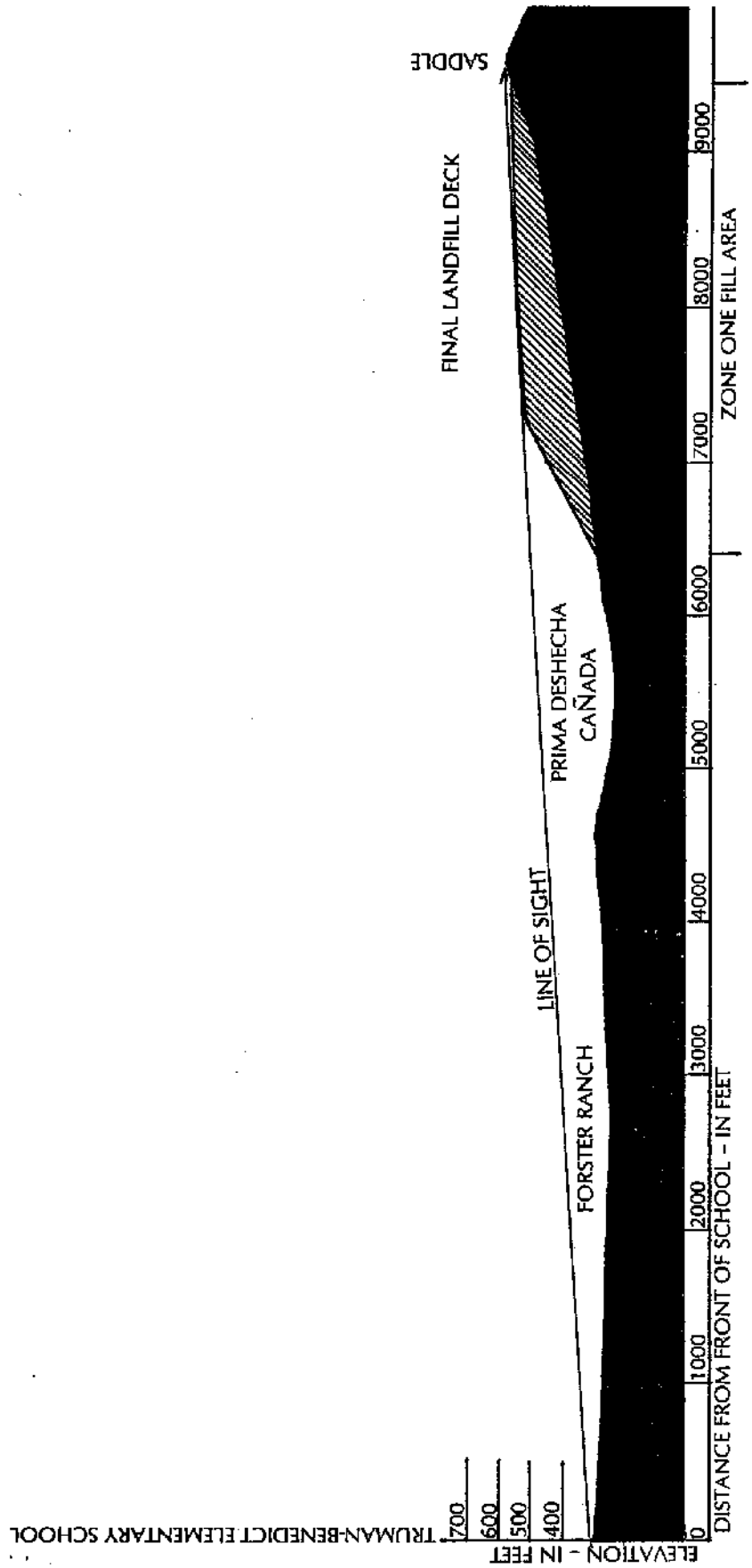
TEL 909.860.7777 FAX 909.860.8017



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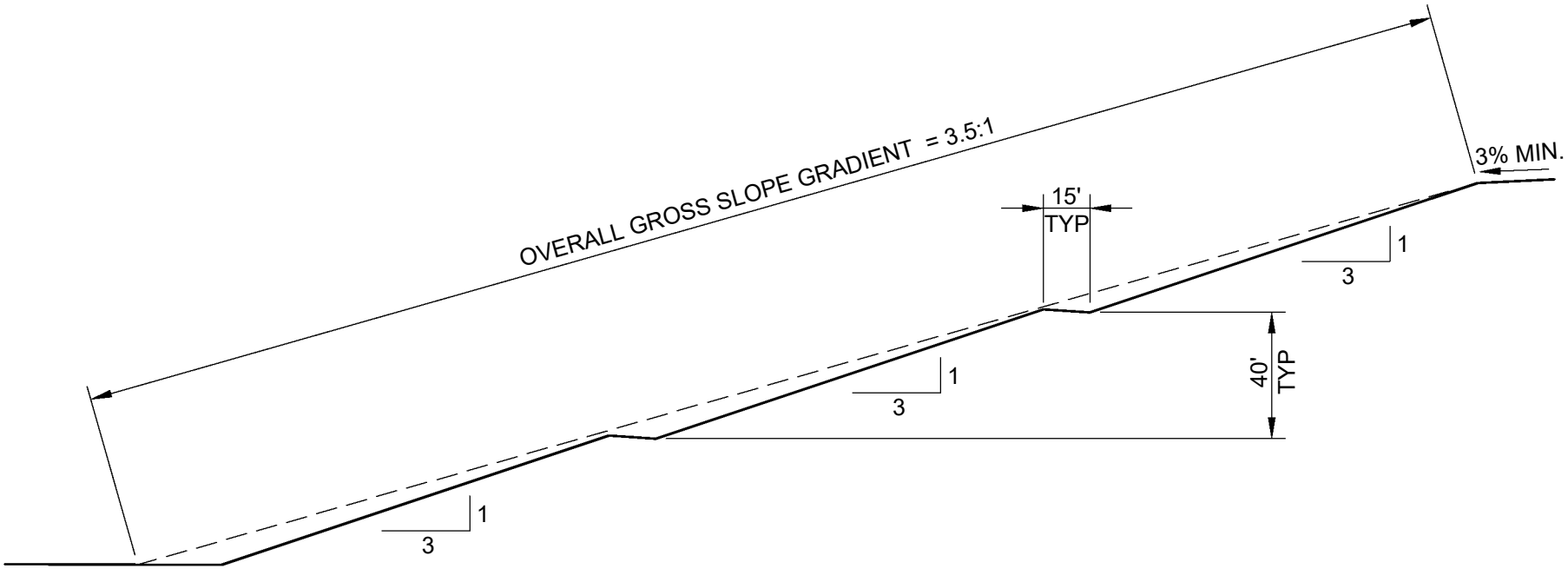
21700 Copley Drive, Suite 200
Diamond Bar, CA 91765
TEL 909.860.7777 FAX 909.860.8017

PRIMA DESHECHA LANDFILL

GENERAL DEVELOPMENT PLAN
LINE OF SIGHT CROSS-SECTION FOR SAN CLEMENTE

FIGURE 7



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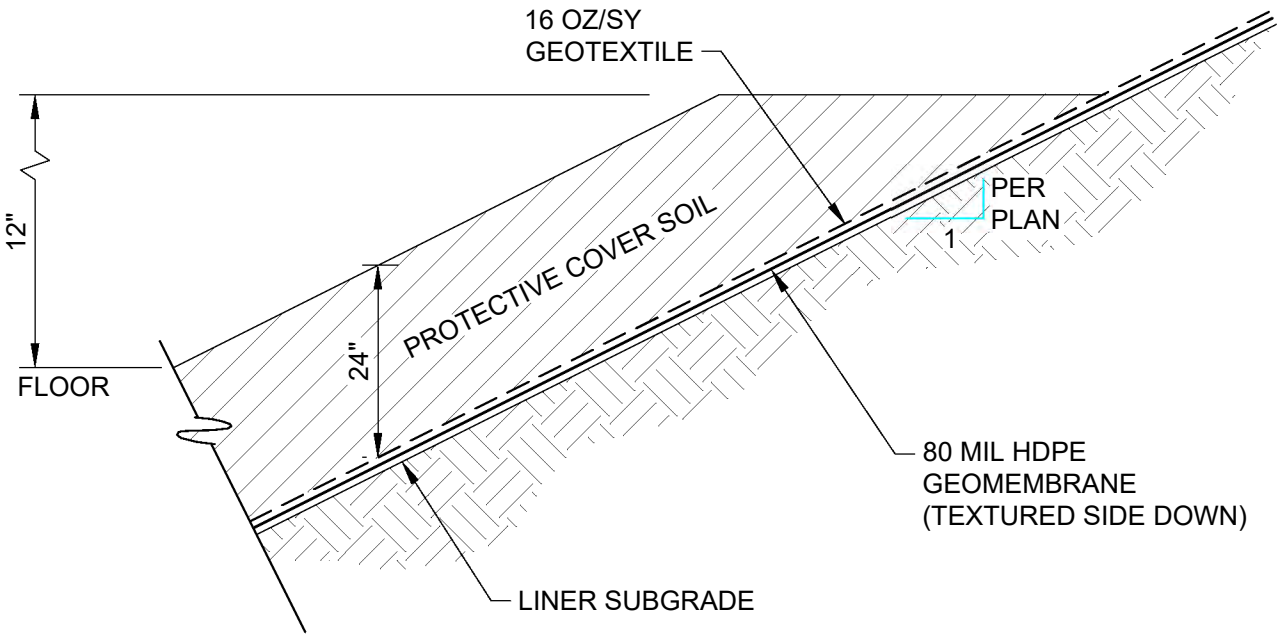
21700 Copley Drive, Suite 200
Diamond Bar, CA 91765
TEL 909.860.7777 FAX 909.860.8017

PRIMA DESHECHA LANDFILL

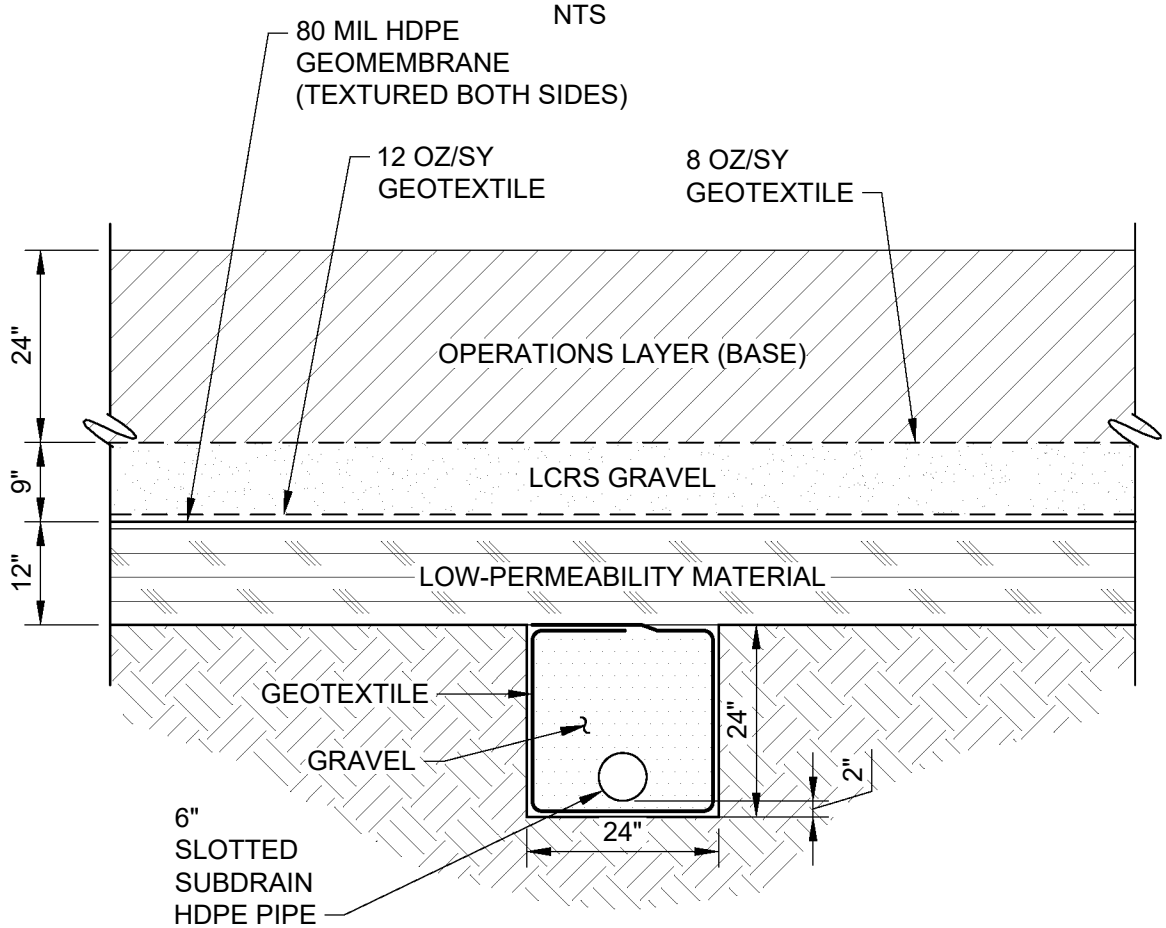
GENERAL DEVELOPMENT PLAN
TYPICAL CROSS-SECTION OF FILL SLOPES

FIGURE 8



SLOPE LINER SECTION

NTS



BOTTOM FLOOR LINER SECTION

NTS

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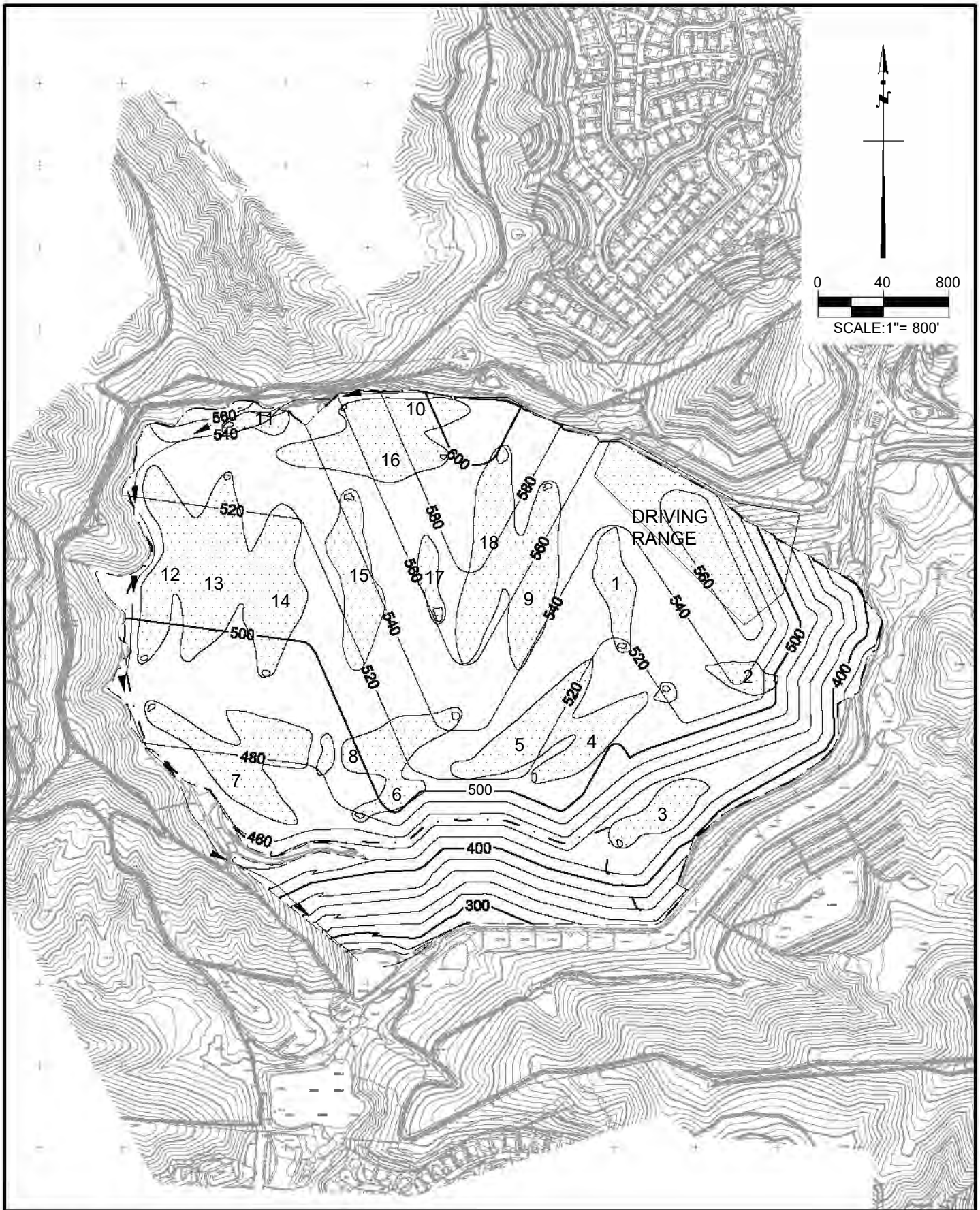
Diamond Bar, CA 91765
TEL 909.860.7777 FAX 909.860.8017

PRIMA DESHECHA LANDFILL

GENERAL DEVELOPMENT PLAN
TYPICAL CROSS-SECTION OF LINER

FIGURE 9



P:\OCWR\PRIMA\GENERAL DEVELOPMENT PLAN\CAD\SHEETFILES\FIGURES\FIGURE 10 CONCEPTUAL GOLF COURSE PLAN - ZONE 1.DWG 6/17/2021 11:31 AM

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Diamond Bar, CA 91765
TEL 909.860.7777 FAX 909.860.8017

PRIMA DESHECHA LANDFILL

GENERAL DEVELOPMENT PLAN
CONCEPTUAL GOLF COURSE PLAN - ZONE 1

FIGURE 10

PROPOSED LANDFILL FOOTPRINT

APPROXIMATE PROPERTY BOUNDARY

AVENIDA LA PATA

EXISTING OPERATIONS FACILITY

EXISTING LANDFILL (WMU2)

EXISTING ENTRANCE ROAD

FUTURE TRAIL HEAD

EXISTING SCALES

PROPOSED INTERIM HAUL ROAD FROM EXISTING SCALES

ZONE 4

RIDGE-1010

1000

ZONE 1

500

PROPOSED SCALE SITE

PROPOSED HAUL ROAD

PROPOSED LPPE ALIGNMENT

EXISTING DESILTING BASIN

FUTURE CAMINO DE LOS MARES (EXTENSION)

N

0 500 1000

SCALE:1"= 1000'

LEGEND

- PROPERTY LINE
- LIMIT OF REFUSE
- DAYLIGHT/ GRADEBREAK
- 50 MAJOR CONTOUR
- MINOR CONTOUR
- 50 EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED DRAINAGE IMPROVEMENTS

DATE OF TOPOGRAPHY: AUGUST 2, 2020

P:\OCWR\Prima\General Development Plan\CAD\SheetFiles\Figures\Figure 11 On-Site Conceptual Circulation Plan

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

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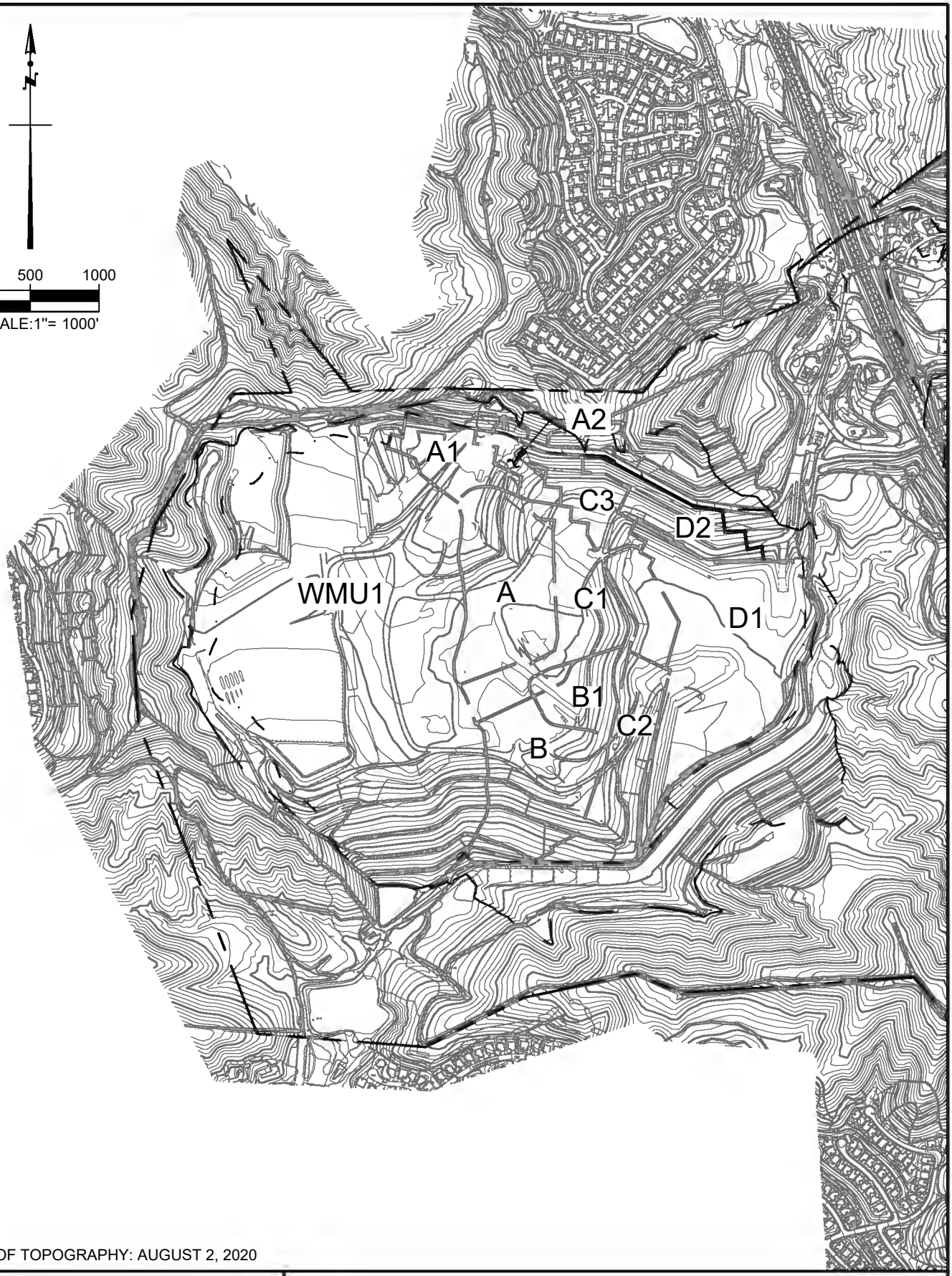
GENERAL DEVELOPMENT PLAN
ON-SITE CONCEPTUAL CIRCULATION PLAN

FIGURE 11



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

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GENERAL DEVELOPMENT PLAN
EXCAVATION PHASING PLAN - ZONE 1

FIGURE 12

P:\OC\WR\PRIMA\GENERAL DEVELOPMENT PLAN\CAD\SHEETFILES\FIGURES\FIGURE 12 EXCAVATION PHASING PLAN - ZONE 1.DWG 6/17/2021 11:32 AM

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

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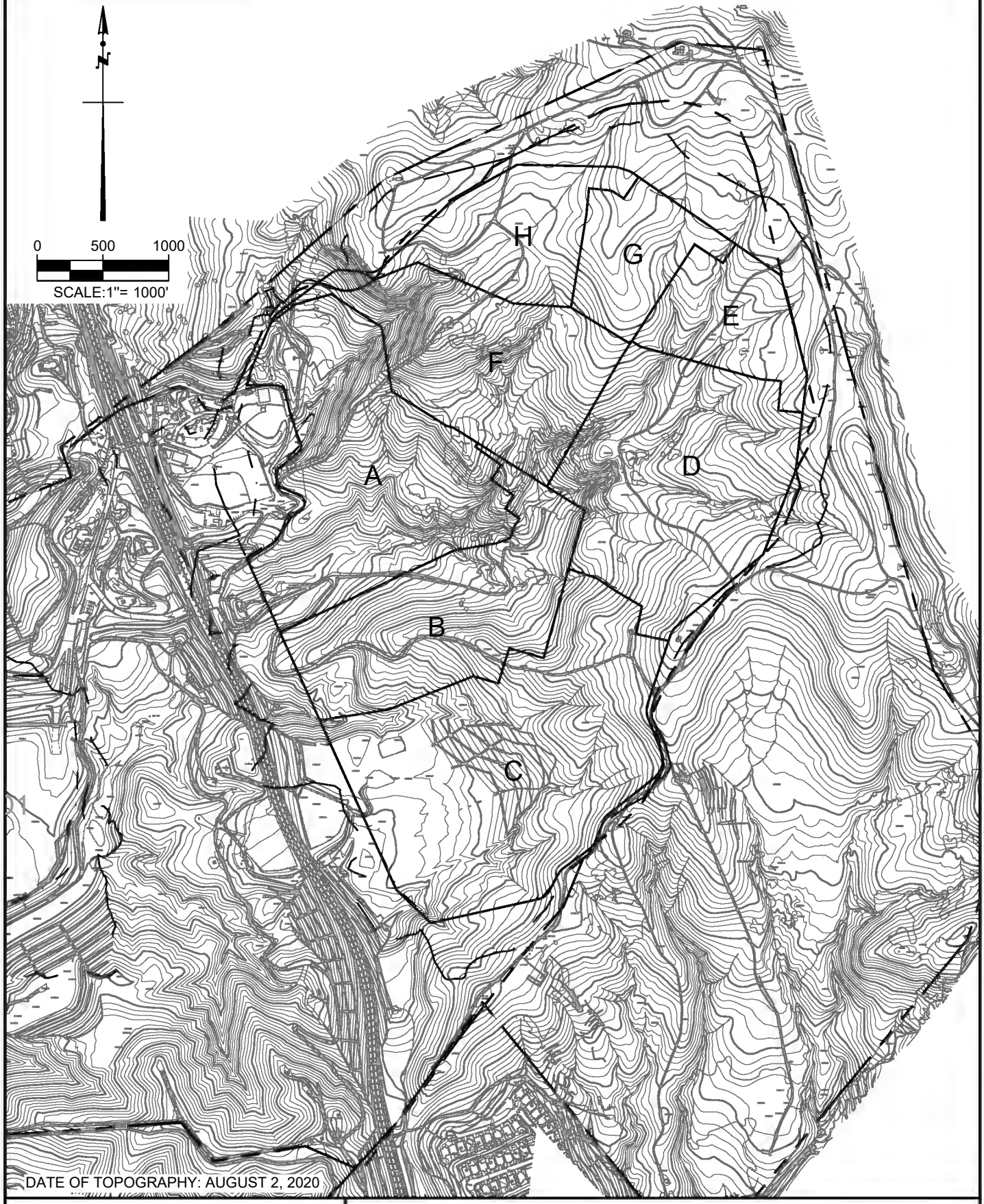
GENERAL DEVELOPMENT PLAN
FILL PHASING PLAN - ZONE 1

FIGURE 13

P:\OCWR\Prima\General Development Plan\CAD\SheetFiles\Figures\Figure 13 Fill Phasing Plan - Zone 1



P:\OC\WR\PRIMA\GENERAL DEVELOPMENT PLAN\CAD\SHEETFILES\FIGURES\FIGURE 14 EXCAVATION PHASING PLAN - ZONE 4.DWG 6/17/2021 11:32 AM

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Diamond Bar, CA 91765
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PRIMA DESHECHA LANDFILL

GENERAL DEVELOPMENT PLAN
EXCAVATION PHASING PLAN - ZONE 4

FIGURE 14

SOURCE: 2018 JTD
DATE OF TOPOGRAPHY: AUGUST 31, 2016

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

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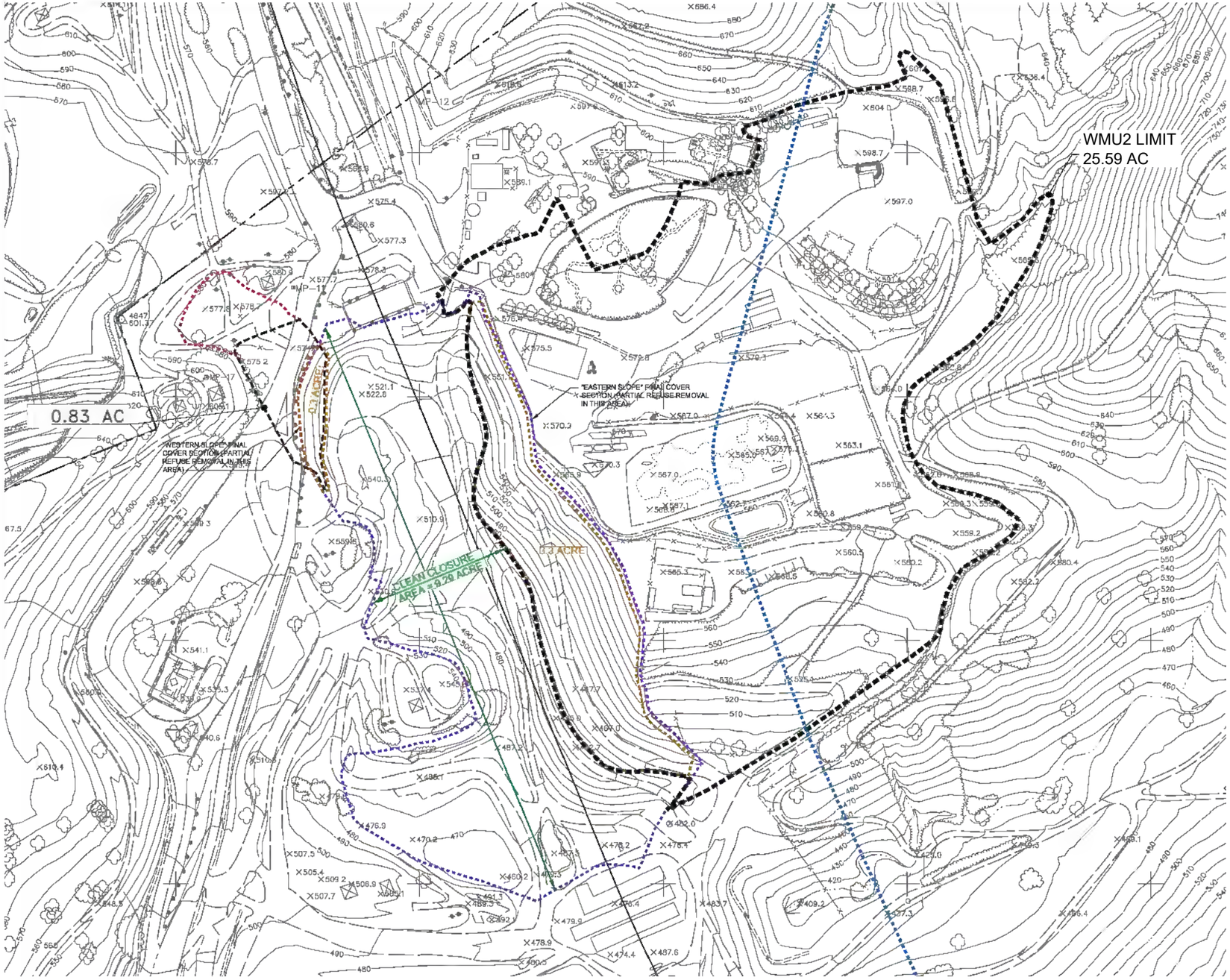
PRIMA DESHECHA LANDFILL

ZONE 4 FILL PHASING PLAN

FIGURE 15

P:\OCWR\Prima\General Development Plan\CAD\SheetFiles\Figures\Figure 15 Zone 4 Fill Phasing Plan



LEGEND

- EXISTING TOPOGRAPHY [1]
- PROPERTY LIMITS (APPROXIMATE)
- CENTERLINE OF AVENIDA LA PATA (163+00)
- ASSUMED WMU-2 LIMIT PER DESIGN DRAWING LF-01/LF-02 [2] (25.59 AC)
- REVISED APPROXIMATE WMU2 MSW LIMIT (GEOSYNTEC, 2015) [3] (0.83 AC)
- POSSIBLE LIMIT OF CONSTRUCTION DEBRIS BASED ON PER-LANDFILL TOPOGRAPHY (GEOSYNTEC, 2015) [3]
- AS-BUILT LIMITS OF WMU2 PARTIAL FINAL CLOSURE
- AS-BUILT LIMITS OF WMU2 PARTIAL FINAL COVER SECTION
- ZONE 4 PHASE REFUSE BOUNDARY

NOTES:

1. BASE PHOTO IS FROM RICK ENGINEERING CO., DATED SEPTEMBER 2015.
2. DESIGN DRAWINGS, LA PATA AVENUE GAP CLOSURE, OC PUBLIC WORKS, DATED JUNE 2013.
3. REPORT ADDITIONAL WASTE DELINEATION NORTHWEST PORTION OF WMU2, GEOSYNTEC CONSULTANTS DATED 23 MARCH 2015.

100 50 0 100 200 300
SCALE: 1"=100'

SOURCE: GEOSYNTEC FIGURE 4 WASTE EXCAVATION AND FINAL COVER LIMITS FOR WMU2 FOR PARTIAL FINAL CLOSURE (OCTOBER 2016)/ 2018 JTD
DATE OF TOPOGRAPHY: SEPTEMBER 2015

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

OC WASTE & RECYCLING

DESIGNED BY:	T.T.
DRAWN BY:	K.A. / A.K.
CHECKED BY:	A.N.P.
APPROVED BY:	V.B.
DATE:	02-24-2021
PROJ. NO.:	197-2020-0119

PRIMA DESHECHA LANDFILL

WMU2 PARTIAL FINAL CLOSURE
WASTE EXCAVATION AND FINAL COVER LIMITS

FIGURE 16

P:\OCWR\Prima\General Development Plan\CAD\SheetFiles\Figures\Figure 16 Waste Excavation And Final Cover Limits

LEGEND

- Prima Deshecha Landfill (PDLF) Boundary
- Concurrent Operations of Zones 1 and 4
- Soil Importation for Liner Installation
- San Onofre Breccia Removal – Blasting
- San Onofre Breccia Removal – Pulverizing/Stockpiling

0 550 1100
FEET

SOURCE: OCWR 2021

P:\OCWR\Prima\General Development Plan\CAD\SheetFiles\Figures\Figure 17 San Onofre Breccia Material Location

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

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DESIGNED BY :	T.T.	DATE:	02-24-2021
DRAWN BY :	K.A. / A.K.	PROJ. NO.:	197-2020-0119
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APPROVED BY :	V.B.		

PRIMA DESHECHA LANDFILL

SAN ONOFRE BRECCIA MATERIAL LOCATION

FIGURE 17