

MEMORANDUM

To: Mr. Greg Mattson, Project Manager, San Diego County
From: Mr. Michael Williams and Ms. Sarah Siren, Dudek
Subject: Paleontological Resources Technical Memorandum for the Otay Ranch Village 14 and Planning Area 16/19 Proposed Project Amendment
Date: December 2, 2019
cc: GDCI Proctor Valley L.P., Sean Kilkenny, Dudek
Attachment(s): Attachment A, Paleontological Sensitivity Map

Introduction

This Memorandum reflects proposed changes to the Otay Ranch Village 14 and Planning Areas 16/19 Project that was approved by the San Diego County Board of Supervisors on June 26, 2019 (Approved Project). The changes to the Approved Project would reconfigure the development footprint to consolidate development in Village 14; add 147 units, for a total of 1,266 residential units; and reduce impacts by approximately 230 acres, to 579 acres (the Proposed Project Amendment). Figure 1, Regional Location Map, shows the regional location of the Approved Project Area and the Proposed Project Amendment Project Area, in the County of San Diego (County).

An Environmental Impact Report (EIR) was prepared for the Approved Project and was certified by the Board on June 26, 2019. The Final EIR analyzed the potential impacts of the Approved Project. The Final EIR also analyzed potential impacts associated with the EIR Land Exchange Alternative, which was one of the alternatives to the Approved Project. The Final EIR is incorporated herein by reference and the results are summarized in Section 3 and mitigation measures are described in Section 5.

This Paleontological Resources Technical Memorandum also compares information from the following technical studies:

- Final EIR 2.10-1, Paleontological Resource and Monitoring Assessment, Proctor Valley Project, Unincorporated San Diego County, California, prepared by Brian F. Smith & Associates, 2015 (BFSA 2015).

The Final EIR analyzed the Approved Project's potential impacts to paleontological resources in Section 2.10, Paleontological Resources. This Paleontological Resources Technical Memorandum was prepared for the Proposed Project Amendment. The purpose of this analysis is to evaluate whether, and to what extent, the potential impacts of the Proposed Project Amendment to paleontological resources differ from those of the Approved Project. This technical memorandum includes the following sections: (1) background, (2) Proposed Project Amendment description, (3) summary of the Approved Project's impacts to paleontological resources, (4) analysis of the Proposed Project Amendment's impacts to paleontological resources, (5) mitigation measures, and (6) conclusion.

For additional context, the following terminology is used in this Technical Memorandum.

Terminology

Approved Project: The project described in Otay Ranch Village 14 and Planning Areas 16/19 Tentative Map 5616, Specific Plan 16-002, and the certified EIR, which the County of San Diego (County) approved on June 26, 2019. The Approved Project permits 1,119 residential units within a Project Area of approximately 1,369 acres. The Development Footprint of the Approved Project is 809 acres.

Conserved Open Space: Conserved Open Space refers to 24.5 acres of land within the Project Area, which, while designated in the Otay Ranch General Development Plan/Otay Subregional Plan (Otay Ranch GDP/SRP) for residential uses within Village 14 and Planning Areas 16/19, will not be developed as part of the Proposed Project Amendment. Instead, the Conserved Open Space will be preserved on site and be (a) added to the Otay Ranch Resource Management Plan (RMP) Preserve (through a future RMP Amendment), (b) managed under a separate RMP, or (c) utilized to mitigate impacts to the City of San Diego Multiple Species Conservation Program Cornerstone Lands. The Conserved Open Space areas are located adjacent to Otay Ranch RMP Preserve and will be conserved by recording a biological open space easement over the land.

Development Footprint: The areas where a given project will cause permanent or temporary ground disturbance. The Development Footprint includes all on-site development, off-site improvements, and impacts resulting from infrastructure and other allowable uses within the Otay Ranch Resource Management Plan (RMP) Preserve.

EIR Land Exchange Alternative: The project alternative identified as the “Land Exchange Alternative” in Chapter 4 of the certified Final EIR. This Land Exchange Alternative contemplated a land exchange with the California Department of Fish and Wildlife (CDFW) and would develop 1,530 residential units within a Project Area of approximately 2,387.6 acres, with a Development Footprint of 658.3 acres.

Off-Site Improvements: Off-site improvements total approximately 40.1 acres and include Proctor Valley Road, wet and dry utilities, drainage facilities, trails, an off-site sewer pump station in the southern reach of Proctor Valley Road, and off-site sewer facilities to connect to the Salt Creek Interceptor as planned since 1994.

Project Area: The total land area for the Proposed Project Amendment as contemplated in the proposed land exchange between applicant and CDFW.¹ The Project Area consists of approximately 1,283.6 acres currently owned by GDCI Proctor Valley, L.P., the owner/applicant, 219.4 acres currently owned by CDFW, and approximately 40.1 acres of off-site improvements, for a total of 1,543 acres.

¹ As indicated above, the land exchange necessary to implement the Proposed Project Amendment must be approved by the California Wildlife Conservation Board.

Proposed Project Amendment: The Proposed Project Amendment reflects proposed changes to the Approved Project, which would add 147 units for a total of 1,266 residential units and would reduce the Development Footprint by approximately 230 acres, to a total of 579 acres, within a Project Area of 1,543 acres, as shown on Figure 2, Site Utilization Plan, and more fully described below in Section 2. The Proposed Project Amendment includes a Revised Tentative Map and Specific Plan Amendment. As contemplated in the Dispute Resolution Agreement, the Proposed Project Amendment assumes and will require a County-initiated amendment to the MSCP County Subarea Plan. Because the amendment to the MSCP County Subarea Plan will be initiated by the County, it is not part of the Proposed Project Amendment.

PV1 and PV3: PV1 and PV3 are areas of the Approved Project located in Village 14 as shown on Figure 3 attached.

Revised Tentative Map: The Revised Tentative Map reflects revisions to the June 26, 2019, Approved Tentative Map #5616 that are necessary to process and implement the land exchange with CDFW and the Proposed Project Amendment in the County.

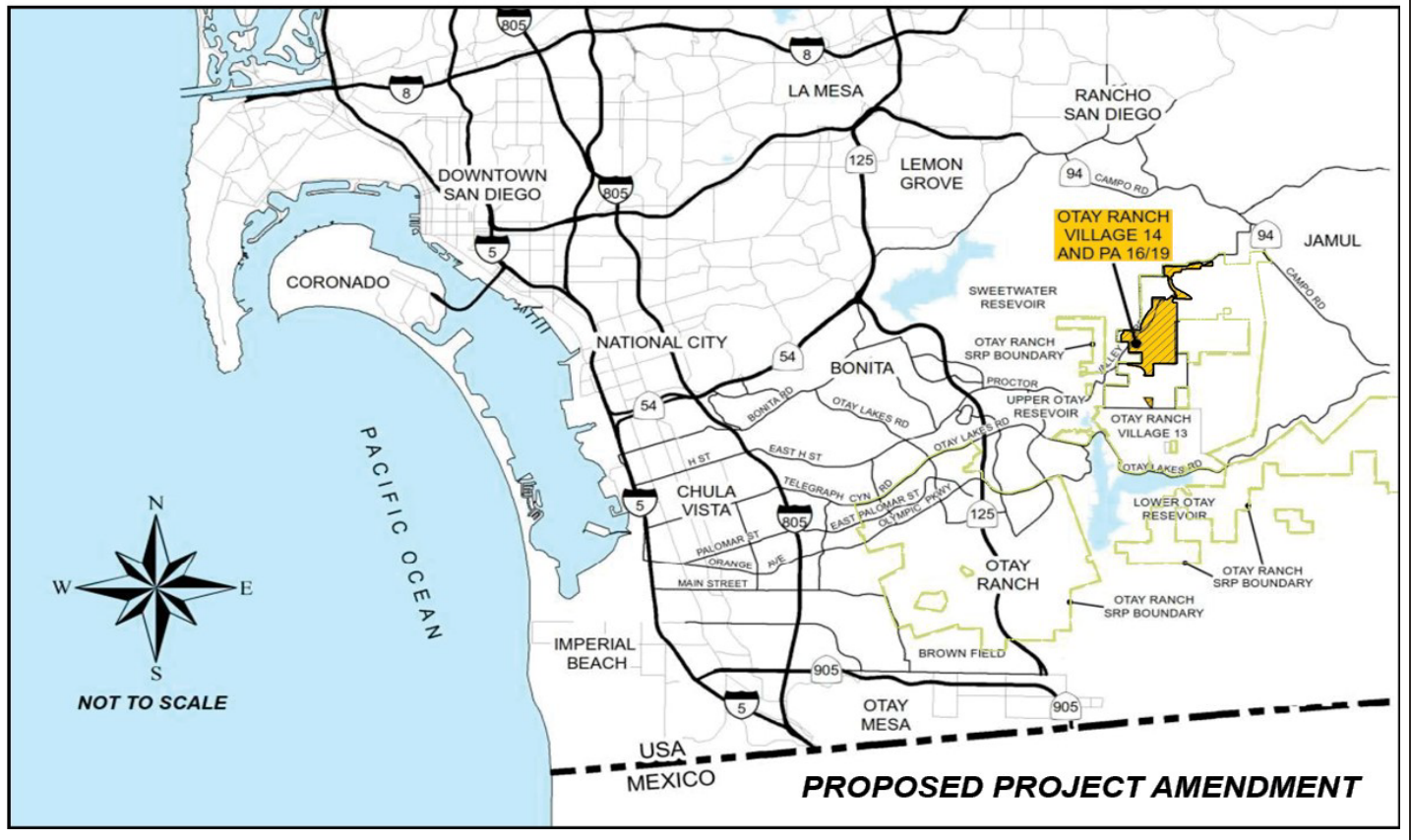
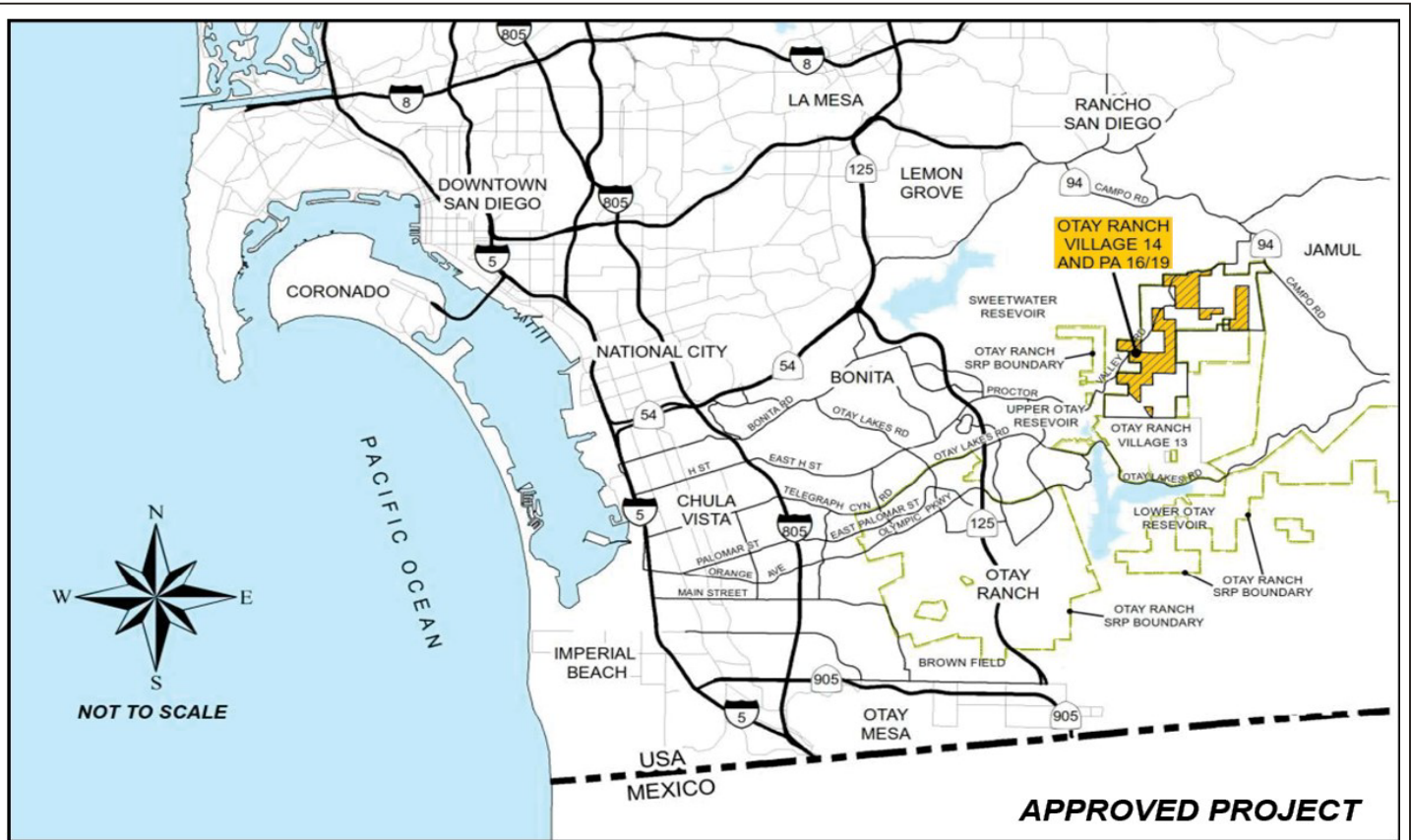
Specific Plan Amendment: The Specific Plan Amendment reflects revisions to the June 26, 2019, Approved Specific Plan #16-002 that are necessary to process and implement the land exchange with CDFW and the Proposed Project Amendment in the County.

Section 1. Background

The Proposed Project Amendment Project Area comprises approximately 1,543 acres of undeveloped land within the Proctor Valley area of the 23,000-acre Otay Ranch master planned community (see Figure 4, Proposed Project Amendment Project Area). The Proposed Project Amendment reflects proposed changes to the Approved Project, including a proposed land exchange with the California Department of Fish and Wildlife (CDFW).

On June 27, 2019, the owner/applicant of the Approved Project entered into a Dispute Resolution Agreement with CDFW, the U.S. Fish and Wildlife Service, and the County. Pursuant to this agreement, the owner/applicant would seek a land exchange with CDFW through a process overseen by the California Wildlife Conservation Board. The proposed land exchange, if approved by the Wildlife Conservation Board, would require the owner/applicant to (i) transfer 147.3 acres in Village 14 and 192.4 acres in Planning Area 16 to CDFW, and (ii) record a conservation easement over 191.5 acres in Planning Area 16. In exchange, CDFW would transfer 219.4 acres in Village 14 to the owner/applicant. The Proposed Project Amendment would then be implemented upon the lands within the applicant's ownership, including those received via the Wildlife Conservation Board land exchange. Because the Proposed Project Amendment assumes the above-described land exchange, it would result in a different development footprint than the Approved Project's development footprint. Therefore, a Specific Plan Amendment to the approved Village 14 and Planning Areas 16/19 Specific Plan and a Revised Tentative Map are required processes for the Proposed Project Amendment.

While the Proposed Project Amendment and EIR Land Exchange Alternative both contemplate exchanges of land with the CDFW, the Development Footprints and other aspects differ. It is important to note that the Development Footprint of the Proposed Project Amendment was assessed in the certified Final EIR as part of the Approved Project Development Footprint and as part of the EIR Land Exchange Alternative Development Footprint.

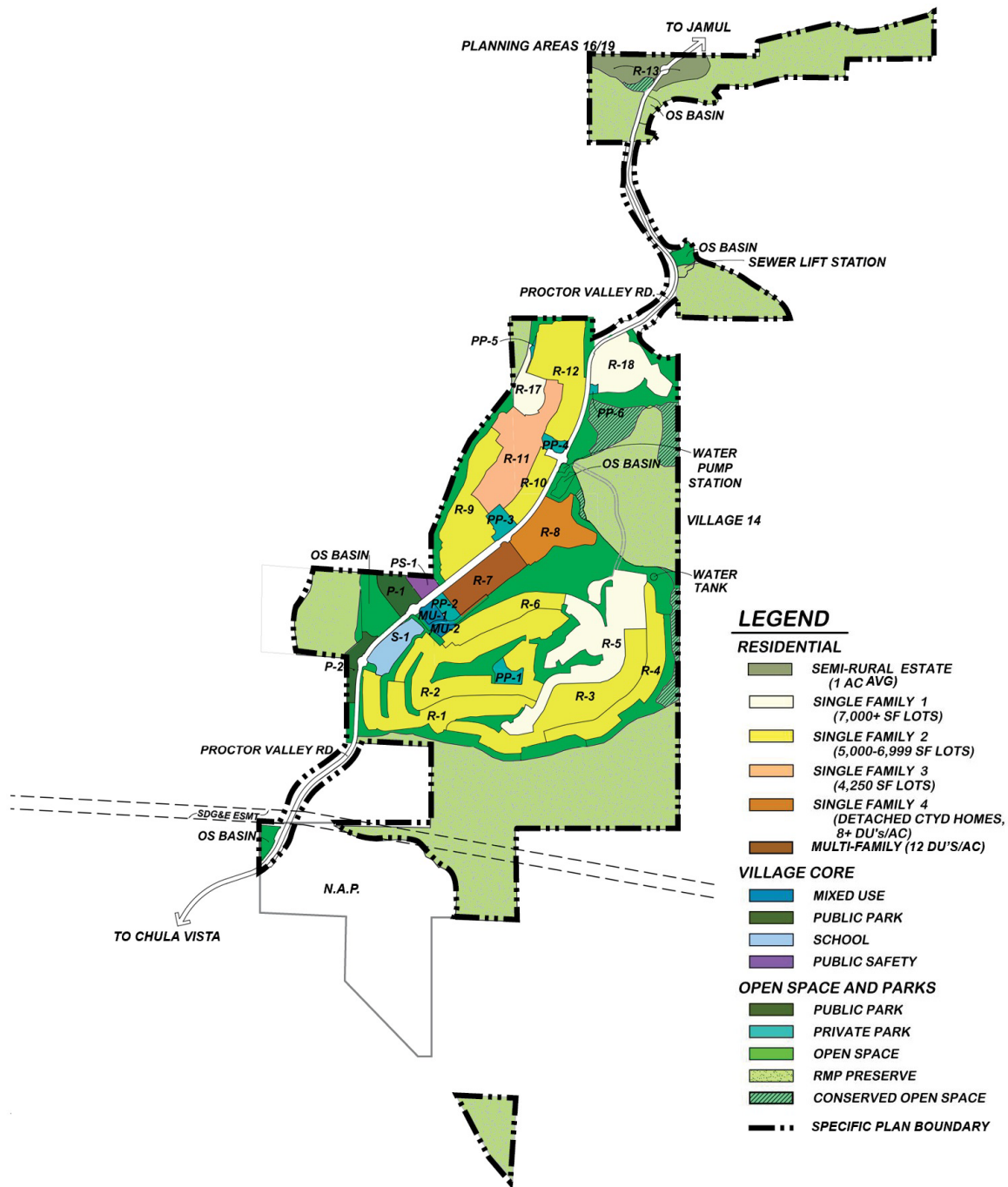


SOURCE: Hunsaker 2019

FIGURE 1

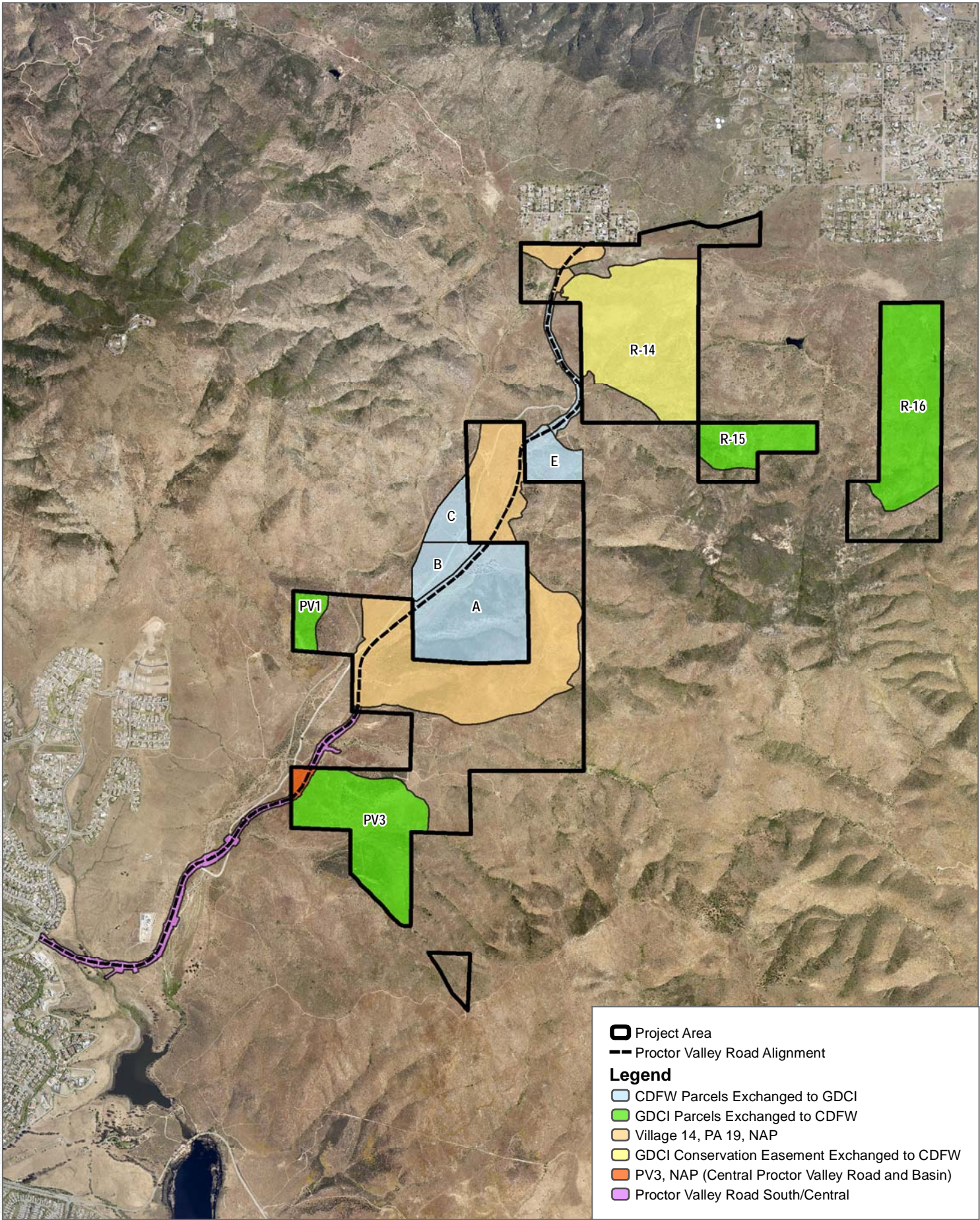
Regional Location

Otay Ranch Village 14 and Planning Areas 16/19 Proposed Project Amendment



SOURCE: Hunsaker 2019

FIGURE 2



SOURCE: SANGIS 2017; Hunsaker 2019

FIGURE 3

Proposed Land Exchange

Otay Ranch Village 14 and Planning Areas 16/19 Proposed Project Amendment

Section 2. Proposed Project Amendment Description and Summary of Amendment/Revisions

The Proposed Project Amendment proposes 1,266 residential units within a Project Area of 1,543 acres. The Proposed Project Amendment Development Footprint would be approximately 578.6 acres, which would consist of approximately 513.1 acres within Otay Ranch Village 14, 25.2 acres within Otay Ranch Planning Area 19, and 40.1 acres of off-site improvements (i.e., Proctor Valley Road). Of the 1,266 residential units, 1,253 units would be located in Village 14 (consistent with the Otay Ranch GDP/SRP) and 13 units would be located in Planning Area 19 (consistent with the Otay Ranch GDP/SRP). The Proposed Project Amendment is depicted in Figure 2 and summarized in Tables 1 through 3.

As described above, the Proposed Project Amendment would also include a land exchange between the owner/applicant and CDFW, which would require the owner/applicant to transfer 339.7 acres to CDFW and record a conservation easement over 191.5 acres, and, in exchange, CDFW would transfer 219.4 acres in Village 14 to the owner/applicant to create a consolidated Development Footprint. The proposed land exchange between the applicant and CDFW is depicted in Figure 3. As defined above, the Proposed Project Amendment requires a Specific Plan Amendment and Revised Tentative Map, which must be approved by the County. The Revised Tentative Map would replace that certain approved Tentative Map TM #5616, approved by the County on June 26, 2019. The Specific Plan Amendment would amend the Specific Plan 16-002 to reflect the Proposed Project Amendment, including the Revised Tentative Map and the land exchange with CDFW.

Table 1. Village 14 and Planning Areas 16/19 Proposed Project Amendment Site Utilization Plan Summary

| Description | Village 14 | | Planning Area 16/19 | | Total Proposed Project Amendment | |
|--|--------------|--------------|---------------------|-----------|----------------------------------|--------------|
| | Gross Acres | Units | Gross Acres | Units | Gross Acres | Units |
| Residential Subtotal ⁽⁴⁾ | 386.6 | 1,253 | 14.9 | 13 | 401.4 | 1,266 |
| Non-Residential Uses | | | | | | |
| Mixed Use ⁽²⁾ | 2.7 | | | | 2.7 | |
| Public Parks | 10.2 | | | | 10.2 | |
| Private Parks/Recreation ⁽³⁾ | 9.5 | | | | 9.5 | |
| Public Safety Site | 2.3 | | | | 2.3 | |
| Elementary School Site | 9.9 | | | | 9.9 | |
| Open Space | 47.8 | | 1.7 | | 49.5 | |
| Conserved Open Space | 23.0 | | 1.5 | | 24.5 | |
| Otay Ranch RMP Preserve | 278.6 | | 98.4 | | 377.0 | |
| Circulation | 23.3 | | 3.4 | | 26.7 | |
| <i>Non-Residential Uses Subtotal</i> | <i>407.2</i> | | <i>105.0</i> | | <i>512.1</i> | <i>-</i> |
| Total Proposed Project Amendment ⁴ | 793.7 | 1,253 | 119.8 | 13 | 913.6 | 1,266 |
| Other Off-sites | | | | | | |
| Off-site Improvements | 40.1 | | | | 40.1 | |
| Off-site Preserve PA 16 | | | 58.2 | | 58.2 | |
| Parcels Exchanged to CDFW | 147.3 | | 192.4 | | 339.7 | |
| Conservation Easement PA 16 | | | 191.5 | | 191.5 | |
| Total Proposed Project Amendment Area | | | | | 1,543.1 | 1,266 |

Notes: PA = Planning Area, CDFW = California Department of Fish and Wildlife.

¹ Residential gross acres includes 96.7 acres of related internal slopes, fuel modification and/or preserve edge open space lots.

² Village 14 Mixed Use acreage includes 10,000 sf of commercial use.

³ Village 14 has 2.1 acres of private pocket parks included in the residential acreage; therefore, the subtotal including PPP is 11.7 acres.

⁴ Totals may not sum due to rounding

Table 2. Proposed Project Amendment Site Utilization Plan Detail (Village 14)

| Description | | Gross Acres ^(1,2) | Units ⁽³⁾ | Density |
|---|--------------------|------------------------------|----------------------|------------|
| Single Family Residential | | | | |
| R-1 | 50*100 | 33.1 | 103 | 3.1 |
| R-2 | 60*100 | 48.3 | 136 | 2.8 |
| R-3 | 60*85 | 35.8 | 112 | 3.1 |
| R-4 | 60*100 | 31.5 | 73 | 2.3 |
| R-5 | 75*100 | 51.7 | 121 | 2.3 |
| R-6 | 60*85 | 22.5 | 47 | 2.1 |
| R-8 | Courtyard | 21.1 | 116 | 5.5 |
| R-9 | 60*85 | 33.0 | 96 | 2.9 |
| R-10 | 60*85 | 8.5 | 31 | 3.7 |
| R-11 | 50*85 | 25.4 | 119 | 4.7 |
| R-12 | 50*100 | 27.6 | 94 | 3.4 |
| R-17 | 70*100 | 7.4 | 10 | 1.4 |
| R-18 | 70*100 | 27.8 | 45 | 1.6 |
| <i>Single Family Residential Subtotal</i> | | 373.8 | 1,103 | 3.0 |
| Multi-Family | | | | |
| R-7 | MF | 12.7 | 150 | 11.8 |
| <i>MF Subtotal</i> | | 12.7 | 150 | 11.8 |
| Residential Subtotal ⁽³⁾⁽⁴⁾ | | 386.6 | 1,253 | 3.2 |
| Non-Residential Uses | | | | |
| Mixed Use ⁽²⁾ | MU - C | 2.7 | | |
| Public Parks | | | | |
| P-1 | Village Green Park | 6.2 | | |
| P-2 | Scenic Park | 3.9 | | |
| <i>Public Parks Subtotal</i> | | 10.2 | | |
| Private Parks & Recreation | | | | |
| PP-1 | Central | 2.8 | | |
| PP-2 | Village Core | 2.1 | | |
| PP-3 | West | 1.9 | | |
| PP-4 | West | 1.5 | | |
| PP-5 | Northwest | 0.8 | | |
| PP-6 | Northeast | 0.4 | | |
| PPP ⁽³⁾ | Various | 0.0 | | |
| <i>Private Parks/Recreation Subtotal</i> | | 9.5 | | |
| Public Safety Site | | 2.3 | | |
| Elementary School Site | | 9.9 | | |
| Open Space | | 47.8 | | |
| Conserved Open Space | | 23.0 | | |
| Otay Ranch RMP Preserve | | 274.9 | | |
| Circulation - In Preserve | | 3.7 | | |
| Circulation - Arterial | | 23.3 | | |

Table 2. Proposed Project Amendment Site Utilization Plan Detail (Village 14)

| Description | Gross Acres ^(1,2) | Units ⁽³⁾ | Density |
|--------------------------------------|------------------------------|----------------------|------------|
| <i>Non-Residential Uses Subtotal</i> | 407.2 | | |
| Village 14 Subtotal | 793.7 | 1,253 | 1.6 |

Notes:

- ¹ Residential gross acres includes 96.5 acres of related internal slopes, fuel modification and/or preserve edge open space lots.
- ² Village 14 Mixed Use acreage includes 10,000 sf of commercial use.
- ³ Village 14 has 2.1 acres of private pocket parks included in the residential acreage; therefore, the subtotal including PPP is 11.6 acres.
- ⁴ Totals may not sum due to rounding

**Table 3. Proposed Project Amendment Site Utilization Plan Detail
(Planning Areas 16/19)**

| Description | Gross Acres | Units | Density |
|--|----------------------------|--------------|------------|
| Residential Uses | | | |
| R-13 (PA 19 Estates) | 14.9 | 13 | 0.9 |
| <i>Residential Subtotal ⁽¹⁾</i> | 14.9 | 13 | 0.9 |
| Non-Residential Uses | | | |
| Circulation in Preserve | 1.4 | | |
| Open Space | 1.7 | | |
| Conserved Open Space | 1.5 | | |
| Otay Ranch RMP Preserve | 97.0 | | |
| Circulation Arterial | 3.4 | | |
| <i>Non-Residential Uses Subtotal</i> | 105.0 | | |
| <i>Planning Area 19 Subtotal</i> | 119.8 | 13 | 0.1 |
| Proposed Project Amendment Total ⁽²⁾ | 913.6 | 1,266 | 1.4 |
| OTHER | | | |
| Description | Gross Acres ⁽¹⁾ | Target Units | Density |
| Other Applicant Owned NAP of TM | | | |
| PV1 exchanged to CDFW | 18.9 | | |
| PV3 exchanged to CDFW | 128.4 | | |
| R-15 Exchanged to CDFW | 49.9 | | |
| R-16 Exchanged to CDFW | 142.5 | | |
| R-14 Conservation Easement Area | 191.5 | | |
| R-15 Preserve | 10.5 | | |
| R-16 Preserve | 47.8 | | |
| <i>Subtotal</i> | 589.5 | | |
| Off-site Acres | 40.1 | | |
| Proposed Project Amendment Project Area | 1,543.1 | 1,266 | |

Notes: PA = Planning Area.

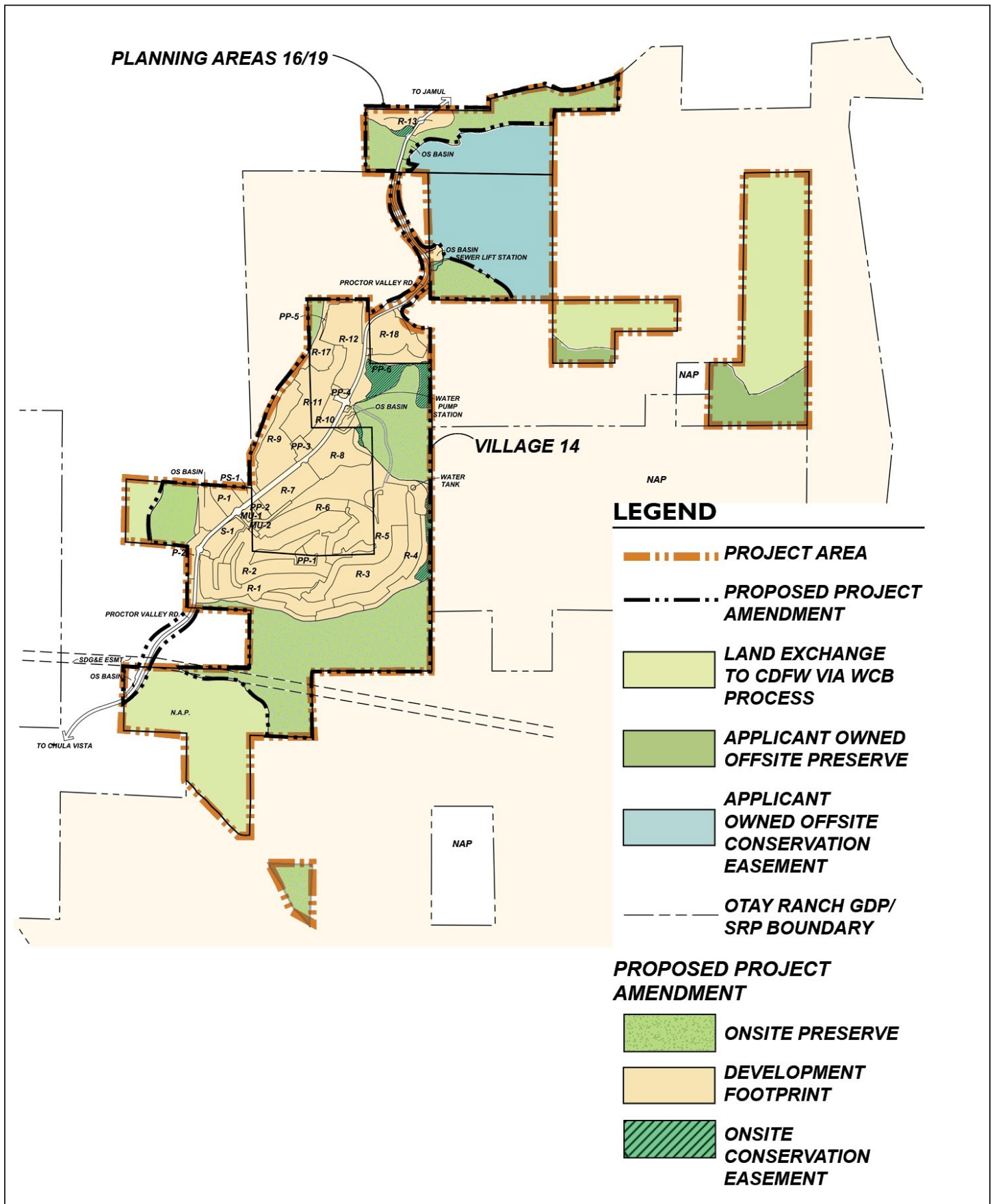
- ¹ Residential gross acres includes 2.1 acres of related internal slopes, fuel modification and/or preserve edge open space lots.
- ² Totals may not sum due to rounding

Proposed Project Amendment Relative to the Approved Project and the EIR Land Exchange Alternative.

The Final EIR evaluated both the Approved Project and the EIR Land Exchange Alternative at a project level of analysis. This Technical Memorandum examines whether the Final EIR, through its analysis of the Approved Project and the EIR Land Exchange Alternative, covered all anticipated impacts of the Proposed Project Amendment. Figure 5 depicts the limits of the development contemplated under the Approved Project, the EIR Land Exchange Alternative, and the Proposed Project Amendment. Table 4 provides a summary of the components for the Proposed Project Amendment, the Approved Project, and the EIR Land Exchange Alternative. Note that from a geographical perspective, each acre that comprises the Proposed Project Amendment's Development Footprint is located either within the Approved Project Development Footprint or within the EIR Land Exchange Alternative Development Footprint. In other words, no portion of the Proposed Project Amendment Development Footprint is outside the combined Approved Project and EIR Land Exchange Alternative Development Footprints.

Table 4. Proposed Project Amendment Comparison to Approved Project and EIR Land Exchange Alternative

| Description | Proposed Project Amendment | Approved Project | EIR Land Exchange Alternative |
|-------------------------------|----------------------------|------------------|-------------------------------|
| Development Footprint (Acres) | 579 | 809 | 658 |
| Project Area (Acres) | 1,543 | 1,369 | 2,388 |
| Off-sites (Acres) | 40 | 85 | 40 |
| Units | 1,266 | 1,119 | 1,530 |
| Proctor Valley Rd. | Same | Same | Same |

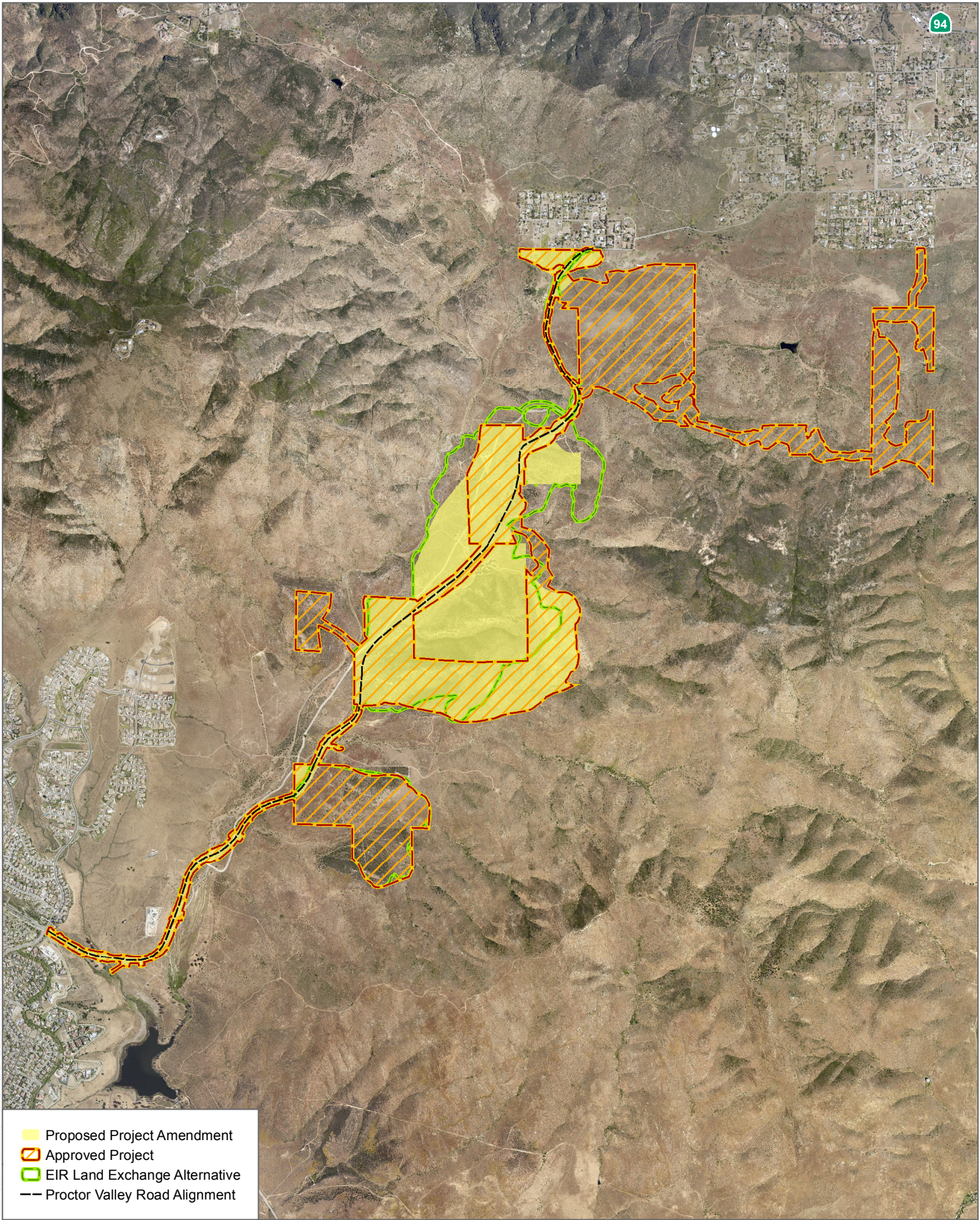


SOURCE: Hunsaker 2019

FIGURE 4

Project Area

Otay Ranch Village 14 and Planning Areas 16/19 Proposed Project Amendment



Section 3. Approved Otay Ranch General Development Plan/Otay Subregional Plan Project Findings

The 1993 Otay Ranch GDP/SRP Program EIR determined that impacts to paleontological resources as a result of development planned in the 1993 Otay Ranch GDP/SRP would be significant. As a result, the Otay Ranch Program EIR included mitigation measures to reduce the significant impacts and determined that implementation of mitigation measures would reduce impacts to below a level of significance.

The Approved Project Final EIR determined there were no previously recorded fossil localities within the boundaries of the Approved Project Development Footprint; however, the Approved Project Final EIR found that the Approved Project Area was partially underlain by the Oligocene age (approximately 29 million years old) Otay Formation, which has a “high paleontological resource sensitivity” to the upper member, and a “moderate paleontological resource sensitivity” to the middle and lower members of this formation and unnamed older alluvium of Pleistocene age (approximately 11,700 to 2.58 million years old). Further, the Approved Project Final EIR found that there were at least 18 recorded fossil localities known from the Otay Formation within a 1-mile radius of the southwestern-most part of the Approved Project Area, 11 of which represent the upper siltstone-sandstone-mudstone member of the Otay Formation, six of which represent the middle gritstone member, and data are not available for one locality (BFSA, 2015). Further, the Approved Project would grade more than 2,500 cubic yards, which the Final EIR determined required the implementation of a Paleontological Monitoring Program per County guidelines for projects within areas of high or moderate paleontological resource potential. Accordingly, excavation in areas underlain by the Otay Formation and unnamed older alluvium of Pleistocene age would result in potentially significant impacts to paleontological resources (**Impact PR-1**).

Section 4. Proposed Project Amendment Impacts to Paleontological Resources

Similar to the Approved Project, the Proposed Project Amendment Project Area is underlain by moderate to high sensitivity sedimentary deposits of Pleistocene age older alluvium and Oligocene age Otay Formation (Tan and Kennedy 2002; Todd et al. 2004) (see Attachment A, Paleontological Sensitivity Map). The Proposed Project Amendment is located in the same general location as the Approved Project and the Land Exchange Alternative and would result in impacts to approximately 579 acres, which is approximately 230 acres less than the Approved Project. Upon implementation of the mitigation measures for the Proposed Project Amendment (Paleontological Monitoring), impacts would be reduced to a less-than-significant level.

Section 5. Final EIR Mitigation Measures

The 1993 Otay Ranch Program EIR and Mitigation Monitoring Program identified mitigation measures to reduce the significant paleontological resources impacts of the Otay Ranch GDP/SRP. The Approved Project Final EIR analyzed the specific impacts of the Approved Project on paleontological resources, accounting for changes in conditions, both environmental and regulatory, that occurred since 1993 when the Otay Ranch Program EIR was certified (County of San Diego 1993). The Final EIR determined that the paleontological resources mitigation measures identified in the Otay Ranch Program EIR were either (i) not applicable; (ii) satisfied; or (iii) replaced with project-specific mitigation measures or regulatory compliance requirements. Based on the analysis contained in Section 2.10 of the Final EIR, the following mitigation measure was identified to reduce direct and cumulative impacts to paleontological resources:

M-PR-1 A Qualified Paleontologist shall supervise a Paleontological Monitoring Program. A Qualified Paleontologist is a person who has, to the satisfaction of the County of San Diego Director of Planning & Development Services:

- a Ph.D. or M.S. or equivalent in paleontology or closely related field (e.g., sedimentary or stratigraphic geology, evolutionary biology);
- demonstrated knowledge of Southern California paleontology and geology; and
- documented experience in professional paleontological procedures and techniques.

The Qualified Paleontologist shall conduct or supervise the following mitigation tasks:

- Monitoring of excavation operations to discover unearthed fossil remains, generally involving monitoring of ongoing excavation activities (e.g., sheet grading pads, cutting slopes and roadways, basement and foundation excavations, and trenching). A Paleontological Resources Monitor must have at least 1 year of experience in field identification and collection of fossil materials.
- Salvaging of unearthed fossil remains, typically involving simple excavation of the exposed specimens, but possibly also plaster-jacketing of individual large and/or fragile specimens, or more elaborate quarry excavation of richly fossiliferous deposits.
- Recording of stratigraphic, geologic, and geographic data to provide a context for the recovered fossil remains, including accurate plotting (mapping) on grading plans and standard topographic maps of all fossil localities, description of lithologies of fossil-bearing strata, measurement and description of the overall stratigraphic section (unless considered by the Project Paleontologist to be infeasible), and photographic documentation of the geologic setting.
- Laboratory preparation (cleaning and repair) of collected fossil remains to the point of identification (not exhibition), generally involving removal of enclosing sedimentary rock material, stabilization of fragile specimens (using glues and other hardeners), and repair of broken specimens.
- Curating prepared fossil remains, typically involving scientific identification and cataloguing of specimens, and entry of data into one or more accredited institutional (museum or university) collection (specimen/species lot and/or locality) databases. Curation is necessary so that the specimens are available for scientific research.

- Transferal, for archival storage, of cataloged fossil remains and copies of relevant field notes, maps, stratigraphic sections, and photographs to an accredited institution (museum or university) in California that maintains paleontological collections, preferably one of the following:
 - San Diego Natural History Museum
 - Los Angeles County Museum
 - San Bernardino Museum of Natural History
 - University of California Museum of Paleontology, Berkeley
 - Anza-Borrego Desert State Park (if the fossils were salvaged in the desert)
- Preparation of a final report summarizing the results of the field investigation, laboratory methods, stratigraphic information, types and importance of collected fossils, and any necessary graphics to document the stratigraphy and precise fossil collecting localities.

The Approved Project Final EIR determined that excavation in areas underlain by the Oligocene age Otay Formation and Pleistocene age older alluvium would result in potentially significant impacts to paleontological resources (**Impact PR-1**). Retention of a Project Paleontologist and Paleontological Resources Monitor during excavation in paleontologically sensitive areas (**M-PR-1**) would reduce potentially significant impacts to less than significant.

Section 6. Conclusion

Overall, impacts to paleontological resources would be reduced under the Proposed Project Amendment compared to the Approved Project. While the impacts to greater than 2,500 cubic yards of grading of Otay Formation and/or unnamed older alluvium identified in Section 4 are considered significant, they would not be new or significantly greater impacts than the Approved Project Final EIR anticipated. Further, the same mitigation measure (**M-PR-1**) requiring a qualified paleontologist to monitor grading would be implemented under the Proposed Project Amendment.

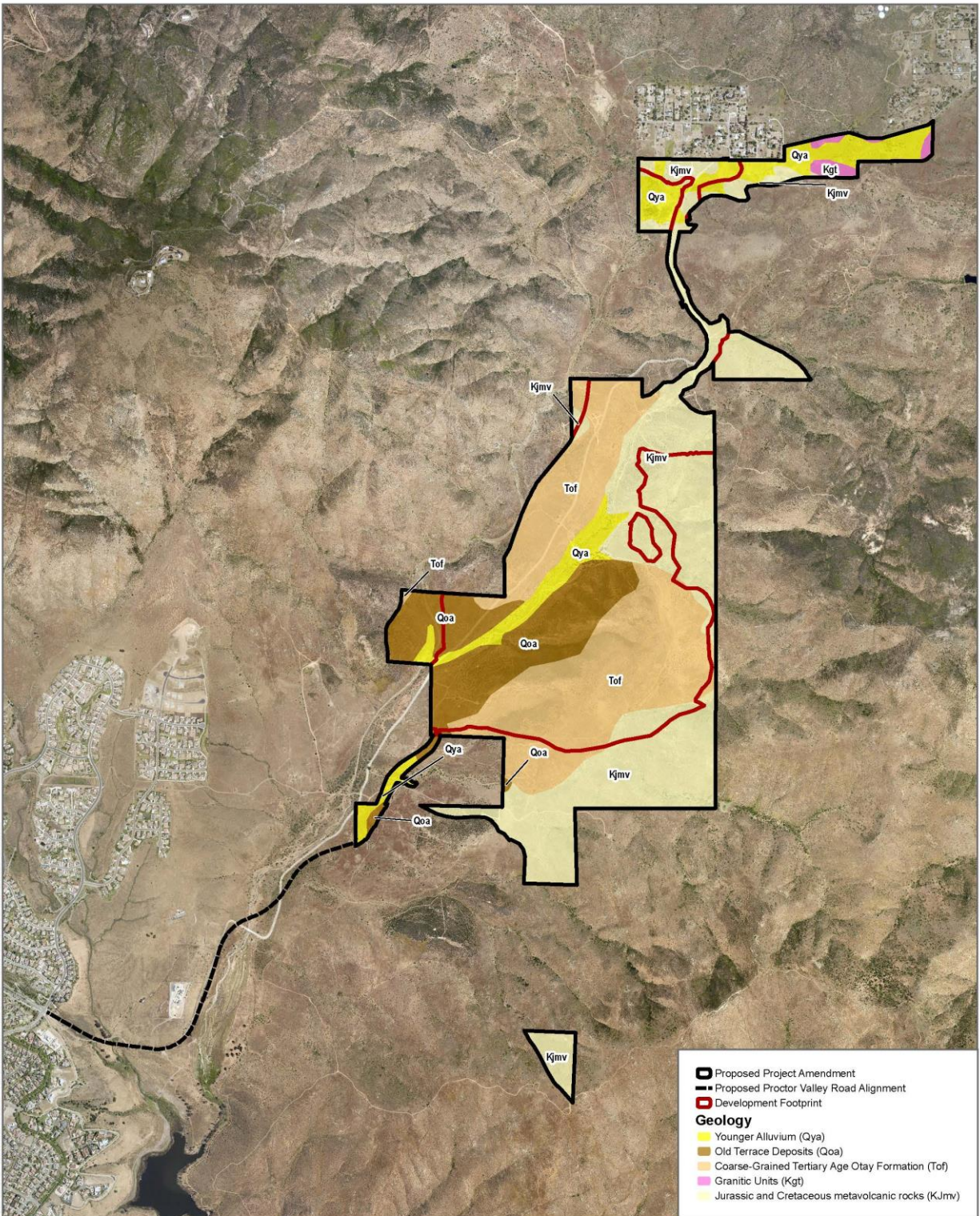
Section 7. References

- BFSA (Brian F. Smith and Associates Inc.). 2015. Paleontological Resource and Monitoring Assessment, Proctor Valley Project, Unincorporated San Diego County, California. Unpublished report submitted to the Jackson Pendo Development Company by Kennedy, G.L. February 2015.
- City of Chula Vista and County of San Diego. 1993. *City of Chula Vista General Development Plan/County of San Diego Otay Subregional Plan*, Volume 2. Adopted October 28, 1993; amended June 4, 1996. <http://www.sandiegocounty.gov/dplu/docs/OtayRanchGenDevPlanVol2.pdf>.
- County of San Diego. 1993. Otay Ranch Program Environmental Impact Report (PEIR). Dated July 1993.
- Tan, S.S, and M.P. Kennedy. 2002. Preliminary geologic map of the Otay Mesa 7.5' Quadrangle, San Diego County, California. California Geological Survey, scale 1:24,000.
- Todd, V.R., R.M. Alvarez, and Techni Graphic Systems Inc., 2004. Preliminary geologic map of the El Cajon 30' X 60' quadrangle, southern California: U.S. Geological Survey, Open-File Report OF-2004-1361, scale 1:100,000.



Attachment A

Paleontological Resources Sensitivity Map



SOURCE: SANGIS 2017; Hunsaker 2019; Tan and Kennedy 2002

DUDEK 0 1,150 2,300 Feet

ATTACHMENT A

Geology

Otay Ranch Village 14 and Planning Areas 16/19 Proposed Project Amendment