
Appendix C-1

Biological Technical Memorandum for the
Reduced Development Footprint Alternative -
Vernal Pool Minimization

Memorandum

HELIX Environmental Planning, Inc.
7578 El Cajon Boulevard
La Mesa, CA 91942
619.462.1515 tel
619.462.0552 fax
www.helixepi.com



Date: May 13, 2024

To: Greg Waite, The Las Posas Owner LPV, LLC

cc: Gill Miltenberger, The Las Posas Owner LPV, LLC
Vanessa Schiedel, DUDEK
Matt Simmons, CCI
Jason Gremminger, CCI
Kimberly Foy, Gatzke Dillon & Ballance LLP

From: Thomas Liddicoat, HELIX Environmental Planning, Inc.

Subject: Comparison of the Pacific Specific Plan Development Project Draft EIR Proposed Project and the Reduced Development Footprint Alternative – Vernal Pool Impact Minimization

HELIX Project: 00357.00040.001

Message:

This memorandum was prepared to address U.S. Fish and Wildlife Service (USFWS) comment on the Draft Environmental Impact Report (EIR; Dudek 2023) and documents a comparison of impacts to biological resources between the proposed project presented in the Draft EIR and an alternative called the RDFA – Vernal Pool Impact Minimization (VPIM) created to address the USFWS comment Letter A-2 dated April 12, 2023 (USFWS 2023). The USFWS commented that the Final EIR include an alternative that limits impacts to 25% of the site and restricts development to the southernmost third of the site. Thus, this memorandum provides pertinent information on such an alternative, referred to herein as the RDFA-VPIM. The biological resources data from the Draft EIR, the engineering refinements associated with roadway dedications and improvements, and additional biological surveys conducted by HELIX in response to draft EIR comments were used for the comparison discussed herein. Figure 1 attached to this memorandum depicts the disturbance area footprints for the proposed project in the Draft EIR and the RDFA-VPIM. Impacts within the 33.22-acre site as well as off-site impacts (i.e., outside of the project site boundary) associated with roadway dedications and improvements are presented in Figure 1. As seen in Figure 1, the footprint of off-site impacts is nearly the same for both the proposed project in the Draft EIR and the RDFA-VPIM.

The proposed project presented in Section 2 the Draft EIR would provide 449 units occupying a development footprint area of approximately 15.09 acres of the 33.22-acre site. The proposed project in the Draft EIR also includes 0.17 acres of roadway dedications on-site, for an overall disturbance impact

of 15.26 acres (approximately 46%) of the 33.22-acre site. Based on engineering refinements and associated with the off-site roadway dedications and improvements, the proposed project presented in the Draft EIR would impact 15.33 acres (approximately 46%) of the 33.22-acre site and 1.53 acres off-site, for a total disturbance footprint of 16.86 acres. In comparison, the RDFA-VPIM proposes 228 units and would result in impacts to 10.11 acres (approximately 30%) of the 33.22-acre site as a result of the project development footprint and on-site roadway dedications. Implementation of the RDFA-VPIM would also result in 1.61 acres of impacts off-site, for an overall disturbance footprint totaling 11.72 acres. Ultimately, the RDFA-VPIM would result in approximately 16% less (5.22 acres less) disturbance impact area to the 33.22-acre site, while providing 221 fewer residential housing units. Table 1 below presents a comparison of footprint impacts by the proposed project in the Draft EIR and the RDFA-VPIM.

Table 1. Proposed Project Footprint Impacts

Project Alternative	On-Site Disturbance Footprint ¹	Off-Site Disturbance Footprint ²	Total
Draft EIR Proposed Project (449 units)	15.33 acres	1.53 acres	16.86 acres
Reduced Development Footprint Alternative – Vernal Pool Impact Minimization (228 units)	10.11 acres	1.61 acres	11.72 acres

¹ Reflects residential development and on-site roadway dedications.

² Consists of off-site roadway dedications and roadway improvements.

When comparing impacts to biological resources, the proposed project in the Draft EIR and the RDFA-VPIM would both impact native vegetation, vernal pools, and listed special-status plant species. However, the proposed project in the Draft EIR would also impact a listed special-status animal (i.e., the federally listed endangered San Diego fairy shrimp [*Branchinecta sandiegonensis*]) whereas the RDFA-VPIM would have no impacts to listed special-status animals. Impacts to biological resources are discussed in further detail below.

The vegetation types impacted with implementation of the proposed project in the Draft EIR versus the RDFA-VPIM are nearly the same; both would result in impacts to grassland, Diegan coastal sage scrub, and vernal pool vegetation. Although both projects would impact vernal pools, the proposed project in the Draft EIR would impact vernal pools and other features known to be occupied by San Diego fairy shrimp. The RDFA-VPIM would avoid all features occupied by San Diego fairy shrimp. Table 2 below presents a comparison of impacts to vernal pools and San Diego fairy shrimp by the proposed project in the Draft EIR and the RDFA-VPIM, of which all are within the 33.22-acre site. No impacts to vernal pools or other features occupied by San Diego fairy shrimp would result with implementation of the off-site roadway dedications and improvements.

Table 2. Proposed Project Impacts to Vernal Pools and San Diego Fairy Shrimp

Project Alternative	Vernal Pools	San Diego Fairy Shrimp
Draft EIR Proposed Project (449 units)	0.15-acre	8 features
Reduced Development Footprint Alternative – Vernal Pool Impact Minimization (228 units)	0.03-acre	0 features

In regard to listed special-status plants, the proposed project in the Draft EIR would impact two listed plant species whereas the RDFA-VPIM would impact only one of these listed plant species. Specifically, implementation of the proposed project in the Draft EIR would impact the federally listed threatened and state listed endangered thread-leaved brodiaea (*Brodiaea filifolia*) and the federally listed endangered and state listed endangered San Diego button celery (*Eryngium aristulatum* var. *parishii*); whereas implementation of the RDFA-VPIM would impact thread-leaved brodiaea. There would be no impacts to San Diego button celery as a result of the RDFA-VPIM. Table 3 below presents a comparison of impacts to listed plant species by the proposed project in the Draft EIR and the RDFA-VPIM.

Table 3. Proposed Project Impacts to Listed Plant Species¹

Project Alternative	Thread-leaved Brodiaea	San Diego Button Celery
Draft EIR Proposed Project (449 units)	33,879 plants	103 plants
Reduced Development Footprint Alternative – Vernal Pool Impact Minimization (228 units)	106,037 plants	0 plants

¹ Impacts reflect on-site and off-site impacts.

Based on the impacts presented in Table 3 above, the proposed project in the Draft EIR would result in impacts to approximately 19% of the population of thread-leaved brodiaea on-site, whereas the RDFA-VPIM would impact an even larger amount. Implementation of the RDFA-VPIM would result in approximately 72,158 additional thread-leaved brodiaea plants being impacted (41% more plants approximately) within the development impact area, which in total reflects impacts to approximately 60% of the thread-leaved brodiaea population at the site. The vast majority of these impacts would be within the 33.22-acre site, although there are some thread-leaved brodiaea located off-site that would be impacted by the off-site roadway dedications and improvements.

Another focal difference between the proposed project in the Draft EIR and the RDFA-VPIM is the consolidation of development. The RDFA-VPIM would cluster development along and within the southern portion of the site. This consolidation of development by the RDFA-VPIM reduces the development interfaces adjacent to proposed biological resources preservation areas on-site. Such reduction of development interface theoretically would result in a reduction of potential indirect impacts on those areas produced by edge effects.

In conclusion, the proposed project in the Draft EIR and the RDFA-VPIM would both result in significant impacts to sensitive biological resources (i.e., vegetation, vernal pools, and thread-leaved brodiaea) and both would be required to incorporate mitigation measures (MM) MM-BIO-1a through MM-BIO-8b in

the Draft EIR to reduce impacts to less than significant. These MMs have been revised in response to comments on the Draft EIR, which are presented in the Final EIR Errata for Biological Resources. The MMs in the Final EIR would adequately reduce project impacts to less than significant.

Overall, the primary differences in impacts to sensitive biological resources between the proposed project in the Draft EIR and the RDFA-VIPM are that:

- 1) The proposed project in the Draft EIR would result in impacts to two listed rare species (i.e., San Diego fairy shrimp and San Diego button celery) and impacts to these two species would not occur with implementation of the RDFA-VIPM project footprint.
- 2) The RDFA-VIPM would result in substantially more impacts to thread-leaved brodiaea; approximately 72,158 more thread-leaved brodiaea plants would be impacted by implementation the RDFA-VIPM.
- 3) The RDFA-VIPM would provide for a larger (approximately 5.22 acres more) biological preservation area of the site. Approximately 23.11 acres of biological preservation would be provided with implementation of the RDFA-VIPM project whereas approximately 17.89 acres of biological preservation would be provided with implementation of the proposed project in the Draft EIR. The proposed conceptual mitigation on-site is presented on Figure 2 attached to this letter.

Attachments:






Figure 1 – Footprint Comparison of Draft EIR Proposed Project and RDFA-VIPM Project

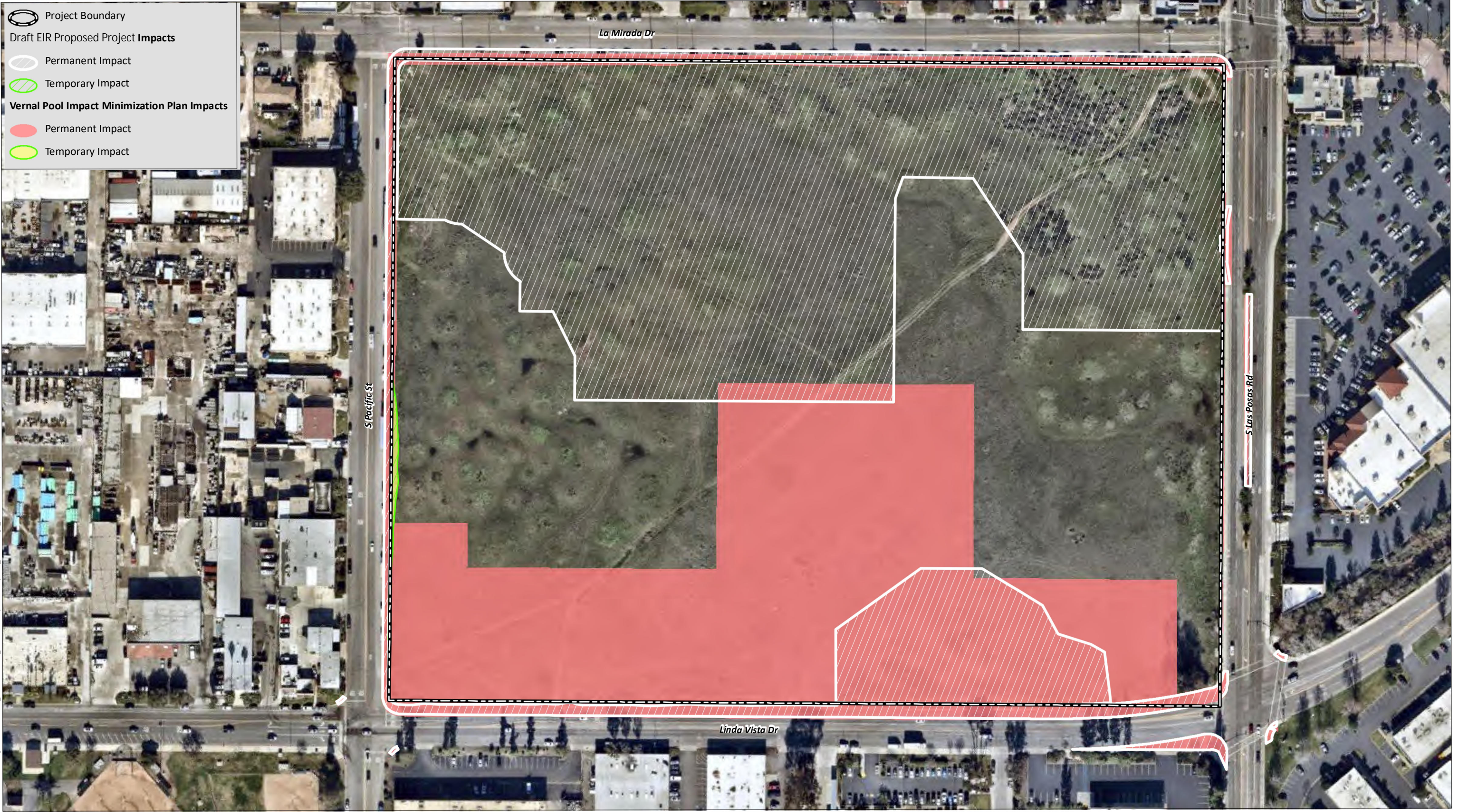
Figure 2 – Proposed Conceptual Mitigation

References Cited:

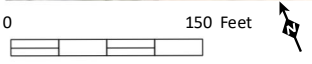
Dudek. 2023. Draft EIR for City of San Marcos Pacific Specific Plan Project. March.

U.S. Fish and Wildlife Service (USFWS). 2023. Comments on the Environmental Impact Report for the Pacific Specific Plan, City of San Marcos, San Diego County, California. April 13.

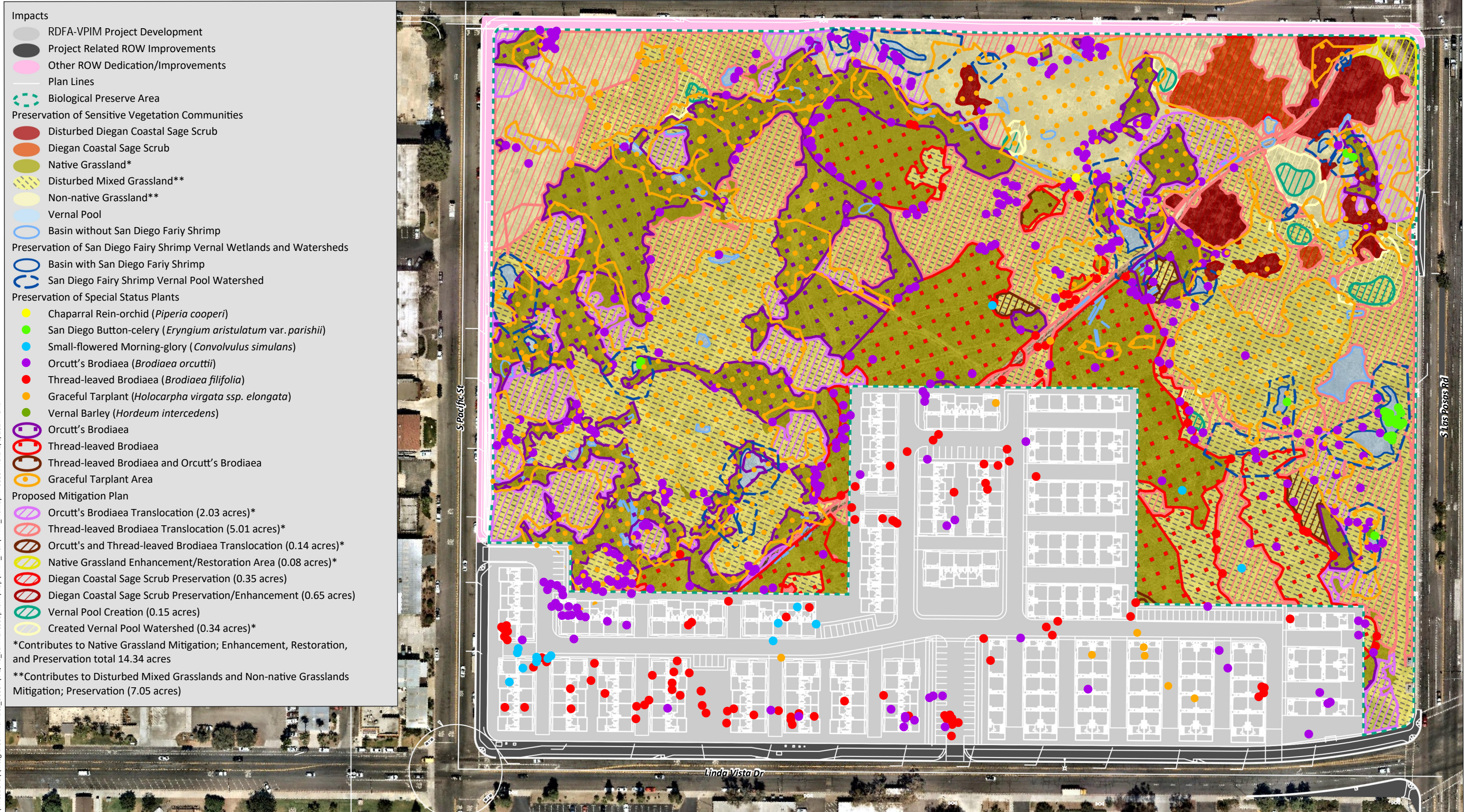
-  Project Boundary
- Draft EIR Proposed Project Impacts**
-  Permanent Impact
-  Temporary Impact
- Vernal Pool Impact Minimization Plan Impacts**
-  Permanent Impact
-  Temporary Impact



I:\PROJECTS\IntegralCommunities_00357\IPQ-40_SanMarcos\pham\Map\EIR_Errata\Fig1_BTRvsVIPM Impacts.mxd 00357_40.1_5/13/2024 - SAB



Source: Aerial (NearMap, 2023)



I:\PROJECTS\IntegralCommunities_00357\1PQ_40_SanMarcosUplham\Map\VPIM_Plan.aprx 00357_40.1 2/6/2024 - SAB

Source: Aerial (NearMap, 2022)