2.1 INTRODUCTION

This chapter describes text changes made to the Draft EIR either in response to a comment letter or initiated by City staff or in response to a modification to the Project.

Under CEQA, an EIR can require recirculation if significant new information is added after public review and prior to certification. According to CEQA Guidelines section 15088.5(a), new information is not considered significant "unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement." More specifically, the Guidelines define significant new information as including:

- A new significant environmental impact resulting from the project or from a new mitigation measure;
- A substantial increase in the severity of an environmental impact that would not be reduced to insignificance by adopted mitigation measures;
- A feasible project alternative or mitigation measure considerably different from those analyzed in the Draft EIR that would clearly lessen the environmental impacts of the project and which the project proponents decline to adopt; and
- A Draft EIR that is so fundamentally and basically inadequate and conclusory that meaningful public review and comment were precluded.

The text changes to the Draft EIR text described below update, refine, amplify, and correct the information and analyses presented in the Draft EIR. No new significant impacts are identified, and no information is provided that would reflect a substantial increase in severity of a significant impact that would not be mitigated by measures identified in the Draft EIR. In addition, no new or considerably different project alternatives or mitigation measures have been identified. Finally, there are no changes or set of changes that would reflect fundamental inadequacies in the Draft EIR. Recirculation of any part of the EIR therefore is not required.

2.2 CHANGES TO THE PROPOSED PROJECT

Since publication of the Draft EIR, feedback was received regarding the layout of the proposed land uses on the Project site. During the Draft EIR process, there was general concern regarding existing noise sources such as the Campbell Soup Supply Company and agricultural operations to the east of the Project site and how those existing noise sources could impact residents of the proposed Project. Further, there was concern that new residents of the Project site may object to or file complaints about the existing noise sources, potentially resulting in pressure to change the operational nature of those industrial and agricultural noise sources.

Although concerns about the potential for existing conditions to impact future Project residents do not present issues that require addressing under CEQA (as explained in the Draft EIR, see, e.g., pp. 3.3-33, 3.12-17), based on feedback from City decision makers, City staff, and various stakeholders, the Project applicant voluntarily undertook the task of revising the proposed site plan to respond to these concerns.

The fundamental Project components remain unchanged from the previous land plan evaluated in the Draft EIR, including:

- Project site boundaries;
- Project site acreage remains at 259.61 acres;
- Proposed number of dwelling units remains at 1,041 units;
- Types of land uses, including low-, medium-, and high-density residential, Dixon Opportunity Center, commercial use, parks and open space, groundwater well, and detention pond;
- Major backbone infrastructure, including the construction of Professional Drive and Commercial Drive, and the widening of the west side of Pedrick Road;
- Two Project site entry points along Pedrick Road, two entry points along Professional Drive, and one entry point along Professional Drive;
- Onsite stormwater retention basin, with the ability to eventually convert to a detention basin;
- Onsite stormwater retention basin volume remains nearly identical; and
- Sizes and locations of the commercial use, groundwater well site, and freeway buffer.

There are several other Project components that have been changed for the revised site plan, including:

- Acreages for several lots;
- Residential densities;
- Number of dwelling units per lot;
- Increased park acreage;
- Increased acreage and locations for Dixon Opportunity Center;
- Location of the high density residential uses;
- Location and size of the retention basin; and
- Phasing plan.

Figure 2-6 at the end of this chapter shows the revised land use plan, and Table 2-1 identifies the land use differences between the previous land plan and the revised land plan.

RETENTION BASIN

One of the changes reflected in the revised site plan is the relocation of the retention basin from the southeast corner of the Project site, south of Commercial Drive, to the eastern edge of the project site along Pedrick Road and north of Commercial Drive, at the low point in Pedrick Road at the existing culvert. The single-family residential area has been adjusted to occupy the original location of the retention basin. This single change resulted in some of the other changes noted above.

The following physical attributes have been changed to the retention basin due to the relocation:

- Deeper basin – approximately 30 feet deep instead of 20 feet deep;
- Smaller footprint – 23.03 acres instead of 25.14 acres;
- Reduced size of storm drain mains by adding multiple discharge locations into the relocated basin.

TABLE 2-1: PROPOSED LAND USE SUMMARY - REVISED

PARCEL	LAND USE	ZONING	PREVIOUS LAND PLAN			REVISED LAND PLAN			CAMU LAND USE
			GROSS AREA (ACRES)	DWELLING UNITS		GROSS AREA (ACRES)	DWELLING UNITS		
				DENSITY (DU/AC)	DUs (UNITS)		DENSITY (DU/AC)	DUs (UNITS)	
RESIDENTIAL									
LOT 1	CAMU	CAMX-NESP-PD	27.90	4.6	128	25.83	4.2	108	LDR
LOT 2a	CAMU	CAMX-NESP-PD	18.05	5.3	95	18.37	4.8	89	LDR
LOT 2b	CAMU	CAMX-NESP-PD				7.12	3.8	27	LDR
LOT 3	CAMU	CAMX-NESP-PD	11.23	8.7	98	11.62	9.1	106	MDR
LOT 4	CAMU	CAMX-NESP-PD	6.46	9.3	60	6.15	9.8	60	MDR
LOT 5	CAMU	CAMX-NESP-PD	15.80	7.6	120	14.77	8.1	119	MDR
LOT 6	CAMU	CAMX-NESP-PD	18.80	6.9	130	19.93	6.8	136	LDR
LOT 7	CAMU	CAMX-NESP-PD	18.89	5.1	96	16.47	5.2	85	LDR
LOT 8	CAMU	CAMX-NESP-PD	15.60	5.7	89	16.68	5.2	86	LDR
LOT 9	CAMU	CAMX-NESP-PD	11.54	19.5	225	10.82	20.8	225	HDR
Residential Total:			**144.27**	**7.2**	**1,041**	**147.76**	**7.0**	**1,041**	
COMMERCIAL AND EMPLOYMENT USES									
Service Commercial									
LOT 11	CAMU	CAMX-NESP-PD	2.49			2.48			CC
Sub-Total:			**2.49**			**2.48**			
Light Industrial (Dixon Opportunity Center)									
LOT 12	CAMU	CAMX-NESP-PD	47.87			37.23			T/BP-LI
LOT 22	CAMU	CAMX-NESP-PD				10.77			T/BP-LI
Sub-Total:			**47.87**			**48.00**			
Commercial and Employment Total:			**50.36**			**50.48**			

PARCEL	LAND USE	ZONING	PREVIOUS LAND PLAN			REVISED LAND PLAN			CAMU LAND USE
			GROSS AREA (ACRES)	DWELLING UNITS		GROSS AREA (ACRES)	DWELLING UNITS		
				DENSITY (DU/AC)	DUs (UNITS)		DENSITY (DU/AC)	DUs (UNITS)	
PARKS, OPEN SPACE & PUBLIC USES									
Parks and Open Space									
LOT 14	CAMU	CAMX-NESP-PD	2.36			2.18			P/R
LOT 15	CAMU	CAMX-NESP-PD	1.64			1.94			P/R (Paseo)
LOT 16	CAMU	CAMX-NESP-PD	1.58			1.88			P/R (Paseo)
LOT 17	CAMU	CAMX-NESP-PD	1.42			1.43			P/R (Paseo)
LOT 18	CAMU	CAMX-NESP-PD	1.42			1.68			P/R (Paseo)
LOT 19	CAMU	CAMX-NESP-PD	5.00			5.23			P/R
LOT 21	CAMU	CAMX-NESP-PD				1.03			P/R
Parks and Open Space Total:			**13.42**			**15.37**			
Public									
LOT 10 (Retention Basin)	CAMU	CAMX-NESP-PD	25.14			23.03			P/QP
LOT 13 (Well Site)	CAMU	CAMX-NESP-PD	1.58			1.58			P/QP
LOT 20 (Freeway Buffer)	CAMU	CAMX-NESP-PD	1.18			1.18			P/QP
Public / Quasi-Public Total:			**27.90**			**25.79**			
ROADS / R.O.W.		CAMX-NESP-PD	**23.66**			**20.21**			
TOTAL									
The Campus Total:			**259.61**		**1,041**	**259.61**		**1,041**	

NOTE: CELLS THAT ARE COLORED LIGHT BLUE ARE VALUES THAT CHANGED BETWEEN THE PREVIOUS LAND PLAN AND THE REVISED LAND PLAN.

The relocated retention basin will continue to retain the Project flows on-site without an off-site discharge, while the existing off-site flows will continue to be routed around and through the Project site in a combination bypass ditch and pipe system. The proposed retention basin may be converted to a City detention basin in the future once the identification of the final city-wide regional storm drainage and conveyance system solution for the NEQSP area is identified. This proposed basin area may be utilized for the NEQSP drainage facility with an outfall to the existing culvert at Pedrick Road which is tributary to the Tremont 3 drainage facility.

The basin takes on a rectangular shape, providing a 23.03-acre buffer between Pedrick Road and the back of single-family homes on Lots 2a and 2b. The retention basin also serves to provide distance between the new residential uses on the Project site and the existing Campbell Soup Supply Company processing facility and agricultural uses east of the Project site, across Pedrick Road. This buffer will reduce noise levels to the new residential units from existing operations east of the units.

The retention basin would also provide open space and landscaping features along Pedrick Road for travelers to view. The distance between Pedrick Road and the back of the single-family homes backing to Pedrick Road would be approximately 630 feet. The basin would be lightly landscaped, with trees lining Pedrick Road and Commercial Drive. The basin would not be accessible to the public as it would be fenced for safety purposes, so it would visually serve as open space.

Due to the new location of the retention basin and its proximity to more housing units, the basin would serve as a new community amenity by including a walking path around the perimeter of the basin. The pedestrian path would complement the planned park, paseo, and open space uses planned throughout the Project site.

HOUSING RELOCATION

As a result of the retention basin relocation, the single-family residential uses previously planned for that location would move to the southeastern corner of the Project site. This area, Lot 1, would be accessed from Commercial Drive. Houses that would back to Pedrick Road would be constructed in such a way as to provide sufficient setback to accommodate the potential future railroad crossing at Pedrick Road. The layout of the proposed residential units would taper away from Pedrick Road to accommodate the side slope associated with any future overpass at Pedrick Road, once approved and constructed at the extreme southeastern corner of the project site. The intersection of Commercial Drive and Pedrick Road is located such that it allows maximum flexibility to address the future Pedrick Road over-crossing of the railroad.

In response to concerns that existing, adjacent noise sources could affect future Project residents, the high density residential uses were moved north and west between the proposed water well site and the park area within the DOC. The clubhouse and rental office portion of the high residential project would now be adjacent to Professional Drive. This new location would place residential uses farther away from existing noise sources such as the Campbell Soup Supply Company and agricultural operations to the east of the Project site.

PARKS AND OPEN SPACE

Relocating some of the single-family and high density housing units and the proposed retention basin resulted in acreage adjustments to several lots on the Project site, as shown in Table 2-1. This

alteration of uses on the site and revisions to the acreages across the site resulted in an increase of parks and open space acreage from 13.42 acres to 15.37 acres.

PROJECT PHASING

The proposed Project would still be constructed in phases to allow for its orderly development, although the order of development has been modified. Phase 1 would consist of developing approximately 405 residential units, the retention basin, and backbone infrastructure, similar to the previous land plan, although the locations of those uses are different. Buildout is still anticipated to occur over approximately eight years.

Phase 1 Improvements:

- Construct sewer from Vaughn Road to the Project site along Professional Drive.
- Construction drainage retention basin.
- Construct an existing drainage by-pass drainage swale system from the easterly project limits to the terminus point of the phase 1 by-pass ditch at the existing Pedrick Road culvert.
- Construction of a 1,500 gpm municipal well.
- Extend 12" water line from well site to the existing 12" water line in Vaughn Road.
- Construct a second 12" water line connection to the existing city system. Several alternative alignments for the 2nd water connection are allowed.
- Construct east half of Professional Drive adjacent to the phase 1 Project area to the south line of the Dixon Opportunity Center.
- Construct the west half of Professional Drive from Commercial Drive to Vaughn Road.
- Construct Pedrick Road frontage improvements and roadway widening from Professional Drive to the south side of Phase 1.
- Construct Campus Parkway to the south line of Phase 1.
- Construct Entrance 'A' roadway from Campus Parkway to Pedrick Road.
- Construct E. Dorset Drive from Professional Drive to Campus Parkway.
- Construction of streetlights, joint trench utilities, water, sewer and drainage facilities and appurtenances with the Phase 1 roadways.
- Construction of residential villages for Lots 2, 4, 5, 6.
- Construction of Dixon Opportunity Center uses on Lot 22.
- Construction of park improvements for Lots 15, 16, ,17, and 21.

Phase 1A Improvements:

- Construct Pedrick Road frontage improvements and roadway widening from Entrance 'A' road to Commercial Drive.
- Construct Commercial Drive from Professional Drive to Pedrick Road.
- Construction of streetlights and drainage facilities within Pedrick Road adjacent to the Project phase.
- Construction of residential villages for Lots 1, 3, 7, 8, and 9.
- Construction of park improvement for Lots 16 and 19.

Phase 2 Improvements:

- Construct the east and south half of Professional drive from the terminus point of Phase 1 to Pedrick Road.
- Construction of streetlights, joint trench utilities, water, sewer and drainage facilities and appurtenances within Professional Drive.
- Construction of streetlights and drainage facilities within Pedrick Road adjacent to the project phase.
- Construction of the remaining undeveloped Dixon Opportunity Center, high density residential and commercial Lots 11 and 12.
- Construction of park improvement for Lot 14.

ENVIRONMENTAL EFFECTS ASSOCIATED WITH PROJECT CHANGES

Although the revised land plan would not alter the location of the site, the types of uses, the number of units, or backbone infrastructure, the revised land plan could result in effects that differ from those identified for the previous land plan. A discussion of those effects is below.

Aesthetics and Visual Resources

The intensity of development of the full Project site would remain identical to that of the previous land plan. Building heights and materials would remain the same as would lighting plans. The revised location of the retention basin to the eastern side of the Project site would provide additional open space and landscaping features along Pedrick Road for travelers to view. Aesthetic and visual resources impacts of the revised land plan would not change from the impacts of the previous land plan. Mitigation Measure 3.1-3 would still be required for the revised land plan.

Agricultural Resources

The revised land plan would develop the same acreage of agricultural land as the previous land plan. No change in the Project boundaries would occur, and the impacts to agricultural resources would be the same as the previous land use plan. Mitigation Measures 3.2-1 and 3.2-3 would still be required for the revised land plan.

Air Quality

The revised land plan would develop the same acreage of land as the previous land plan. No change in the Project boundaries would occur, and the same amount of soil would be disturbed during construction activities. Therefore, air quality impacts resulting from Project construction would be the same under the revised land plan as under the previous land plan. Mitigation Measures 3.3-1(b), 3.3-2, 3.3-4, 3.3-6, and 3.3-8 to lower construction-related air emissions would still be required for the revised land plan.

The number of residential units would remain the same under the revised land plan, although the number and square footage of buildings in the Dixon Opportunity Center may slightly increase. The operation of those uses would remain the same under the revised land plan, and there would be no change to the stationary operational air emissions under the revised land plan.

Moving some of the low density residential units to the previous site of the retention basin, and moving the high density residential uses north and west within the Project site, would have nominal effect on the VMT characteristics of the site, and the revised land plan would not affect longer trips,

such as commute trips taken to work sites outside Dixon. The VMT characteristics would not change by locating some of the low density residential units south of Commercial Drive or by relocating the high density residential units. Because changes to VMT under the revised land plan would be minimal, mobile air emissions would be nearly identical between the previous land plan and the revised land plan. Mitigation Measures 3.3-1(a)-(e) would still be required for the revised land plan.

Biological Resources

The revised land plan would develop the same acreage of land as the previous land plan. No change in the Project boundaries would occur, resulting in disturbance to the entire Project site, and the impacts to biological resources would be the same as the previous land use plan. Mitigation Measures 3.4-4(a)-(e), 3.4-7, 3.4-11, and 3.4-12 would still be required for the revised land plan.

Cultural and Tribal Cultural Resources

The revised land plan would develop the same acreage of land as the previous land plan. No change in the Project boundaries would occur. The potential to inadvertently discover historic-era cultural resources, archaeological resources, human remains, or tribal cultural resources would be the same as under the previous land plan as the same amount of soil would be disturbed, within the same footprint, during construction. Mitigation Measures 3.5-1(a), 3.5-1(b), 3.5-2, 3.5-3, 3.5-4(a) and 3.5-4(b) would still be required for the revised land plan.

Energy

The revised land plan would develop the same number of residential units as the previous land plan, resulting in the same level of population increase in the city. The size of the Dixon Opportunity Center would slightly increase, which would not result in any meaningful increase in employment, if any. The demand for electricity and natural gas would remain nearly identical to the previous land plan. Changes to VMT, resulting in changes to mobile energy consumption, would be negligible. Therefore, impacts to energy would be the same as the previous land use plan.

Geology and Soils

The revised land plan would develop the same acreage of land as the previous land plan. No change in the Project boundaries would occur, resulting in disturbance to the entire Project site, and the impacts to geology and soils would be the same as the previous land use plan. Mitigation Measures 3.7-5 and 3.7-10 would still be required for the revised land plan.

Greenhouse Gas Emissions

Moving some of the residential units to the previous site of the retention pond, and moving the high density residential uses to the north and west within the Project site, would have a nominal effect on the VMT characteristics of the site, and the revised land plan would not affect longer trips, such as commute trips taken to work sites outside Dixon. The VMT characteristics would not change by locating some of the low density residential units south of Commercial Drive, and moving the high density residential uses. Because changes to VMT under the revised land plan would be minimal, mobile greenhouse gas emissions would be nearly identical between the previous land plan and the revised land plan.

Hazards and Hazardous Materials

The revised land plan would develop the same acreage of land as the previous land plan. No change in the Project boundaries would occur, resulting in disturbance to the entire Project site. The types

of uses anticipated to occur on the Project site are the same as the previous land plan, and the impacts to hazards and hazardous materials would be the same as the previous land use plan.

Hydrology and Water Quality

Although the revised land plan would develop the same acreage of land as the previous land plan, slightly less acreage would become impervious because the retention basin would be slightly enlarged under the revised land plan. However, the difference in impervious surface would be minimal, and therefore not measurably affect hydrology across the Project site.

The relocation of the retention basin under the revised land plan improves hydrologic drainage from the Project site because it would sit at a low point on the Project site, allowing more runoff to enter the retention basin naturally. Water quality would remain unchanged as the same amount of land would be disturbed, and best management practices would remain in effect. Therefore, impacts to hydrology and water quality would be slightly improved under the revised land plan.

Land Use

The revised land plan would develop residential units at the same number and type as planned under the previous land plan. The acreage of retail would remain the same, although the size of the Dixon Opportunity Center would slightly increase. There would be more parkland and open space under the revised land plan, including more open space along a portion of Pedrick Road that runs parallel to the primary operations of the Campbell Soup Supply Company, thereby increasing the buffer between the Project and Campbell's operations. All of these uses would be compatible with the land use designations and zoning for the site, and there would be no change in land use compatibility. Because the Project boundaries would not change, it would still be within the area where the Solano Multispecies Habitat Conservation Plan (Solano HCP) would apply, should it be approved in the future. Therefore, Mitigation Measure 3.11-3 would still be required for the revised land plan.

Noise

As ruled in *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, CEQA does not require a lead agency "to analyze the impact of existing environmental conditions on a project's future users or residents. But when a proposed project risks exacerbating those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future residents or users." The Campbell Soup Supply Company processing facility is a significant noise generator in the area, and the facility can operate 24 hours per day during the limited four-month peak tomato harvesting season June through September. Although this is not a CEQA issue since the Project would not exacerbate noise levels at the facility, the noise generated by the Campbell Soup Supply Company processing facility could affect proposed sensitive receptors on the Project site. Moving some of the single-family residential units to the previous site of the retention pond and the high density residential units north and west would move proposed onsite residential uses farther away from the offsite Campbell Soup Supply Company processing facility on the east side of Pedrick Road. Under the revised land plan, the distance between Pedrick Road and the back of the single-family homes backing to Pedrick Road would be approximately 630 feet as the retention basin would be located between those homes and Pedrick Road. Even more distance would occur between Campbell's primary operations and the high density residential units. Under the revised land plan, potential nuisance noise from the existing

facility and from truck traffic on Pedrick Road would be less impactful on residential units on the Project site due to the distance between the source and the receptor.

Noise generated by the Project would be no different under the revised land plan than under the previous land plan. The number of residential units would remain the same, as would the types and locations of retail and employment center uses. Therefore, the Project would not generate any new noise under the revised land plan.

Population, Housing, and Employment

The revised land plan would develop the same number of residential units as the previous land plan, resulting in the same level of population increase in the city. The size of the Dixon Opportunity Center would increase slightly, which would not result in any meaningful increase in employment, if any. No change in the Project boundaries would occur, and no housing would be removed. Therefore, the impacts to population, housing, and employment would be the same as the previous land use plan.

Public Services and Recreation

The revised land plan would develop the same number of residential units as the previous land plan, resulting in the same level of population increase in the city. The size of the Dixon Opportunity Center would increase slightly, which would not result in any meaningful increase in employment, if any. Therefore, there would be no change to demand for police services, fire protection, emergency services, parks or recreation facilities, libraries, or any other service provider. The impacts on public services and recreation would be the same as the previous land plan.

Transportation

Moving some of the residential units to the previous site of the retention pond, and moving the high density residential uses to north and west within the Project site, would have a nominal effect on the VMT characteristics of the site. The daily VMT per unit is heavily influenced by the longer trips, such as commute trips taken to work sites outside Dixon. That would not change by locating some of the low density residential units south of Commercial Drive. If anything, moving some residential units further south might encourage more walking and bicycling to local destinations situated south of the Project site. The relocation of the high density residential uses north and west within the Project site would result in imperceptible changes in VMT, if at all.

While overall trip generation would not change, relocating these residential uses would change the vehicle loading onto the collector and arterial network, resulting in more trips on Commercial Drive through the intersections with Professional Drive and Pedrick Road, and a slightly different traffic pattern at the Pedrick Road/Professional Drive intersection. The Traffic Impact Analysis prepared by Flecker Associates showed that under future conditions, these intersections were expected to operate at LOS[1] A or B with stop controls, resulting in sufficient remaining capacity for additional

[1] As explained in the Draft EIR (pp. 3.15-5, 3.15-25), LOS is no longer a CEQA issue that needs to be addressed in EIRs (see Public Resources Code section 21099 (b)(2); *Citizens for Positive Growth & Preservation v. City of Sacramento* (2019) 43 Cal.App.5th 609). LOS analysis was replaced with VMT analysis, which was the analysis used in the Draft EIR for assessing traffic impacts under CEQA. LOS is used to determine Project consistency with General Plan thresholds.

trips without excessive side street delay. Mitigation Measures 3.15-2 and 3.15-5 would still be required for the revised land plan.

Utilities and Service Systems

The revised land plan would develop the same number of residential units as the previous land plan, resulting in the same level of population increase in the city. The size of the Dixon Opportunity Center would slightly increase, which would not result in any meaningful increase in employment, if any. Therefore, there would be no change to demand for water, wastewater, storm drainage, or solid waste services. The impacts on utilities and service systems would be the same as the previous land plan.

2.3 TEXT CHANGES TO THE DRAFT EIR

This section summarizes text changes made to the Draft EIR either in response to a comment letter or initiated by City staff or in response to a modification to the proposed Project. New text is indicated in double underline and text to be deleted is reflected by a strike through. Text changes are presented in the page order in which they appear in the Draft EIR.

The text revisions provide clarification, amplification, and corrections that have been identified since publication of the Draft EIR. The text changes do not result in a change in the analysis or conclusions of the Draft EIR.

GLOBAL REVISIONS

As described throughout the Draft EIR, the Project site is designated as Campus Mixed Use (CAMU) in the City's General Plan. The proposed rezone described in the Draft EIR, from Professional & Admin Office (PAO-PUD), Neighborhood Commercial (CN-PUD), and Light Industrial (ML-PUD) to Campus Mixed Use Planned Development (CAMU-PD) would bring the Project site's zoning into consistency with the General Plan designation, in accordance with Government Code Section 65860.

On May 7, 2024, the City took action to adopt a comprehensive update to the City's Zoning Ordinance and Zoning Map, which went into effect on June 7, 2024. As part of that comprehensive update, the proposed Project site was rezoned to "Campus Mixed Use - Northeast Specific Plan overlay (CAMX-NESP)."

Although the City Council adopted the updated the Zoning Ordinance before the Draft EIR was published on May 24, 2024, amendments to the Zoning Ordinance did not go into effect until June 7, 2024, after the Draft EIR publication and during the 45-day comment review period. As part of that comprehensive update, the proposed Project site was rezoned to "Campus Mixed Use - Northeast Specific Plan overlay (CAMX-NESP)."

Because the new Zoning Ordinance and Zoning Map are now in effect, the proposed Project does not need to request rezoning of the Project site to Campus Mixed Use. Instead, the proposed Project now seeks to rezone the Project site to add a Planned Development (PD) overlay. The CAMX-NESP-PD zoning designation would allow the establishment of Planned Development standards and Design Guidelines, and the execution of a Development Agreement.

All references throughout the EIR that refer to the Project's request to rezone the site from Professional & Admin Office (PAO-PUD), Neighborhood Commercial (CN-PUD), and Light Industrial (ML-PUD) to Campus Mixed Use Planned Development (CAMU-PD) are struck and are replaced by the updated zoning adopted by the City's separate action of adoption of a Comprehensive Zoning Ordinance update, to make the zoning map consistent with the recently adopted General Plan. This Zoning Map update was adopted and effective as the Draft EIR was published and updated the zoning for the site from Campus Mixed Use - Northeast Specific Plan overlay (CAMX-NESP) to Campus Mixed Use - Northeast Specific Plan - Planned Development overlay (CAMX-NESP-PD).

EXECUTIVE SUMMARY

Page ES-3, Table ES-1 is revised to read:

TABLE ES-1: PROPOSED LAND USE SUMMARY

PARCEL	LAND USE	ZONING	GROSS AREA (ACRES)	DWELLING UNITS		~~CAMU~~ CAMX LAND USE
				DENSITY (DU/AC)	DUs (UNITS)	
RESIDENTIAL						
LOT 1	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~27.90~~ 25.83	~~4.6~~ 4.2	~~128~~ 108	LDR
LOT 2a	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~18.05~~ 18.05	~~5.3~~ 5.3	~~95~~ 89	LDR
LOT 2b	CAMU	CAMX-NESP-PD	7.12	3.8	27	LDR
LOT 3	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~11.23~~ 11.62	~~8.7~~ 9.1	~~98~~ 106	MDR
LOT 4	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~6.46~~ 6.15	~~9.3~~ 9.8	60	MDR
LOT 5	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~15.80~~ 14.77	~~7.6~~ 8.1	~~120~~ 119	MDR
LOT 6	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~18.80~~ 19.93	~~6.9~~ 6.8	~~130~~ 136	LDR
LOT 7	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~18.89~~ 16.47	~~5.1~~ 5.2	~~96~~ 85	LDR
LOT 8	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~15.60~~ 16.68	~~5.7~~ 5.2	~~89~~ 86	LDR
LOT 9	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~11.54~~ 10.82	~~19.5~~ 20.8	225	HDR
Residential Total:			**~~144.27~~ 147.76**	**~~7.2~~ 7.0**	**1,041**	
COMMERCIAL AND EMPLOYMENT USES						
Service Commercial						
LOT 11	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	2.48			CC
Sub-Total:			**2.48**			
Light Industrial (Dixon Opportunity Center)						
LOT 12	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~47.87~~ 37.23			T/BP-LI
LOT 22	CAMU	CAMX-NESP-PD	10.77			
Sub-Total:			**~~47.87~~ 48.00**			

PARCEL	*LAND USE*	*ZONING*	*GROSS AREA (ACRES)*	*DWELLING UNITS*		*~~CAMU~~ CAMX LAND USE*
				DENSITY (DU/AC)	*DUs (UNITS)*	
Commercial and Employment Total:			**~~50.36~~ 50.48**			
PARKS, OPEN SPACE & PUBLIC USES						
Parks and Open Space						
LOT 14	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~2.36~~ 2.18			P/R
LOT 15	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~1.64~~ 1.94			P/R (Paseo)
LOT 16	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~1.58~~ 1.88			P/R (Paseo)
LOT 17	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~1.42~~ 1.43			P/R (Paseo)
LOT 18	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~1.42~~ 1.68			P/R (Paseo)
LOT 19	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~5.00~~ 5.23			P/R
LOT 21	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	1.03			
Parks and Open Space Total:			**~~13.42~~ 15.37**			
Public						
LOT 10 (Detention Pond)	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~25.14~~ 23.03			P/QP
LOT 13 (Well Site)	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	1.58			P/QP
LOT 20 (Drainage Channel)	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	1.18			P/QP
Public / Quasi-Public Total:			**~~27.90~~ 25.79**			
ROADS / R.O.W.		~~CAMU-PD~~ CAMX-NESP-PD	**~~23.66~~ 20.10**			
TOTAL						
The Campus Total:			**259.61**		**1,041**	

SOURCE: CITY OF DIXON 2023; DE NOVO PLANNING GROUP 2024.

Page ES-10, the row for Impact 3.3-1 is revised to read:

Impact 3.3-1: Project operations would cause a violation of an air quality standard or contribute substantially to an existing or projected air quality violation.	Potentially Significant.	**Mitigation Measure 3.3-1(a):** Prior to the issuance of each building permit, the Project applicant shall ensure that the Project buildings are designed to exceed the Title 24 Building Envelope Energy Efficiency Standards by 1% or greater.	Significant and Unavoidable.

		Mitigation Measure 3.3-1(b): During Project ~~operation~~ construction, operators of heavy-duty trucks that travel to and from the Project site are required to use trucks that have 2010 model year or newer engines that meet the CARB's 2010 engine emission standards of 0.01 g/bhp-hr for particulate matter (PM) and 0.20 g/bhp-hr of NOx emissions, or newer, cleaner trucks and equipment. **Mitigation Measure 3.3-1(c):** The Project applicant shall require the use of super compliant, low-VOC paints (less than 10 g/L) during the architectural coating construction phase of Project construction, and during Project maintenance. **Mitigation Measure 3.3-1(d):** During Project construction, the Project applicant shall install Level 2 EV charging stations in 15% of all parking spaces for multi-family developments and pre-wiring to allow for a Level 2 EV charging stations in all single-family residential garages.	

Page ES-13, the row for Impact 3.4-4 is revised to read:

Impact 3.4-4: Implementation of the proposed Project, with mitigation, would not result in direct or indirect effects on special-status bird species.	Potentially Significant.	~~**Mitigation Measure 3.4-4(a):** The Project proponent shall implement the following measure to avoid or minimize impacts on western burrowing owl:~~ • ~~A qualified biologist shall conduct focused burrowing owl surveys in the Project area and surrounding 500 feet, where accessible, in accordance with the CDFW's Staff Report on Burrowing Owl Mitigation (Staff Report), published March 7, 2012. Surveys shall be repeated if project activities are suspended or delayed more than 14 days.~~	Less than Significant.

		~~○ According to the Staff Report, four survey visits shall be conducted during the breeding season (February 1 to August 31): 1) at least one site visit between February 15 and April 15, and 2) a minimum of three survey visits, at least three weeks apart, between April 15 and July 15, with at least one visit after June 15.~~ ~~○ Non-breeding season surveys shall be conducted during four site visits, spread evenly apart.~~ ~~○ Take avoidance surveys may also be conducted. An initial take avoidance survey shall be conducted no less than 14 days prior to initiating ground disturbance activities using the methods outlined in the Staff Report. Implementation of avoidance and minimization measures would be triggered by positive owl presence on the site where project activities will occur. The development of avoidance and minimization approaches would be informed by monitoring the burrowing owls. Burrowing owls may re-colonize a site after only a few days. Time lapses between project activities trigger subsequent take avoidance surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance.~~ ~~• If no burrowing owls are detected, no further measures are required. If active burrowing owl burrows~~	

		~~are detected, the avoidance, minimization, and mitigation methodologies outlined in the CDFW's Staff Report on Burrowing Owl Mitigation shall be followed prior to initiating Project related activities that may impact burrowing owls.~~ ***Mitigation Measure 3.4-4(a)****: A qualified biologist shall conduct surveys following the Department of Fish and Game Staff Report on Burrowing Owl Mitigation (2012) methodology (https://wildlife.ca.gov/Conservation/Survey-Protocols#377281284-birds) and prepare a report documenting the survey results. Surveys for nesting burrowing owl shall be conducted if Project construction starts during nesting season (February 1 to August 31), and surveys for wintering burrowing owl shall be conducted if the construction starts during the wintering season (September 1 to January 31). The surveys shall encompass the Project site and a sufficient buffer zone to detect owls nearby that may be impacted, which is up to 500 feet pursuant to CDFW guidance , to the extent access to off-site properties is allowed, around the Project site pursuant to the above methodology. Surveys shall occur each year of Project construction, as conditions may change annually and suitable refugia for burrowing owl, such as small mammal burrows, can be created within a few hours or days, unless otherwise approved in writing by CDFW.* *Time lapses between surveys or Project activities shall trigger subsequent surveys including, but not limited to, a final survey within 24 hours prior to ground disturbance. The qualified biologist shall have a minimum of two years of experience implementing the*	

		above methodology resulting in burrowing owl detections. The Project shall immediately notify CDFW if burrowing owl is detected and implement a construction avoidance buffer around any detected burrowing owl pursuant to the buffer distances outlined in the Department of Fish and Game Staff Report on Burrowing Owl Mitigation (2012), which may be up to 500 feet pursuant to CDFW guidance to the extent access to off-site properties is allowed. Any detected owl shall be monitored by the qualified biologist to ensure it is not disturbed during construction activities, unless otherwise approved in writing by CDFW. Impacts to nesting burrowing owl shall be fully avoided. ***Mitigation Measure 3.4-4(b):*** *If the Project would impact an unoccupied nesting burrowing owl burrow or burrow surrogate (i.e., a burrow known to have been used in the past three years for nesting), or an occupied burrow (where a non-nesting owl would be evicted as described below), the following habitat mitigation shall be implemented prior to Project construction. Impacts to each burrowing owl nesting site shall be mitigated by permanent preservation of two burrowing owl occupied nesting sites with appropriate foraging habitat within Solano County, unless otherwise approved by CDFW, through a conservation easement and implementing and funding a long-term management plan in perpetuity. The same requirements shall apply for impacts to non-nesting evicted owl sites except two burrowing owl occupied non-nesting (i.e., wintering) sites shall be preserved. The Project may implement alternative methods for*	

		preserving habitat with written acceptance from CDFW. ***Mitigation Measure 3.4-4(c):*** *The applicant has contracted to acquire conservation easements to mitigate for impacts to potential Swainson's hawk foraging habitat with in-kind habitat at a minimum 1:1 ratio which equally benefits burrowing owl foraging as establishing a conservation easement over irrigated pasture land will provide wintering and foraging habitat for burrowing owl. The Project site, including off-site improvement areas, contain 279.76 acres of which 261.19 acres provide suitable foraging habitat for Swainson's hawks. Impacts to suitable foraging habitat for Swainson's hawk will be mitigated at a minimum 1:1 ratio (one acre of foraging habitat preserved for each acre of development). Other species known to benefit from this habitat type include: tricolored blackbird, white-tailed kite, northern harrier, yellow-billed magpie, burrowing owl, and migratory birds and raptors.* ***Mitigation Measure 3.4-4(d)****: To prevent burrowing owl from sheltering or nesting in exposed material; all construction pipes, culverts, hoses or similar materials greater than two inches in diameter stored at the Project site shall be capped or covered before the end of each work day and shall be inspected thoroughly for wildlife before the pipe or similar structure is buried, capped, used, or moved.* ***Mitigation Measure 3.4-4(~~b~~e):*** *The project proponent shall implement the following measures to avoid or minimize impacts on Swainson's hawk:* • *If construction activities will begin during the Swainson's hawk nesting season (March*	

		20 to September 15), prior to beginning work on the Project, a qualified biologist ~~should~~ shall conduct at least the minimum number of surveys called for within at least two survey periods prior to the initiation of construction in accordance with the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000) or the current CDFW-approved protocol and prepare a report documenting the survey results. Current survey periods specified by the Guidelines are March 20 to April 5, April 5 to April 20, April 21 to June 10, and June 10 to July 30. All potential nest trees within 0.5-mile of the proposed Project footprint ~~should~~ shall be visually examined for potential Swainson's hawk nests, as accessible. • *If no active Swainson's hawk nests are identified on or within 0.5-mile of the proposed Project, a letter report documenting the survey methodology and findings ~~should~~ shall be submitted to the Project proponent and no additional mitigation measures are recommended.* • *If active Swainson's hawk nests (a nest becomes active once the first egg is laid and remains active until the fledged young are no longer dependent on the nest [USFWS 2018]) are found within 0.5-mile of the Project footprint, a survey report ~~should~~ shall be submitted to CDFW, and an avoidance and minimization plan ~~should~~ shall*	

		be developed for approval by CDFW prior to the start of construction. The avoidance plan ~~should~~ shall identify measures to minimize impacts to the active Swainson's hawk nest depending on the location of the nest relative to the project footprint. These measures may include: o *Conduct a worker awareness training program prior to the start of construction;* o *Establish a buffer zone and work schedule to avoid impacting the nest during critical periods. ~~If possible, no~~ No work will occur within 200 yards of the nest while it is in active use. If work will occur within 200 yards of the nest, then construction will be monitored by a qualified biologist to ensure that no work occurs within 50 yards of the nest during incubation or within 10 days after hatching (Swainson's Hawk Technical Advisory Committee 2000);* o *Have a biological monitor conduct regular monitoring of the nest during construction activities; and* o *Should the project biologist determine that the construction activities are disturbing the nest; the biologist ~~should~~ shall halt construction activities until the CDFW is consulted.* • *The Project site, including off-site improvement areas, contains ~~261.192~~ 261.19 acres of ~~cropland habitats which~~*	

		~~*provide*~~ *suitable foraging habitat for Swainson's hawks. CDFW has provided guidelines for mitigating impacts to Swainson's hawk foraging habitat as summarized below (CDFW 1994):* *a) Projects within 1 mile of an active nest tree shall provide:* *i. One acre of foraging habitat for each acre of development at a ratio of 1:1. Mitigated lands shall consist of 10 percent of the land requirements met by fee title acquisition or a conservation easement allowing for the active management of the habitat, and the remaining 90 percent of the land protected by a conservation easement on agricultural lands or other suitable habitats which provide foraging habitat for Swainson's hawk (grasslands, rangeland, etc.) and no requirements for active management of the habitat; or* *ii. One-half acre of foraging habitat for each acre of development authorized at a ratio of 0.5:1. All the land requirements shall be met by fee title acquisition or a conservation easement, which allows for the active management of the*	

		habitat for prey production on the land. Prey abundance and availability is determined by land and farming patterns including crop types, agricultural practices, and harvesting regimes. Actively managed land for prey production may result in the land becoming less valuable for crop production due to management limitations but increases the value for Swainson's hawk through functional lift. *b) Projects within 5 miles of an active nest tree but greater than 1 mile from the nest tree shall provide 0.75 acre of foraging habitat for each acre of urban development at a ratio of 0.75:1. All foraging habitat may be protected through fee title acquisition or conservation easement on agricultural lands or other suitable habitats.* *c) Projects within 10 miles of an active nest tree but greater than 5 miles from an active nest tree shall provide 0.5 acre of Habitat Management land for each acre of urban development at a ratio of 0.5:1. All foraging habitat may be protected through fee title acquisition or a conservation easement on agricultural lands or other suitable habitat.*	

		~~*The City of Dixon as the CEQA lead agency shall make the final determination as to the extent of the proposed Project's impacts to Swainson's hawk foraging habitat and any appropriate mitigation that might be necessary associated with project development.*~~ *Mitigation bank credits may also be used to satisfy Swainson's hawk mitigation requirements as approved by the City and CDFW.* ***Mitigation Measure 3.4-4(~~c~~f):*** *The project proponent shall implement the following measure to avoid or minimize impacts on tricolored blackbird, northern harrier, white-tailed kite and other special-status birds and nesting migratory birds and raptors that may occur on the site:* *Active nests and nesting birds are protected by the California Fish and Game Code Sections 3503 and 3503.5, 3513 and the MBTA. Ground-disturbing and other development activities including grading, vegetation clearing, tree removal/trim, and construction could impact nesting birds if these activities occur during the nesting season (generally February 1 to August 31). To avoid impacts to nesting birds, all ground disturbing activity shall be completed between September 1 and January 31, if feasible. If construction cannot occur outside of the nesting season, the following measures are recommended:* • *If construction activities occur during the nesting season, a qualified biologist shall conduct a nesting bird survey to determine the presence of any active nests within the Project site. Additionally, the surrounding 500 feet of the Project site shall be surveyed for active ~~raptor~~ nests, where*	

		accessible. The nesting bird survey shall be conducted within 14 days prior to commencement of ground-disturbing or other development activities. If the nesting bird survey shows that there is no evidence of active nests, then a letter report shall be prepared to document the survey and be provided to the project proponent and no additional measures are recommended. If development does not commence within 14 days of the nesting bird survey, or halts for more than 14 days, then an additional survey is required prior to starting or resuming work within the nesting season. ○ *If active nests are found, then the qualified biologist shall establish a species-specific buffer to prohibit development activities near the nest to and minimize nest disturbance until the young have successfully fledged or the biologist determines that the nest is no longer active. Buffer distances may range from ~~30~~ a minimum of 30 feet for some songbirds and 0.5 mile for some raptors. Nest monitoring may also be warranted during certain phases of construction to ensure nesting birds are not adversely impacted. If active nests are found within any trees slated for removal, then an appropriate buffer shall be established around the tree and all trees within the buffer shall not be removed until a*	

		qualified biologist determines that the nest has successfully fledged and/or is no longer active. • *A qualified biologist shall conduct environmental awareness training that is given to all onsite personnel prior to the initiation of work.* • *If construction occurs outside of the nesting bird season (September 1 to January 31) a nesting bird survey and environmental training for nesting birds would not be required.*	

Page ES-34, the row for Impact 3.11-3 is revised to read:

Impact 3.11-3: The proposed Project would not conflict with an applicable habitat conservation plan or natural community conservation plan.	Potentially Significant	**Mitigation Measure 3.11-3:** Implement Mitigation Measure ~~3.4-5~~ 3.4-11.	Less than Significant.

Page ES-37, the row for Impact 3.15-2 is revised to read:

Impact 3.15-2: Implementation of the proposed Project would be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) regarding Vehicle Miles Traveled (VMT).	Potentially Significant	**Mitigation Measure 3.15-2:** The effectiveness of various VMT mitigation strategies as documented in the literature is summarized in the California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Change Vulnerabilities, and Advancing Health Equity (CAPCOA Handbook). Table 3.15-6 [of this Draft EIR] summarizes the maximum potential effectiveness of various applicable strategies documented in the CAPCOA Handbook that were considered for potential incorporation into the project. Although implementation of any feasible VMT-reducing measures would not provide the level of mitigation necessary to significantly reduce VMT-related Project	Significant and Unavoidable.

		impacts, the following measures shall be implemented: All future employers at the Project site shall: • Implement a voluntary employee trip reduction program; • Identify a carpool coordinator; • Include preferential carpool parking spot(s) at employee-generating development to be reserved for use by employees who carpool (2+ employees per car per ride); • Provide incentives as feasible for employees who walk, ride manual bicycles, and/or take pubic transportation to work more than half of the time and can provide proof; • Ensure the availability of a secure bicycle storage area within the Dixon Opportunity Center for use by employees; and • Allow remote work for applicable employees where feasible for one or more days per week or equivalent hours.	

INTRODUCTION

Page 1-2, the first paragraph is revised to read:

The following agencies are considered "Responsible Agencies" or "Trustee Agencies" for the proposed Project, and may be required to issue permits or approve certain aspects of the proposed Project:

- Association of Bay Area Governments (ABAG)
- Metropolitan Transportation Commission (MTC)
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- California Department of Transportation
- California Department of Fish and Wildlife
- California Public Utilities Commission
- Central Valley Regional Water Quality Control Board
- Pacific Gas and Electric Company
- Solano Transportation Authority

- State Water Resources Control Board, Division of Drinking Water
- Yolo-Solano Air Quality Management District (YSAQMD)

2.0 PROJECT DESCRIPTION

Page 2-2, Table 2-1 is revised to read:

TABLE 2-1: PROPOSED LAND USE SUMMARY

PARCEL	LAND USE	ZONING	GROSS AREA (ACRES)	DWELLING UNITS		~~CAMU~~ CAMX LAND USE
				DENSITY (DU/AC)	DUs (UNITS)	
RESIDENTIAL						
LOT 1	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~27.90~~ 25.83	~~4.6~~ 4.2	~~128~~ 108	LDR
LOT 2a	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~18.05~~ 18.05	~~5.3~~ 5.3	~~95~~ 89	LDR
LOT 2b	CAMU	CAMX-NESP-PD	7.12	3.8	27	LDR
LOT 3	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~11.23~~ 11.62	~~8.7~~ 9.1	~~98~~ 106	MDR
LOT 4	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~6.46~~ 6.15	~~9.3~~ 9.8	60	MDR
LOT 5	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~15.80~~ 14.77	~~7.6~~ 8.1	~~120~~ 119	MDR
LOT 6	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~18.80~~ 19.93	~~6.9~~ 6.8	~~130~~ 136	LDR
LOT 7	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~18.89~~ 16.47	~~5.1~~ 5.2	~~96~~ 85	LDR
LOT 8	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~15.60~~ 16.68	~~5.7~~ 5.2	~~89~~ 86	LDR
LOT 9	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~11.54~~ 10.82	~~19.5~~ 20.8	225	HDR
Residential Total:			**~~144.27~~ 147.76**	**~~7.2~~ 7.0**	**1,041**	
COMMERCIAL AND EMPLOYMENT USES						
Service Commercial						
LOT 11	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	2.48			CC
Sub-Total:			**2.48**			
Light Industrial (Dixon Opportunity Center)						
LOT 12	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~47.87~~ 37.23			T/BP-LI
LOT 22	CAMU	CAMX-NESP-PD	10.77			
Sub-Total:			**~~47.87~~ 48.00**			
Commercial and Employment Total:			**~~50.36~~ 50.48**			
PARKS, OPEN SPACE & PUBLIC USES						
Parks and Open Space						
LOT 14	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~2.36~~ 2.18			P/R

PARCEL	*LAND USE*	*ZONING*	*GROSS AREA (ACRES)*	*DWELLING UNITS*		*~~CAMU~~ CAMX LAND USE*
				DENSITY (DU/AC)	*DUs (UNITS)*	
LOT 15	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~1.64~~ 1.94			P/R (Paseo)
LOT 16	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~1.58~~ 1.88			P/R (Paseo)
LOT 17	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~1.42~~ 1.43			P/R (Paseo)
LOT 18	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~1.42~~ 1.68			P/R (Paseo)
LOT 19	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~5.00~~ 5.23			P/R
LOT 21	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	1.03			
Parks and Open Space Total:			**~~13.42~~ 15.37**			
Public						
LOT 10 (Detention Pond)	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	~~25.14~~ 23.03			P/QP
LOT 13 (Well Site)	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	1.58			P/QP
LOT 20 (Drainage Channel)	CAMU	~~CAMU-PD~~ CAMX-NESP-PD	1.18			P/QP
Public / Quasi-Public Total:			**~~27.90~~ 25.79**			
ROADS / R.O.W.		~~CAMU-PD~~ CAMX-NESP-PD	**~~23.66~~ 20.10**			
TOTAL						
The Campus Total:			**259.61**		**1,041**	

SOURCE: CITY OF DIXON 2023; DE NOVO PLANNING GROUP 2024.

Page 2-4, second paragraph under the header "Residential Uses" is revised to read:

> Five lots – Lots 1, 2, 6, 7, and 8 – would be designated for low density residential uses, with density ranges between 4.6 dwelling units per acre (du/ac) and 6.9 du/ac. A sound wall would be constructed around the housing in Lot 2 parallel to Pedrick Road. Low-density residential units would be typical single-family detached units with varying lot and product sizes, totaling 538 units.

Page 2-6, under the header "Drainage/Stormwater Control" is revised to read:

> … The proposed basin would have an outfall to the existing culvert at Pedrick Road which is tributary to the Tremont 3 drainage facility. The underlying land use for the detention basin would be CAMU, per the current proposed amendment to the NEQSP and consistent with the General Plan's CAMU land use designation of the Project site. A drainage channel in the northwest corner of the Project site, between I-80 and Professional Drive, would further accommodate the bypass of offsite stormwater. At final design, an Operation and Maintenance plan will be developed specifying the inspection frequencies, maintenance

activities, and record keeping required to maintain the proposed permanent stormwater control measures.

Page 2-6, third paragraph under the header "Access and Circulation" is revised to read:

The Project proposes the construction of eastern and southern halves of the future four-lane arterial for Professional Drive allowing for two-lanes (one in each direction). Professional Drive would be extended south along the west side of the roadway to provide a connection to existing Vaughn Road. Additionally, the Project would construct the widening of Pedrick Road adjacent to the Project frontage from an existing two-lane road to a modified four-lane arterial roadway with a dedicated southbound turn lane for existing vehicle traffic entering the Campbell's Soup Supply Company facility.

Page 2-8, under the header "2.5 Project Approvals and Entitlements" is revised to read:

The Campus Project would require numerous approvals from the City of Dixon, requiring Planning Commission review with final action by the City Council:

- Amendment of the Northeast Quadrant Specific Plan (NEQSP);
- Rezoning of the Project site ~~from Professional & Admin Office (PAO-PUD), Neighborhood Commercial (CN-PUD), and Light Industrial (ML-PUD) to Campus Mixed Use Planned Development (CAMU-PD),~~ from Campus Mixed Use - Northeast Specific Plan overlay (CAMX-NESP) to Campus Mixed Use - Northeast Specific Plan - Planned Development overlay (CAMX-NESP-PD), consistent with the City's recently adopted 2040 General Plan;
- Large-Lot and Small-Lot Vesting Tentative Subdivision Maps;
- Establish Planned Development standards, including Design Guidelines; and
- Development Agreement.

Page 2-8, under the header "2.6 Responsible Agencies," the bulleted list is revised to read:

- Association of Bay Area Governments (ABAG)
- Metropolitan Transportation Commission (MTC)
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- California Department of Transportation
- California Department of Fish and Wildlife
- California Public Utilities Commission
- Central Valley Regional Water Quality Control Board
- Pacific Gas and Electric Company
- Solano Transportation Authority
- State Water Resources Control Board, Division of Drinking Water
- Yolo-Solano Air Quality Management District (YSAQMD)

3.3 AIR QUALITY

Page 3.3-23, Mitigation Measure 3.3-1 is revised to read:

MITIGATION MEASURE(S)

Mitigation Measure 3.3-1(a): *Prior to the issuance of each building permit, the Project applicant shall ensure that the Project buildings are designed to exceed the Title 24 Building Envelope Energy Efficiency Standards by 1% or greater.*

Mitigation Measure 3.3-1(b): *During Project operation, operators of heavy-duty trucks that travel to and from the Project site are required to use trucks that have 2010 model year or newer engines that meet the CARB's 2010 engine emission standards of 0.01 g/bhp-hr for particulate matter (PM) and 0.20 g/bhp-hr of NOx emissions, or newer, cleaner trucks and equipment.*

Mitigation Measure 3.3-1(c): *The Project applicant shall require the use of super compliant, low-VOC paints (less than 10 g/L) during the architectural coating construction phase of Project construction, and during Project maintenance.*

Mitigation Measure 3.3-1(d): *During Project construction, the Project applicant shall install Level 2 EV charging stations in 15% of all parking spaces for multi-family developments and pre-wiring to allow for a Level 2 EV charging stations in all single-family residential garages.*

3.4 BIOLOGICAL RESOURCES

Page 3.4-12, Table 3.4-4, row beginning with "*Buteo Swainsoni*" is revised to read:

Buteo Swainsoni Swainson's hawk	--;CT	Nests in tall cottonwoods, valley oaks or willows. Forages in fields, cropland, irrigated pasture, and grassland often near riparian corridors.	**High.** The entire Project site contains suitable foraging habitat for this species and suitable nest trees border the Project site and are also present surrounding the Project site. There are ~~131~~ 143 documented occurrences within five miles of the Project site and two documented nest trees adjacent to the Project site (CDFW 2023).

Page 3.4-31, last paragraph is revised to read:

The ~~croplands within the~~ 261.19 acres of cropland on the Project site provides suitable foraging habitat for this species and suitable nest trees are located adjacent to the Project site and in the surrounding vicinity. There are ~~131~~ 143 documented occurrences of this species within five miles of the Project site, and two of those occurrences overlap with the Project site. These two occurrences are documented nest trees from 2005 and 2006. Based on suitable habitat in the Project site and the number and proximity of nearby documented occurrences, Swainson's hawk has a high potential to occur ~~in~~ on the Project site. However, it should be noted that if tall-growing crops such as corn are planted within the Project site, the portion of the Project site that is planted with corn may be unsuitable for Swainson's hawk foraging. Once the crops reach a certain height, foraging opportunities are minimal for this species. Swainson's hawk can forage in a variety of agricultural settings, including early-

stage corn fields, but tall, dense vegetation/crops are typically unsuitable for foraging by this species.

Page 3.4-34, Mitigation Measure 3.4-4 is revised to read:

MITIGATION MEASURE(S)

~~***Mitigation Measure 3.4-4(a):*** *The Project proponent shall implement the following measure to avoid or minimize impacts on western burrowing owl:*~~

- ~~*A qualified biologist shall conduct focused burrowing owl surveys in the Project area and surrounding 500 feet, where accessible, in accordance with the CDFW's Staff Report on Burrowing Owl Mitigation (Staff Report), published March 7, 2012. Surveys shall be repeated if project activities are suspended or delayed more than 14 days.*~~
    - ~~*According to the Staff Report, four survey visits shall be conducted during the breeding season (February 1 to August 31): 1) at least one site visit between February 15 and April 15, and 2) a minimum of three survey visits, at least three weeks apart, between April 15 and July 15, with at least one visit after June 15.*~~
    - ~~*Non-breeding season surveys shall be conducted during four site visits, spread evenly apart.*~~
    - ~~*Take avoidance surveys may also be conducted. An initial take avoidance survey shall be conducted no less than 14 days prior to initiating ground disturbance activities using the methods outlined in the Staff Report. Implementation of avoidance and minimization measures would be triggered by positive owl presence on the site where project activities will occur. The development of avoidance and minimization approaches would be informed by monitoring the burrowing owls. Burrowing owls may re-colonize a site after only a few days. Time lapses between project activities trigger subsequent take avoidance surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance.*~~
- ~~*If no burrowing owls are detected, no further measures are required. If active burrowing owl burrows are detected, the avoidance, minimization, and mitigation methodologies outlined in the CDFW's Staff Report on Burrowing Owl Mitigation shall be followed prior to initiating Project related activities that may impact burrowing owls.*~~

Mitigation Measure 3.4-4(a)*: A qualified biologist shall conduct surveys following the Department of Fish and Game Staff Report on Burrowing Owl Mitigation (2012) methodology (https://wildlife.ca.gov/Conservation/Survey-Protocols#377281284 – birds) and prepare a report documenting the survey results. Surveys for nesting burrowing owl shall be conducted if Project construction starts during nesting season (February 1 to August 31), and surveys for wintering burrowing owl shall be conducted if the construction starts during the wintering season (September 1 to January 31). The surveys shall encompass the Project site and a sufficient buffer zone to detect owls nearby that may be impacted, which is up to 500 feet, to the extent access to off-site properties is allowed, around the Project site pursuant to the above methodology. Surveys shall occur each year of Project construction, as conditions may change annually and suitable refugia for burrowing owl,*

such as small mammal burrows, can be created within a few hours or days, unless otherwise approved in writing by CDFW.

Time lapses between surveys or Project activities shall trigger subsequent surveys including, but not limited to, a final survey within 24 hours prior to ground disturbance. The qualified biologist shall have a minimum of two years of experience implementing the above methodology resulting in burrowing owl detections. The Project shall immediately notify CDFW if burrowing owl is detected and implement a construction avoidance buffer around any detected burrowing owl pursuant to the buffer distances outlined in the Department of Fish and Game Staff Report on Burrowing Owl Mitigation (2012), which may be up to 500 feet to the extent access to off-site properties is allowed. Any detected owl shall be monitored by the qualified biologist to ensure it is not disturbed during construction activities, unless otherwise approved in writing by CDFW. Impacts to nesting burrowing owl shall be fully avoided.

Mitigation Measure 3.4-4(b): *If the Project would impact an unoccupied nesting burrowing owl burrow or burrow surrogate (i.e., a burrow known to have been used in the past three years for nesting), or an occupied burrow (where a non-nesting owl would be evicted as described below), the following habitat mitigation shall be implemented prior to Project construction. Impacts to each burrowing owl nesting site shall be mitigated by permanent preservation of two burrowing owl occupied nesting sites with appropriate foraging habitat within Solano County, unless otherwise approved by CDFW, through a conservation easement and implementing and funding a long-term management plan in perpetuity. The same requirements shall apply for impacts to non-nesting evicted owl sites except two burrowing owl occupied non-nesting (i.e., wintering) sites shall be preserved. The Project may implement alternative methods for preserving habitat with written acceptance from CDFW.*

Mitigation Measure 3.4-4(c): *The applicant has contracted to acquire conservation easements to mitigate for impacts to potential Swainson's hawk foraging habitat with in-kind habitat at a minimum 1:1 ratio which equally benefits burrowing owl foraging as establishing a conservation easement over irrigated pasture land will provide wintering and foraging habitat for burrowing owl. The Project site contains 261.19 acres of cropland habitats which provide suitable foraging habitat for Swainson's hawks. Impacts to suitable foraging habitat for Swainson's hawk will be mitigated at a minimum 1:1 ratio (one acre of foraging habitat preserved for each acre of development). Other species known to benefit from this habitat type include: tricolored blackbird, white-tailed kite, northern harrier, yellow-billed magpie, burrowing owl, and migratory birds and raptors.*

Mitigation Measure 3.4-4(d)*: To prevent burrowing owl from sheltering or nesting in exposed material; all construction pipes, culverts, hoses or similar materials greater than two inches in diameter stored at the Project site shall be capped or covered before the end of each work day and shall be inspected thoroughly for wildlife before the pipe or similar structure is buried, capped, used, or moved.*

Mitigation Measure 3.4-4(~~b~~e): *The project proponent shall implement the following measures to avoid or minimize impacts on Swainson's hawk:*

- *If construction activities will begin during the Swainson's hawk nesting season (March 20 to September 15), prior to beginning work on the Project, a qualified biologist ~~should~~ shall conduct at least the minimum number of surveys called for within at least two survey periods prior to the initiation of construction in accordance with the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000) or the current CDFW-approved protocol and prepare a report documenting the survey results. Current survey periods specified by the Guidelines are March 20 to April 5, April 5 to April 20, April 21 to June 10, and June 10 to July 30. All potential nest trees within 0.5-mile of the proposed Project footprint ~~should~~ shall be visually examined for potential Swainson's hawk nests, as accessible.*
- *If no active Swainson's hawk nests are identified on or within 0.5-mile of the proposed Project, a letter report documenting the survey methodology and findings ~~should~~ shall be submitted to the Project proponent and no additional mitigation measures are recommended.*
- *If active Swainson's hawk nests (a nest becomes active once the first egg is laid and remains active until the fledged young are no longer dependent on the nest [USFWS 2018]) are found within 0.5-mile of the Project footprint, a survey report ~~should~~ shall be submitted to CDFW, and an avoidance and minimization plan ~~should~~ shall be developed for approval by CDFW prior to the start of construction. The avoidance plan ~~should~~ shall identify measures to minimize impacts to the active Swainson's hawk nest depending on the location of the nest relative to the project footprint. These measures may include:*
    - *Conduct a worker awareness training program prior to the start of construction;*
    - *Establish a buffer zone and work schedule to avoid impacting the nest during critical periods. ~~If possible, no~~ No work will occur within 200 yards of the nest while it is in active use. If work will occur within 200 yards of the nest, then construction will be monitored by a qualified biologist to ensure that no work occurs within 50 yards of the nest during incubation or within 10 days after hatching (Swainson's Hawk Technical Advisory Committee 2000);*
    - *Have a biological monitor conduct regular monitoring of the nest during construction activities; and*
    - *Should the project biologist determine that the construction activities are disturbing the nest; the biologist ~~should~~ shall halt construction activities until the CDFW is consulted.*
- *The Project site, including off-site improvement areas, contains ~~261.192~~ 261.19 acres of ~~cropland habitats which provide~~ suitable foraging habitat for Swainson's hawks. CDFW has provided guidelines for mitigating impacts to Swainson's hawk foraging habitat as summarized below (CDFW 1994):*
    - *d) Projects within 1 mile of an active nest tree shall provide:*
        - *iii. One acre of foraging habitat for each acre of development at a ratio of 1:1. Mitigated lands shall consist of 10 percent of the land requirements met by fee title acquisition or a conservation easement allowing for the active management of the habitat, and the remaining 90 percent of the land protected by a conservation easement on agricultural lands or other suitable*

habitats which provide foraging habitat for Swainson's hawk (grasslands, rangeland, etc.) and no requirements for active management of the habitat; or

iv. One-half acre of foraging habitat for each acre of development authorized at a ratio of 0.5:1. All the land requirements shall be met by fee title acquisition or a conservation easement, which allows for the active management of the habitat for prey production on the land. Prey abundance and availability is determined by land and farming patterns including crop types, agricultural practices, and harvesting regimes. Actively managed land for prey production may result in the land becoming less valuable for crop production due to management limitations but increases the value for Swainson's hawk through functional lift.

e) Projects within 5 miles of an active nest tree but greater than 1 mile from the nest tree shall provide 0.75 acre of foraging habitat for each acre of urban development at a ratio of 0.75:1. All foraging habitat may be protected through fee title acquisition or conservation easement on agricultural lands or other suitable habitats.

f) Projects within 10 miles of an active nest tree but greater than 5 miles from an active nest tree shall provide 0.5 acre of Habitat Management land for each acre of urban development at a ratio of 0.5:1. All foraging habitat may be protected through fee title acquisition or a conservation easement on agricultural lands or other suitable habitat.

~~The City of Dixon as the CEQA lead agency shall make the final determination as to the extent of the proposed Project's impacts to Swainson's hawk foraging habitat and any appropriate mitigation that might be necessary associated with project development.~~ Mitigation bank credits may also be used to satisfy Swainson's hawk mitigation requirements as approved by the City and CDFW.

Mitigation Measure 3.4-4(~~c~~f): *The project proponent shall implement the following measure to avoid or minimize impacts on tricolored blackbird, northern harrier, white-tailed kite and other special-status birds and nesting migratory birds and raptors that may occur on the site:*

Active nests and nesting birds are protected by the California Fish and Game Code Sections 3503 and 3503.5, 3513 and the MBTA. Ground-disturbing and other development activities including grading, vegetation clearing, tree removal/trim, and construction could impact nesting birds if these activities occur during the nesting season (generally February 1 to August 31). To avoid impacts to nesting birds, all ground disturbing activity shall be completed between September 1 and January 31, if feasible. If construction cannot occur outside of the nesting season, the following measures are recommended:

- *If construction activities occur during the nesting season, a qualified biologist shall conduct a nesting bird survey to determine the presence of any active nests within the Project site. Additionally, the surrounding 500 feet of the Project site shall be surveyed for active ~~raptor~~ nests, where accessible. The nesting bird survey shall be conducted within 14 days prior to*

commencement of ground-disturbing or other development activities. If the nesting bird survey shows that there is no evidence of active nests, then a letter report shall be prepared to document the survey and be provided to the project proponent and no additional measures are recommended. If development does not commence within 14 days of the nesting bird survey, or halts for more than 14 days, then an additional survey is required prior to starting or resuming work within the nesting season.

- *If active nests are found, then the qualified biologist shall establish a species-specific buffer to prohibit development activities near the nest to and minimize nest disturbance until the young have successfully fledged or the biologist determines that the nest is no longer active. Buffer distances may range from ~~30~~ a minimum of 30 feet for some songbirds and 0.5 mile for some raptors. Nest monitoring may also be warranted during certain phases of construction to ensure nesting birds are not adversely impacted. If active nests are found within any trees slated for removal, then an appropriate buffer shall be established around the tree and all trees within the buffer shall not be removed until a qualified biologist determines that the nest has successfully fledged and/or is no longer active.*

- *A qualified biologist shall conduct environmental awareness training that is given to all onsite personnel prior to the initiation of work.*
- *If construction occurs outside of the nesting bird season (September 1 to January 31) a nesting bird survey and environmental training for nesting birds would not be required.*

Page 3.4-37, Level of Significance After Mitigation Measure paragraph is revised to read:

LEVEL OF SIGNIFICANCE AFTER MITIGATION MEASURE

Less than Significant.

Implementation of Mitigation Measures 3.4-4(a) through 3.4-4(~~c~~f) would ensure that measures to avoid or minimize impacts on tricolored blackbird (*Agelaius tricolor*), burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), white-tailed kite (*Elanus leucurus*), northern harrier (*Circus hudsonius*), and a number of migratory birds and raptors are implemented. For example, Mitigation Measure 3.4-4(a) requires site surveys for burrowing owls and avoidance, minimization, and mitigation methodologies outlined in the CDFW's Staff Report on Burrowing Owl Mitigation should active burrows be detected during surveys. Mitigation Measure 3.4-4(b) requires permanent preservation of replacement burrowing owl nesting sites if the Project impacts an unoccupied burrowing owl burrow or burrow surrogate, or occupied burrow. Mitigation Measure 3.4-4(c) requires conservation easements to mitigate for impacts to potential Swainson's hawk foraging habitat with in-kind habitat at a minimum 1:1 ratio which equally benefits burrowing owl foraging habitat. Mitigation Measure 3.4-4(d) requires capped or covered pipes, culverts, hoses or similar materials greater than two inches during construction in order to prevent burrowing owl sheltering or nesting. Mitigation Measure 3.4-4(~~b~~e) requires site surveys for Swainson's hawk and measures should nests be found during surveys. This measure also requires mitigation for impacts to Swainson's hawk foraging habitat depending on the distance from

any active nests. Mitigation Measure 3.4-4(~~c~~f) requires site surveys for other protected birds if construction occurs within the nesting bird season.

These mitigation measures would reduce the potential for impacts to special-status bird species to a ***less-than-significant*** level.

Page 3.4-40, the first bullet under Mitigation Measure 3.4-7 is revised to read:

- Before any activities that would result in discharge, fill, removal, or hydrologic interruption of any of the water features occur within the Project site, the Project proponent shall obtain ~~an approved~~ a preliminary jurisdictional delineation (~~AJD~~ PJD) from the USACE.

Page 3.4-47, second paragraph under Impact 3.4-12 is revised to read:

The proposed Project has the potential to result in impacts to special-status species in the region. ~~Although there has been no documented sighting within the immediate area in, or near the Project site,~~ As discussed in this section, the Project site provides potential habitat for several species. Therefore, the proposed Project would have a considerable contribution to the impact, and the impact would be ***potentially significant***.

3.9 HAZARDS AND HAZARDOUS MATERIALS

Page 3.10-10, first paragraph under the heading "California Department of Health Services" is revised to read:

~~California Department of Health Services~~ State Water Resources Control Board, Division of Drinking Water

~~The Department of Health Services, Division of Drinking Water and Environmental Management,~~ The State Water Resources Control Board, Division of Drinking Water (State Water Board, DDW) oversees the Drinking Water Program. The Drinking Water Program regulates public water systems and certifies drinking water treatment and distribution operators. It provides support for small water systems and for improving their technical, managerial, and financial capacity. It provides subsidized funding for water system improvements under the State Revolving Fund and Proposition 50 programs. The Drinking Water Program also oversees water recycling projects, permits water treatment devices, supports and promotes water system security, and oversees the Drinking Water Treatment and Research Fund for methyl tert-butyl ether (MTBE) and other oxygenates.

3.11 LAND USE

Page 3.11-15, Table 3.11-1, the row beginning with "Policy LCC-1.2" is revised to read:

Policy LCC-1.2 Maintain designated urban-agricultural buffers within City jurisdiction to minimize conflicts with adjoining agricultural uses.	**Consistent**. The proposed development adjoins Pedrick Road along its ~~west~~ east boundary, with some agricultural land uses located on the opposite side of Pedrick Road. The proposed Project would in effect be buffered from agricultural uses by Pedrick Road, which will be modified to include bicycle/pedestrian and landscape improvements as part of the final roadway design.

Page 3.11-28, Mitigation Measure 3.11-3 is revised to read:

Mitigation Measure 3.11-3: *Implement Mitigation Measure ~~3.4-5~~ 3.4-11.*

3.12 NOISE

Page 3.12-16, third paragraph under the heading "Exterior Transportation Noise" is revised to read:

However, the proposed Project includes the construction of a~~n 8-foot-tall~~ sound barrier between Pedrick Road and the proposed residential units that back up to some extent to Pedrick Road. This barrier would be a total of ~~8~~6-feet above the centerline height of Pedrick Road, made from a likely combination of a ~~6-foot~~ block wall ~~atop a 2-foot~~ and an earthen berm or raised pad. …

3.15 TRANSPORTATION

Page 3.15-23, text is added after the third paragraph, and the significance discussion is revised, to read:

Although implementation of any feasible VMT-reducing measures would not provide the level of mitigation necessary to significantly reduce VMT-related Project impacts, the following measures shall be implemented to lessen impacts to the extent possible:

All future employers at the Project site shall:

- Implement a voluntary employee trip reduction program;
- Identify a carpool coordinator;
- Include preferential carpool parking spot(s) at employee-generating development to be reserved for use by employees who carpool (2+ employees per car per ride);
- Provide incentives as feasible for employees who walk, ride manual bicycles, and/or take pubic transportation to work more than half of the time and can provide proof;
- Ensure the availability of a secure bicycle storage area within the Dixon Opportunity Center for use by employees; and
- Allow remote work for applicable employees where feasible for one or more days per week or equivalent hours.

SIGNIFICANCE AFTER MITIGATION

Significant and Unavoidable.

The employment-related VMT of the project could potentially be mitigated through the implementation of a mandatory commute trip reduction program, but, as explained, such a measure is not demonstrably feasible. Feasible measures included in Mitigation Measure 3.15-2 would reduce employee-generated VMT to some extent, although not enough to significantly lessen the impact. However, for the home-based VMT associated with the project's residential uses, no feasible mitigation strategy has been identified that would sufficiently reduce impacts to below significant levels. Consequently, the overall VMT impact of the project would remain significant and unavoidable.

3.16 UTILITIES AND SERVICE SYSTEMS

Page 3.16-16, first paragraph under the heading "Multiple Dry Years" is revised to read:

> During multiple dry years, ~~the City's surface water supplies (from both the CVP and SCWSP) may be significantly reduced. Thus, in the event of drought, the City will have~~ the City may choose to depend more heavily on conservation efforts, groundwater, and the proposed future supply projects. However, as demonstrated in the Water Supply Assessment (Appendix H), sufficient groundwater supplies exist to support the City's water demand needs during multiple dry years.

Page 3.16-33, the second paragraph under Impact 3.16-7, seventh sentence is revised to read:

> If a future city-wide storm drainage solution is pursued, the basin expansion would increase basin capacity to 360 acre feet of storage and would be utilized as a detention basin for the remaining undeveloped NEQSP properties west of Pedrick Road.

Page 3.16-33, the last paragraph, second sentence, is revised to read:

> The existing off-site flows will be routed around the Project site.

CHANGES TO FIGURES

On May 7, 2024, the City took action to adopt a comprehensive update to the City's Zoning Ordinance and Zoning Map, which went into effect on June 7, 2024. As part of that comprehensive update, the proposed Project site was rezoned to "Campus Mixed Use - Northeast Specific Plan overlay (CAMX-NESP)."

Although the City Council adopted the updated the Zoning Ordinance before the Draft EIR was published on May 24, 2024, amendments to the Zoning Ordinance did not go into effect until June 7, 2024, after the Draft EIR publication and during the 45-day comment review period. As part of that comprehensive update, the proposed Project site was rezoned to "Campus Mixed Use - Northeast Specific Plan overlay (CAMX-NESP)."

Therefore, **Figure ES-5** and **Figure 2-5**, Existing and Proposed Zoning, are revised to reflect that The Campus Project site is currently zoned as CAMX-NESP, and a "PD - Planned Development Overlay" would be implemented as part of the proposed Project.

Figure ES-6 and **Figure 2-6**, Proposed Land Use Plan, are revised to reflect an updated land use plan.

Figure 2-7, Illustrative Land Use Plan, is revised to reflect an updated land use plan.

A new **Figure 2-9**, Campus Water Plan, is added to show detail for the proposed onsite water distribution system.

Figure 2-9, Wastewater System, is renumbered to **Figure 2-10**. The content of the figure is unchanged.

A new **Figure 2-11**, Sewer Plan and Shed Map, is added to show detail for the proposed onsite wastewater system.

Figure 2-10, Proposed NEQSP Drainage System, is renumbered to **Figure 2-12**, and is revised to reflect an updated land use plan and resulting changes to the proposed drainage system.

Figure 2-11, Proposed Phasing Plan, is renumbered to **Figure 2-13**, and is revised to reflect an updated land use plan and resulting changes to the proposed phasing plan.

Figure 3-12-3, Transportation Noise on Project Site Ldn, dB(A), is revised to reflect an updated land use plan.

Figure 3.12-4, Transportation Noise on Project Site Ldn, dB(A) with 8-foot Wall Ldn (dB(A), is revised to reflect an updated land use plan, and show the location of soundwalls proposed for the Project site, and re-title to figure as follows: Transportation Noise on Project Site with Soundwall Ldn, dB(A).

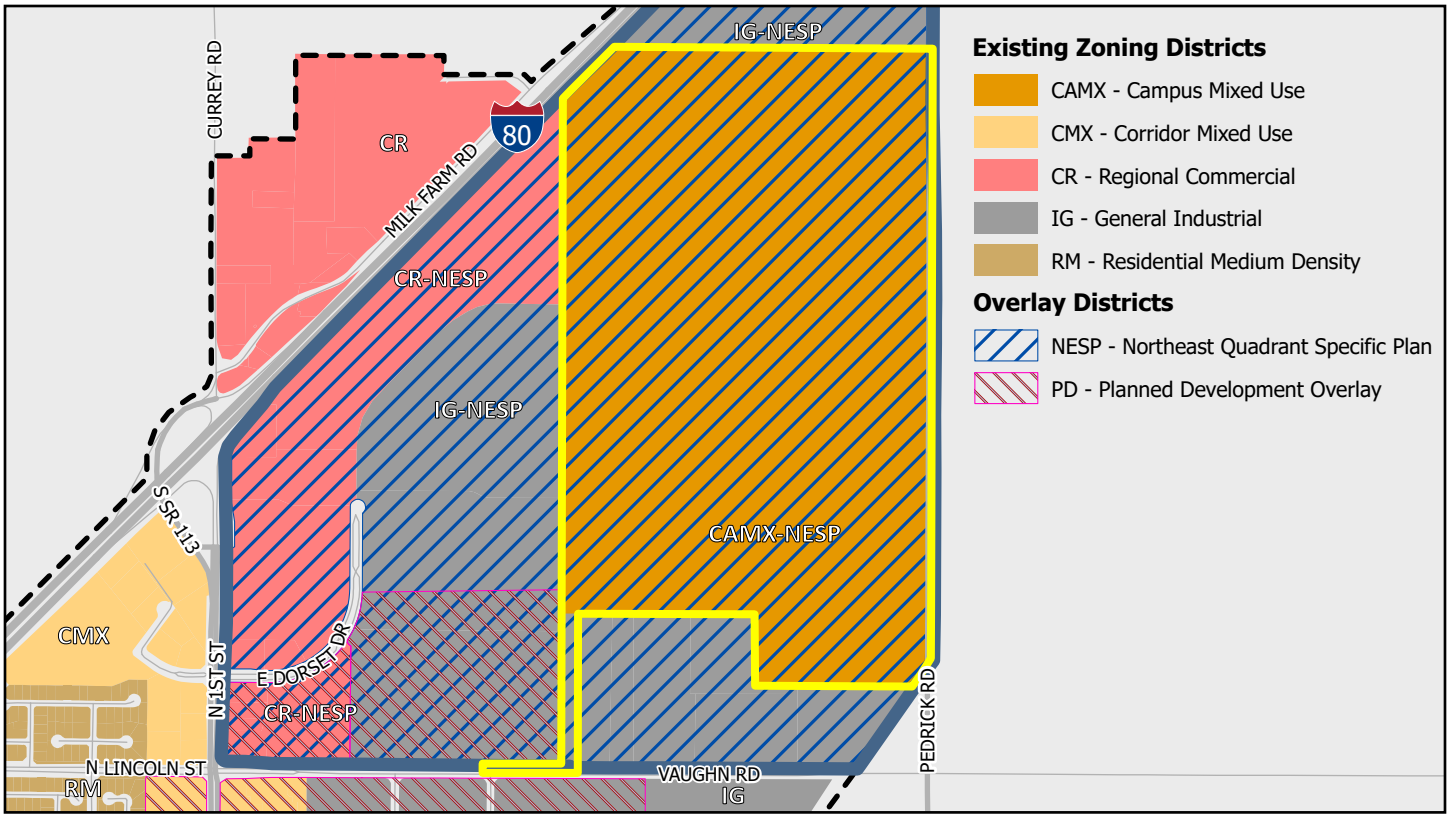
Figure 3.12-5, Non-Transportation Noise on Project Site, is revised to reflect an updated land use plan. It also shows updated noise contours from off-site stationary sources, specifically the Campbell Soup Supply Company processing facility.

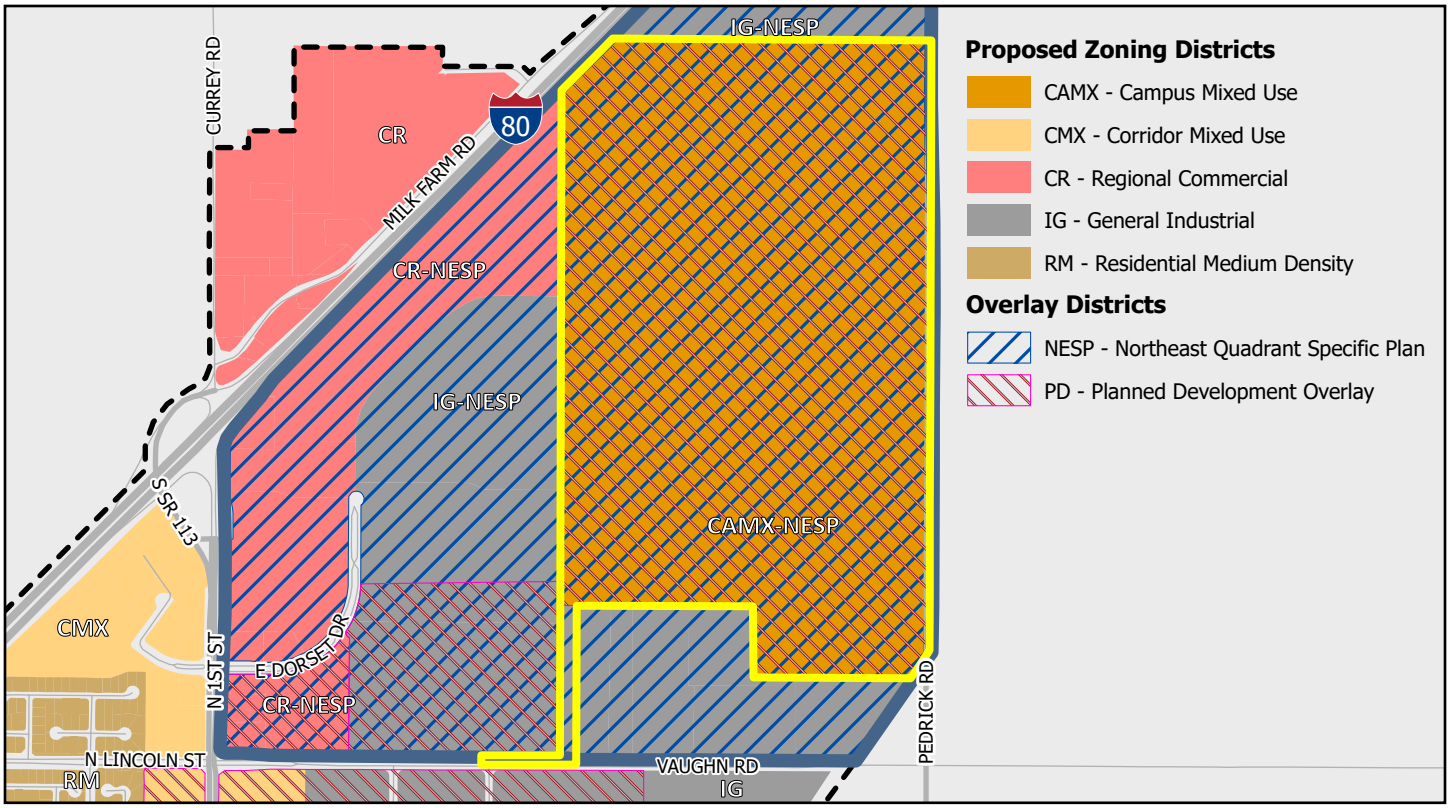
Figure 3.15-3, Site Plan and Internal Circulation, is revised to reflect an updated land use plan. However, there was no change to the internal circulation network.

CHANGES TO APPENDICES

Appendix D, Biological Resources Assessment (April 2023) is replaced by Biological Resources Assessment (July 2023).

A new appendix, Appendix P – Addendum to the Campus 257 NEQSP Traffic Impact Analysis, is added to address the revised site plan and provide clarifications to the Traffic Impact Analysis.





LEGEND

- City of Dixon
- Northeast Quadrant Specific Plan Area
- The Campus Project Site

THE CAMPUS EIR

Figure ES-5. Existing and Proposed Zoning

0 500 1,000
Feet

Sources: City of Dixon Zoning Adopted 5/7/2024.
Map date: July 9, 2024; Printed: October 24, 2024

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LEGEND

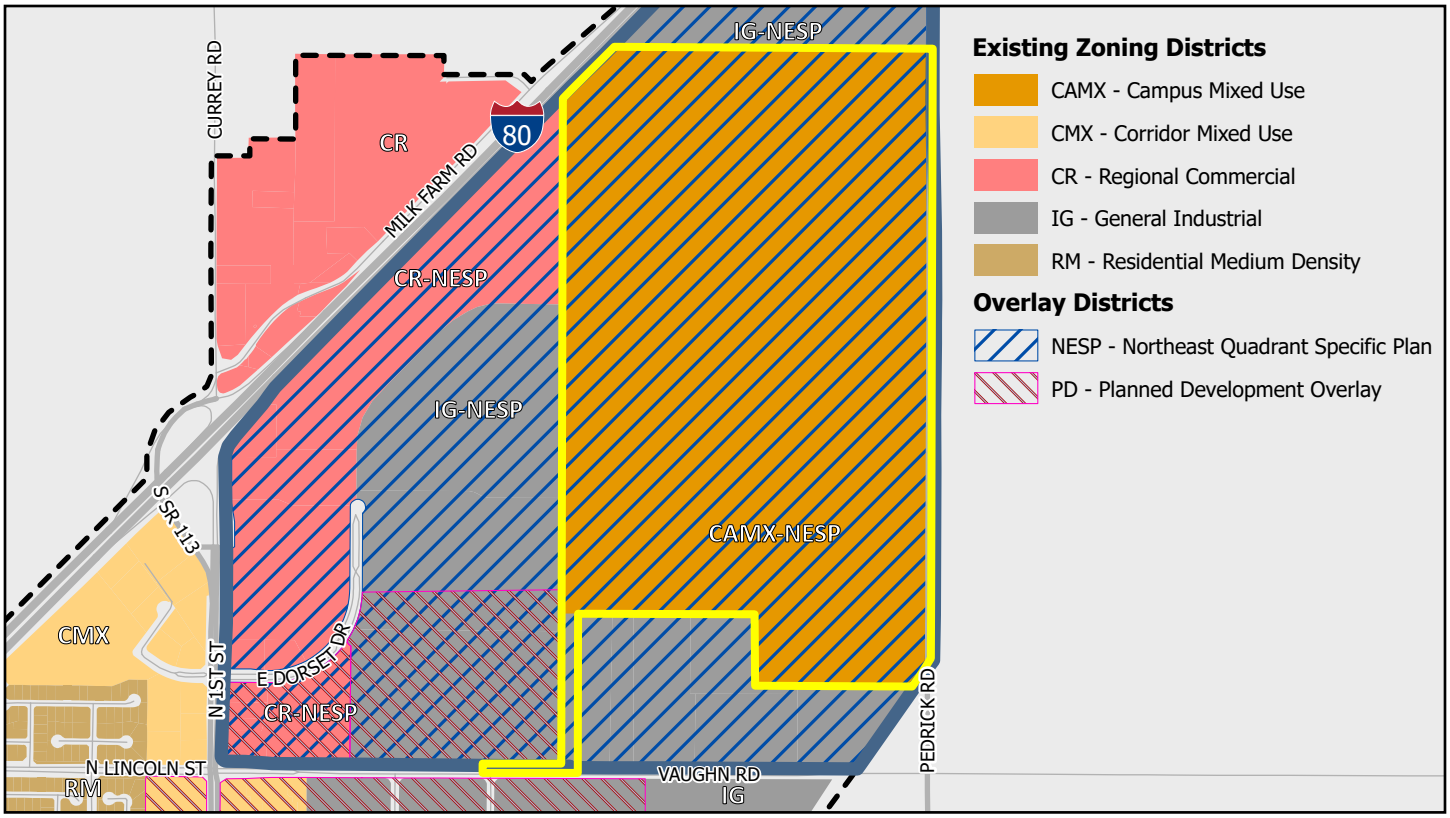
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Community Commercial
- Dixon Opportunity Center
- Park
- Drainage Basin
- Other

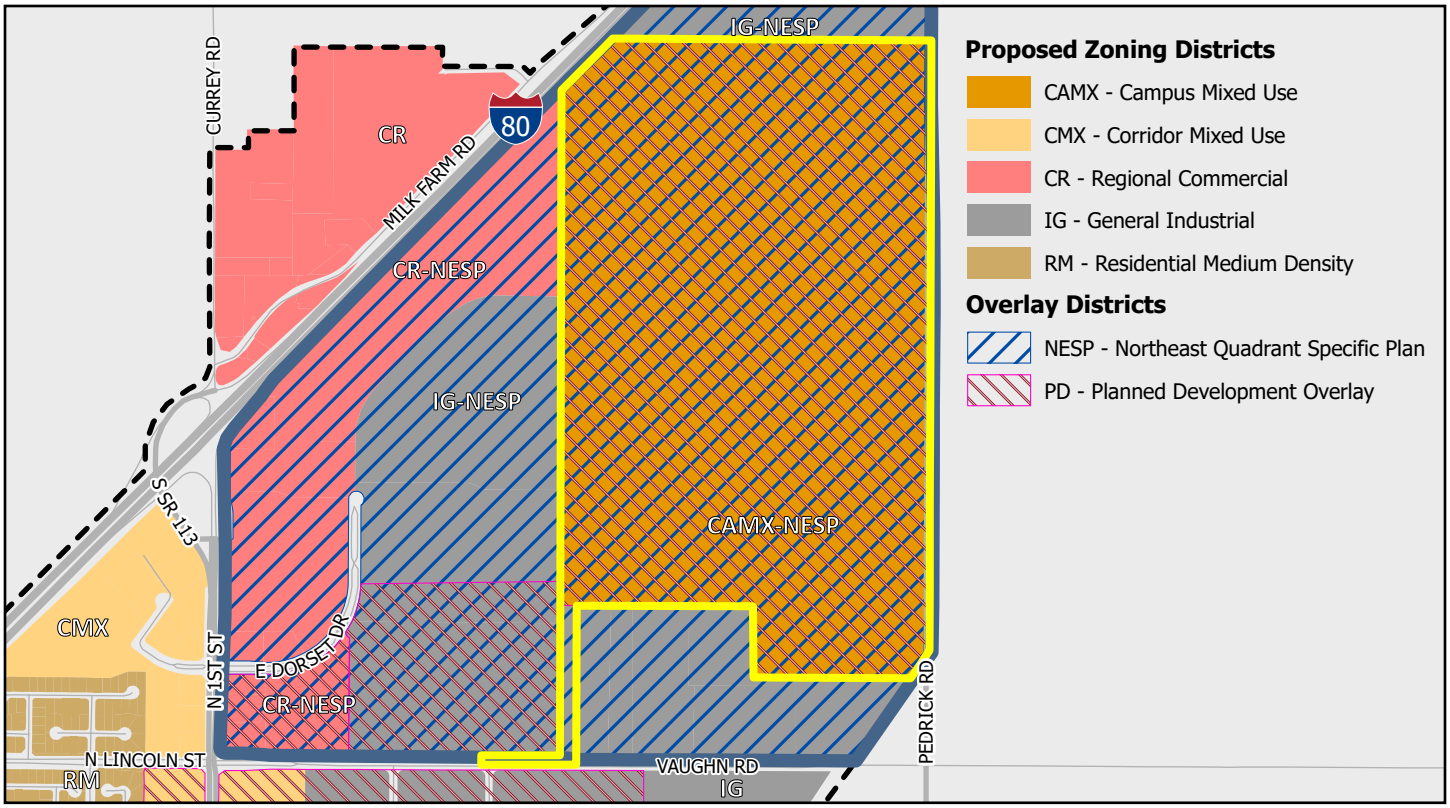
THE CAMPUS EIR

Figure ES-6. Proposed Land Use Plan

0 250 500
Feet

Sources: Morton & Pitalo, January 4, 2024. Map date: January 24, 2025.





LEGEND

- City of Dixon
- Northeast Quadrant Specific Plan Area
- The Campus Project Site

THE CAMPUS EIR

Figure 2-5. Existing and Proposed Zoning

0 500 1,000
Feet

Sources: City of Dixon Zoning Adopted 5/7/2024.
Map date: July 9, 2024.

LEGEND

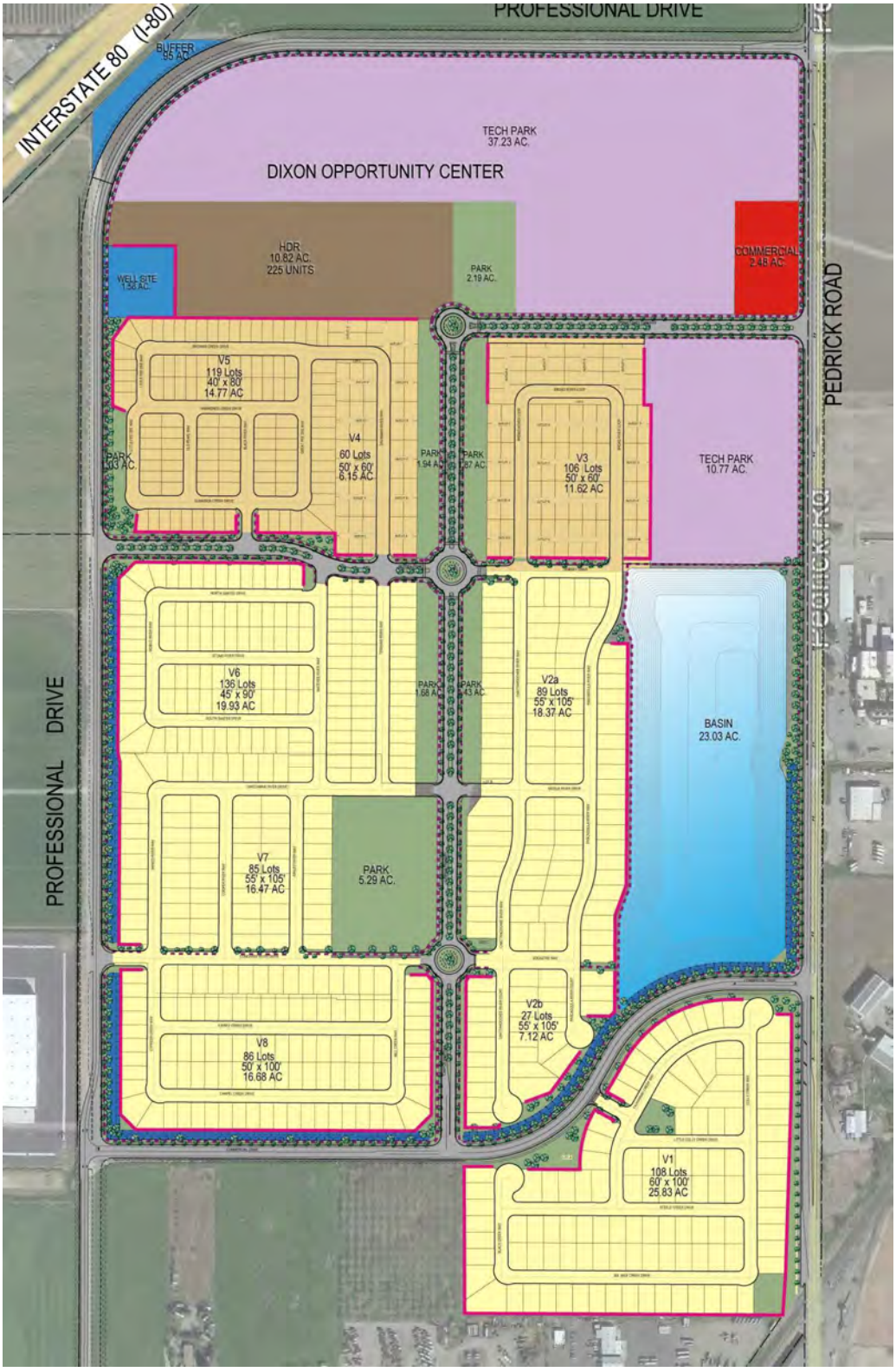
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Community Commercial
- Dixon Opportunity Center
- Park
- Drainage Basin
- Other

THE CAMPUS EIR

Figure 2-6. Proposed Land Use Plan

0 250 500
Feet

Sources: Morton & Pitalo, January 4, 2024. Map date: January 24, 2025.



LEGEND

- Low Density Residential
- Medium Density Residential
- High Density Residential
- Community Commercial
- Dixon Opportunity Center/Tech Park
- Park
- Drainage Basin
- Other

THE CAMPUS EIR

Figure 2-7. Illustrative Land Use Plan

0 250 500
Feet

Sources: Morton & Pitalo, January 4, 2024. Map date: January 23, 2025.

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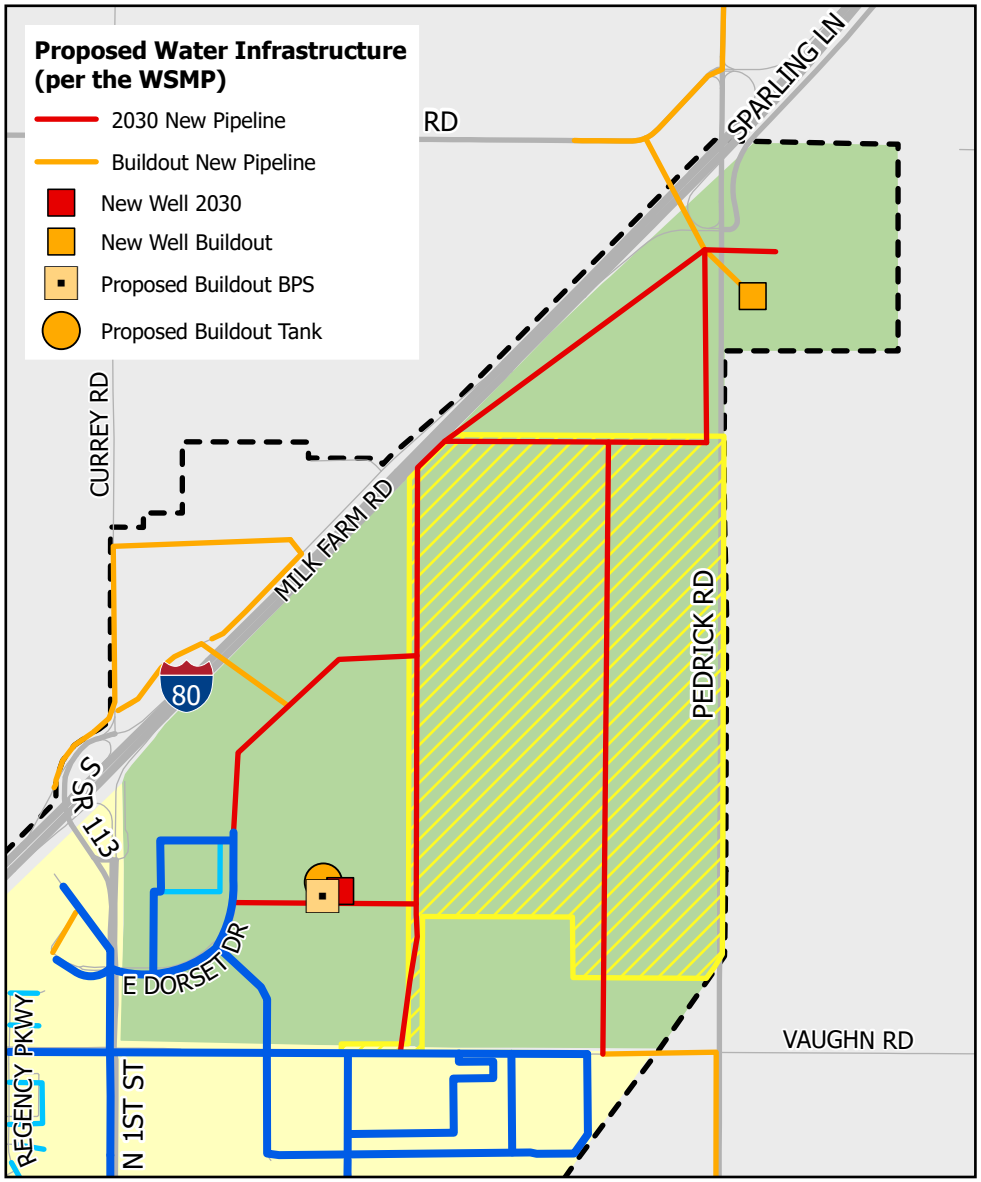

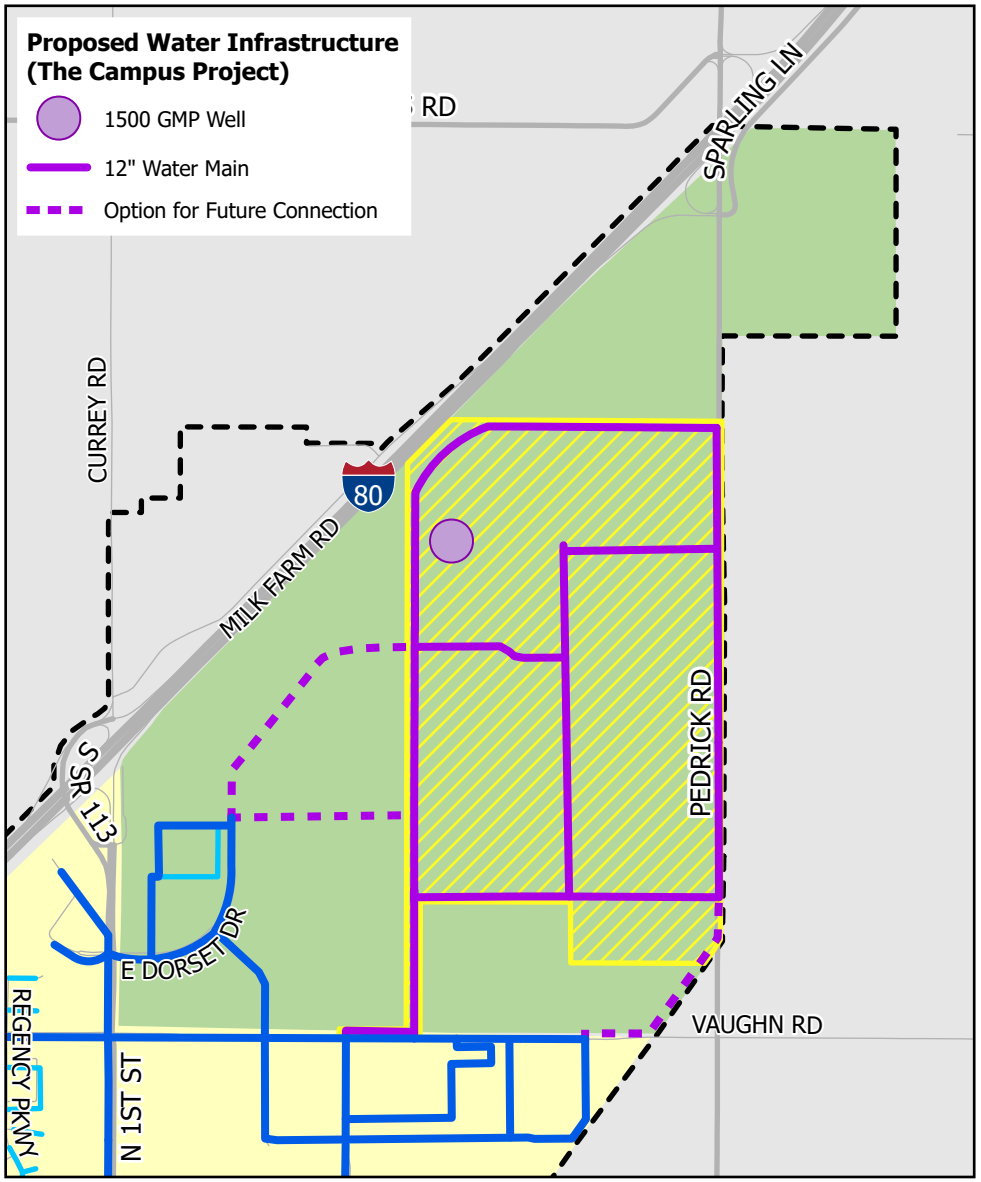

LEGEND

The Campus Project Site

Dixon City Boundary

City Water Service Areas

Core Zone

North Zone

Existing Pipelines

Less than 10-inch

10-inch and Greater

THE CAMPUS EIR

Figure 2-8. Water Distribution System

0 500 1,000 Feet

Sources: The Campus, City of Dixon, Water Study (v.3), prepared by Morton & Pitalo. Map date: May 3, 2024.

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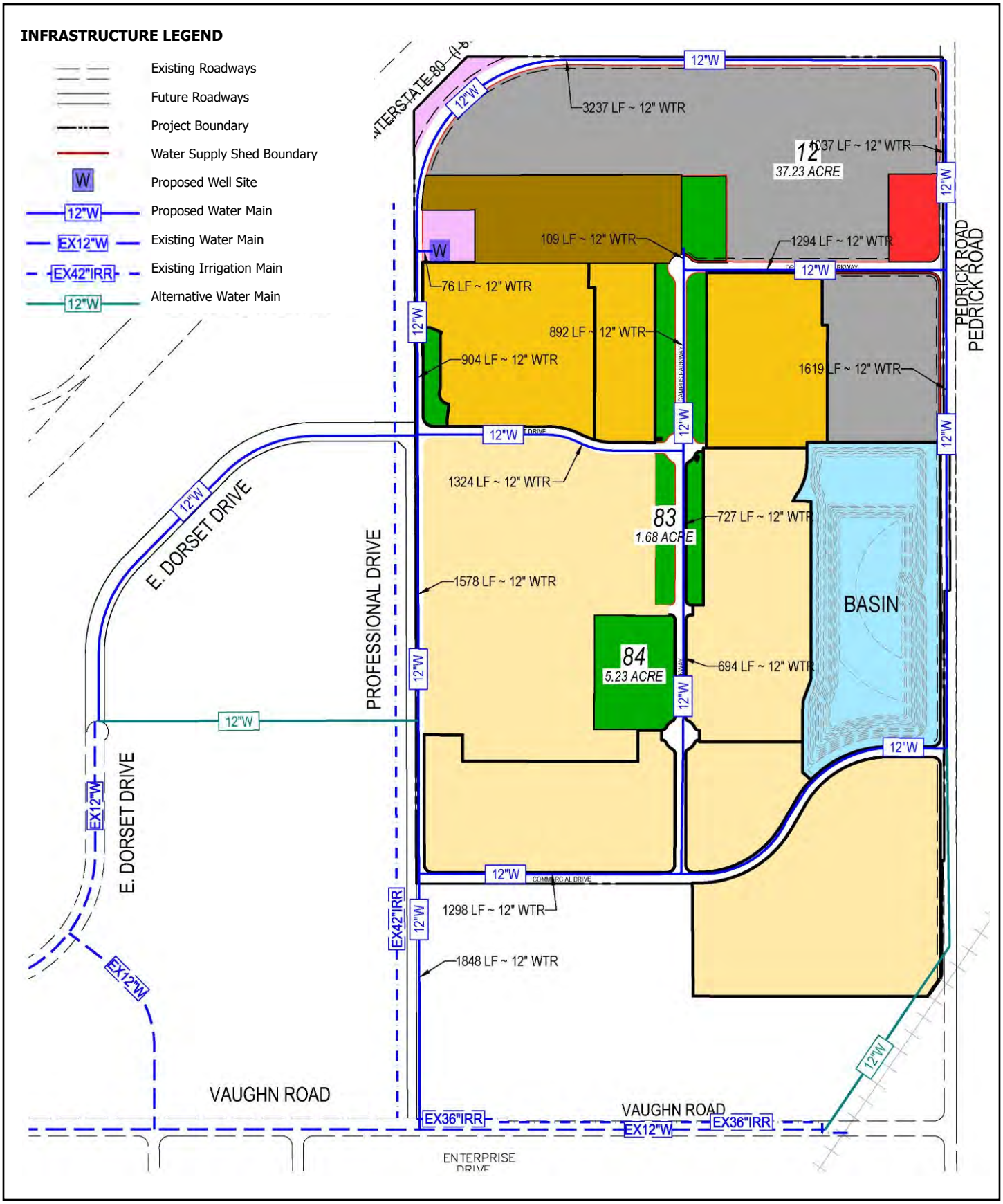


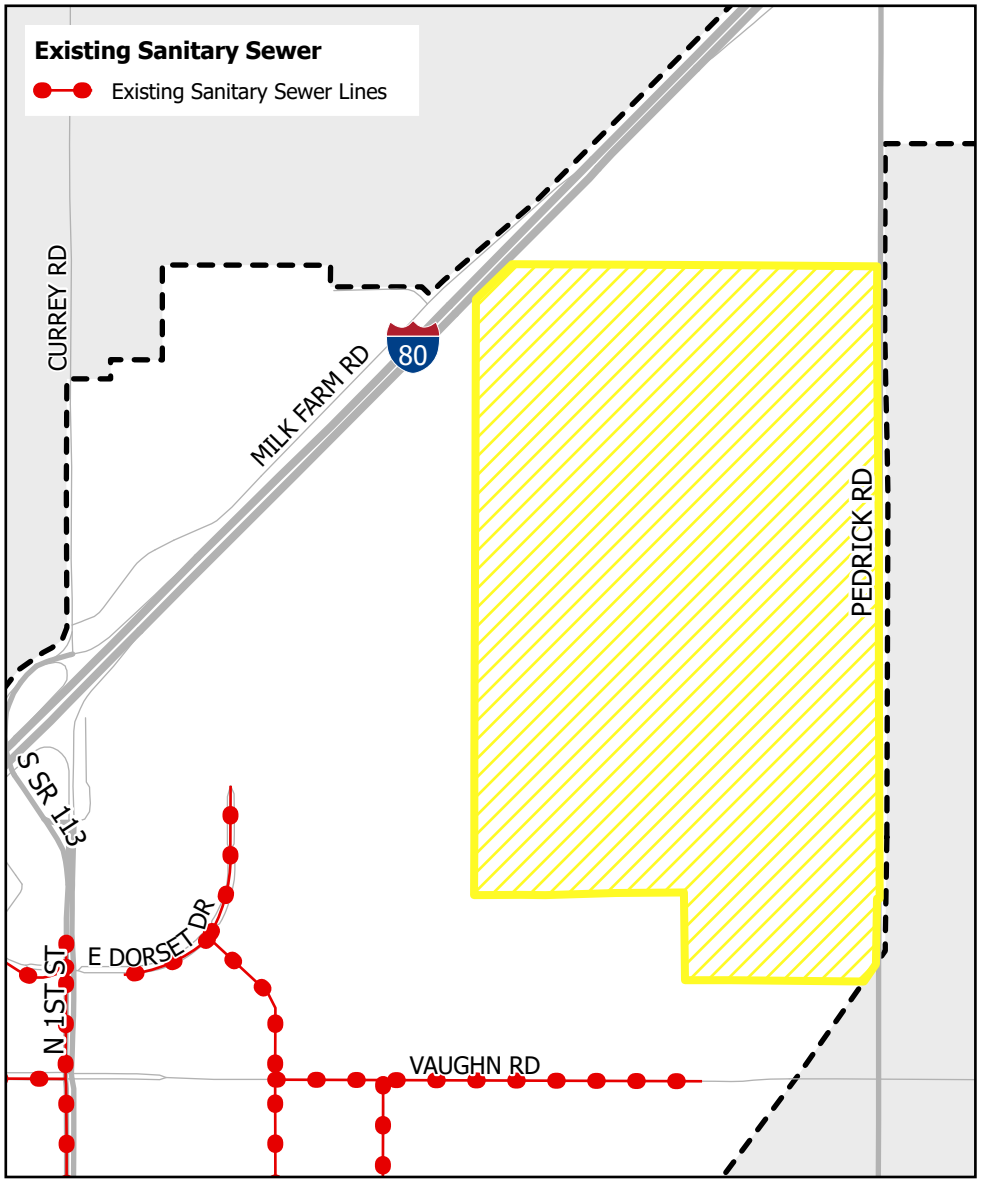
LAND USE LEGEND

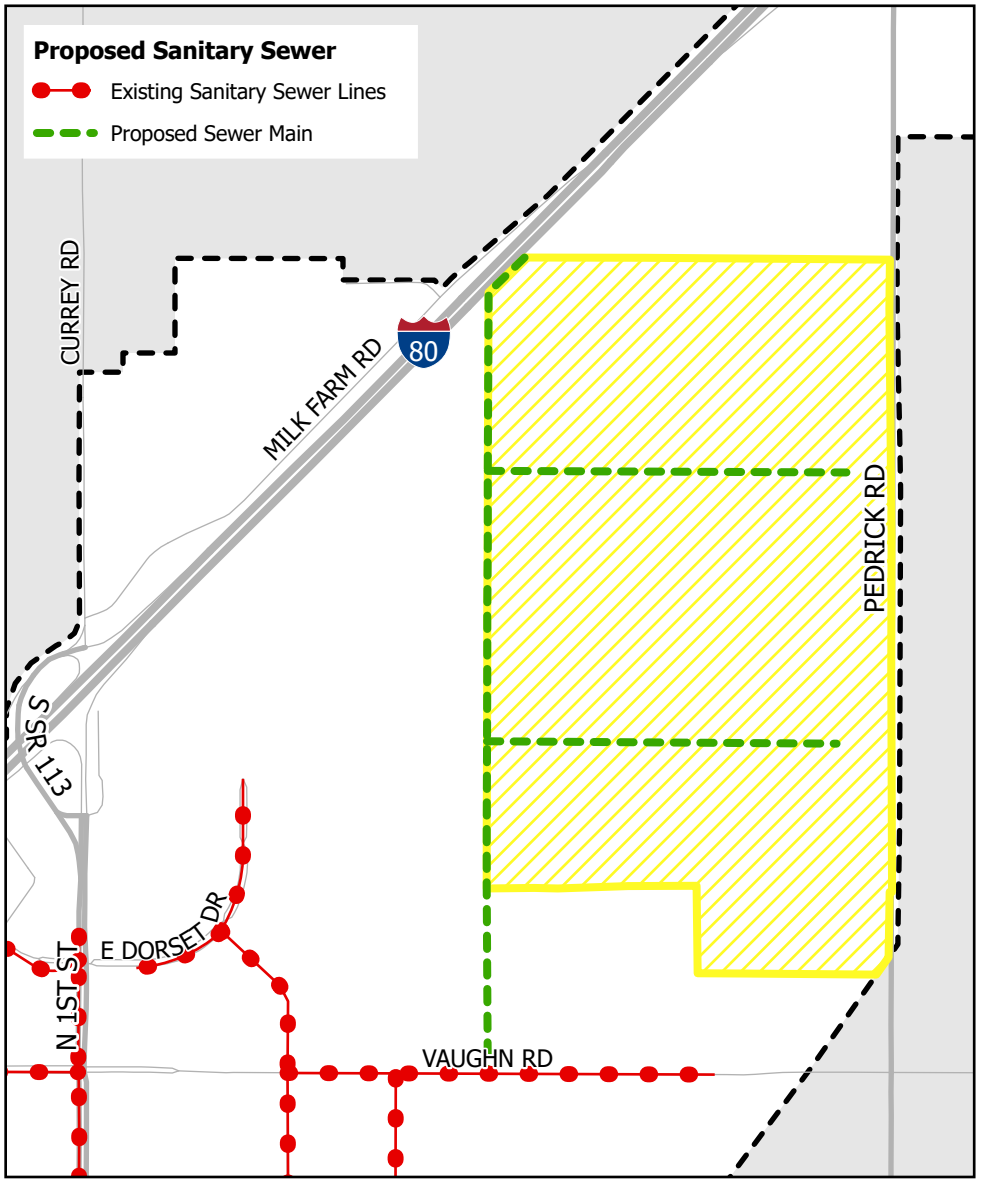
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Community Commercial
- Dixon Opportunity Center/Tech Park
- Park
- Drainage Basin
- Other

THE CAMPUS EIR

Figure 2-9. Campus Water Plan

Sources: Morton & Pitalo, January 2025. Map date: January 24, 2025.





LEGEND

The Campus Project Site

Dixon City Boundary

THE CAMPUS EIR

Figure 2-10. Wastewater System

0 500 1,000
Feet

Sources: City of Dixon, California, Dixon 257 Draft Sewer Study, July7, 2023, prepared by Morton & Pitalo. Map date: November 15, 2023. Renumbered: October 28, 2024.

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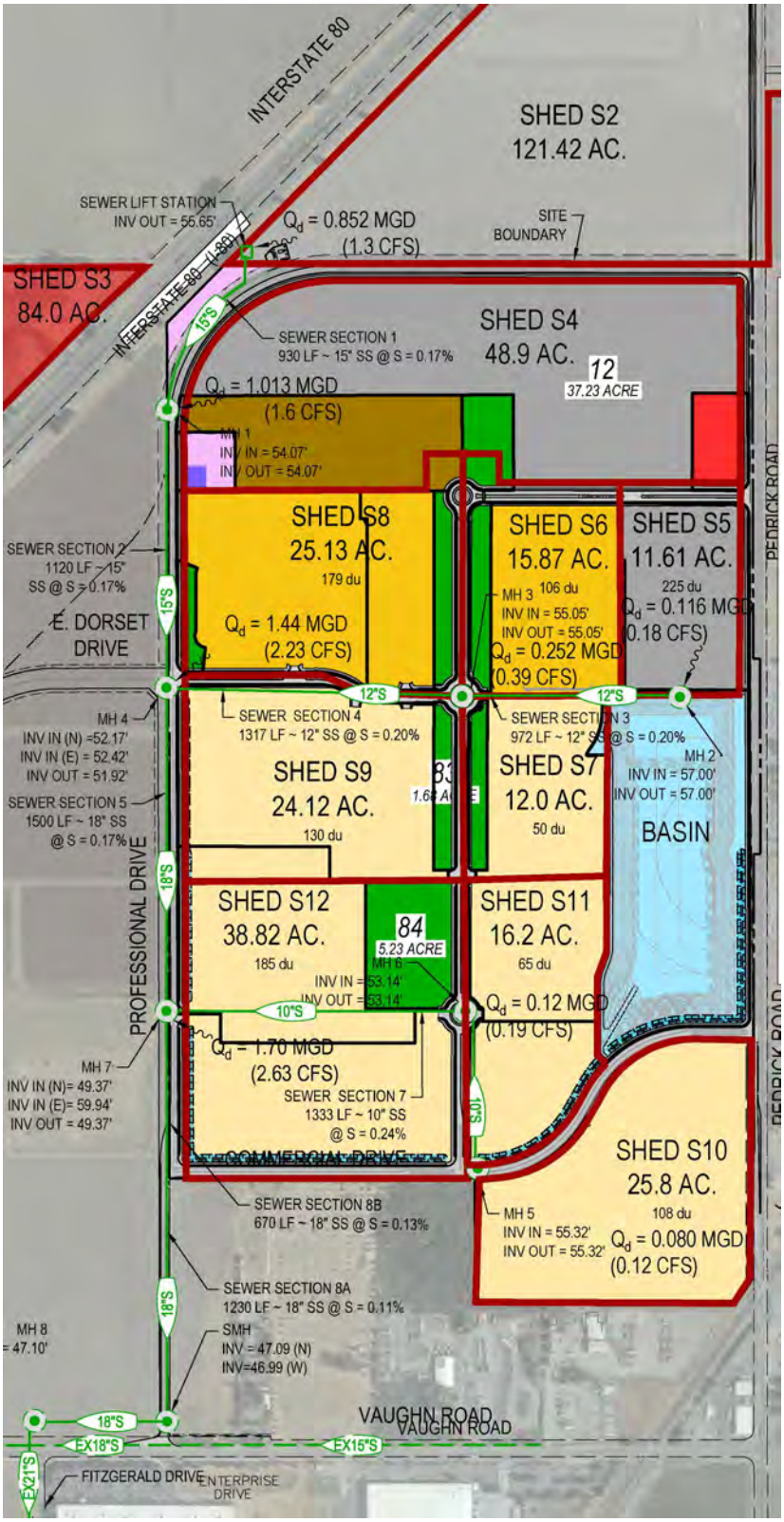
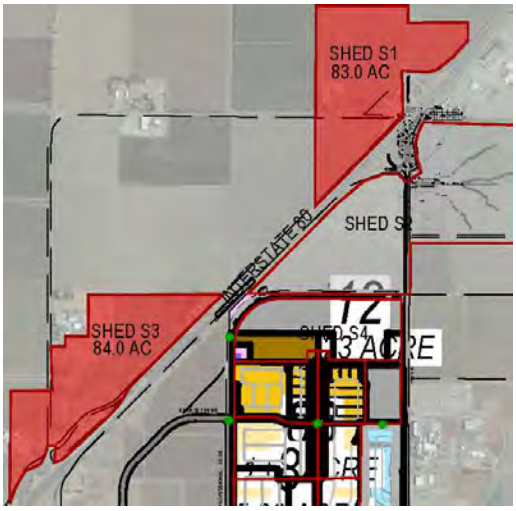


INFRASTRUCTURE LEGEND

- Existing Roadways
- Future Roadways
- Project Boundary
- Sewer Shed Boundary
- 15"S — Proposed Sewer Main
- EX18"S — Existing Sewer Main
- Sewer Node
- Proposed Sewer Trunk Main
- Existing Sewer Main
- Q_d=0.1 MGD (0.2 CFS) — Design Sewer Flow
- INV = 48.60 — Sewer Pipe Invert

OFFSITE SHED



LAND USE LEGEND

- Low Density Residential
- Medium Density Residential
- High Density Residential
- Community Commercial
- Dixon Opportunity Center/Tech Park
- Park
- Drainage Basin
- Other
- Propsed Well Site

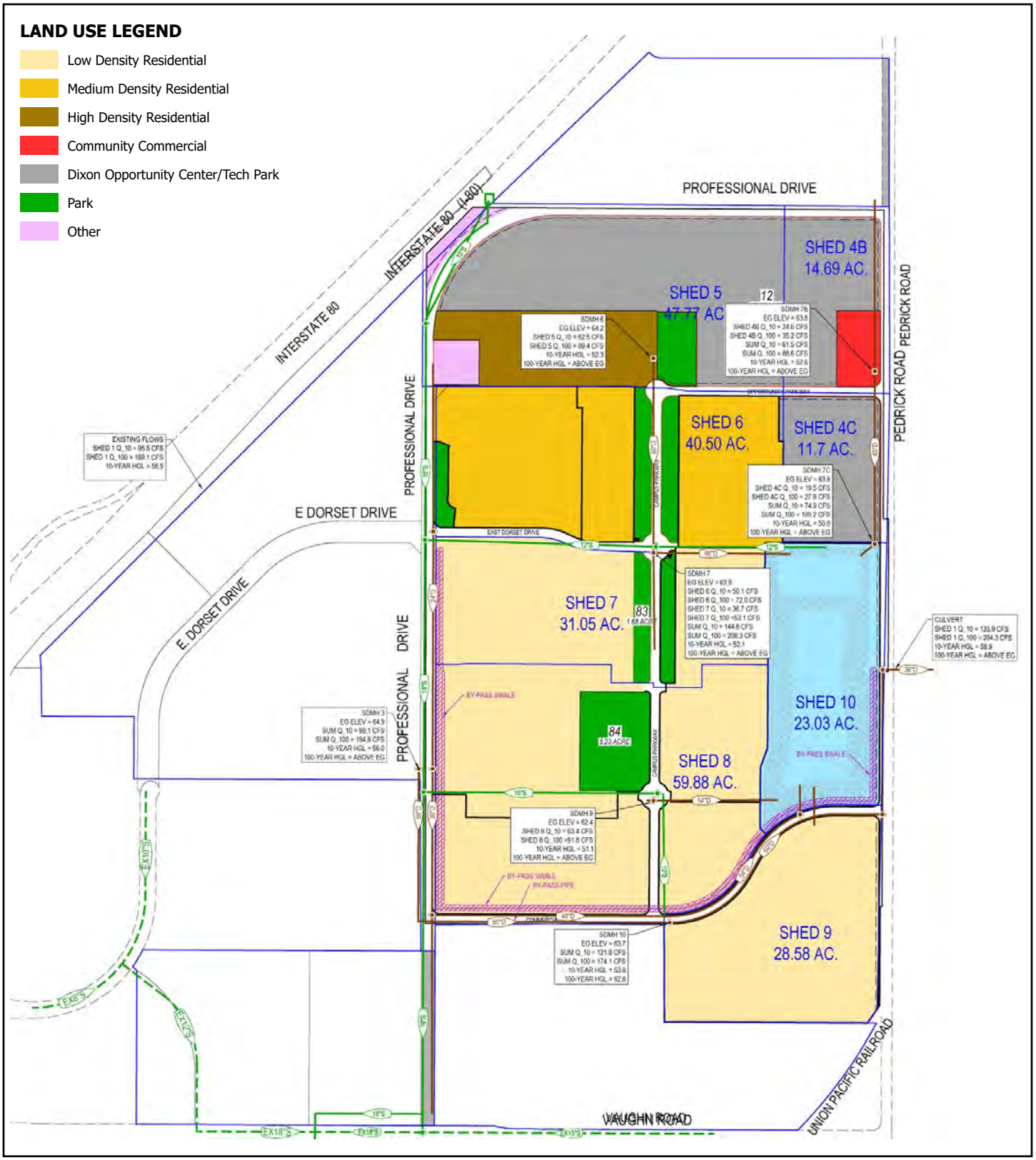
THE CAMPUS EIR

Figure 2-11. Sewer Plan and Shed Map

0 500 1,000
Feet

Sources: Morton & Pitalo Inc., January 2025. Map date: January 24, 2025.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm



INFRASTRUCTURE LEGEND

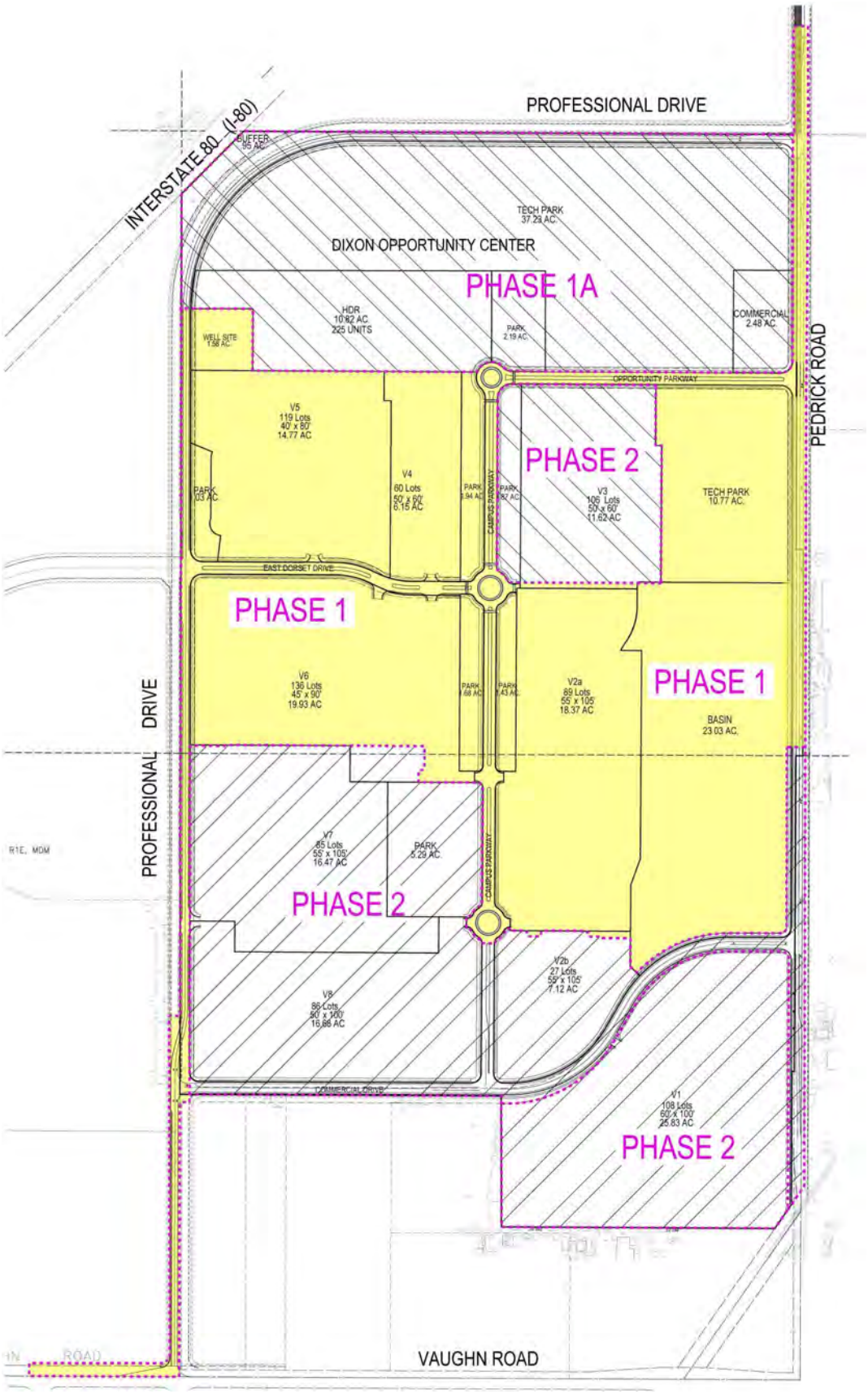
- Land Use Boundary
- Shed Boundary
- Storm Drain Line
- Sewer Line
- Existing Sewer Line
- Storm Drain Pipe Size and Direction of Flow
- Storm Drain Manhole
- Sewer Pipe Size and Direction of Flow (EX=Existing)
- Sewer Manhole

THE CAMPUS EIR

Figure 2-12. Proposed Drainage System

0 500 1,000
Feet

Sources: Morton & Pitalo Inc., January 2025. Map date: January 24, 2025.



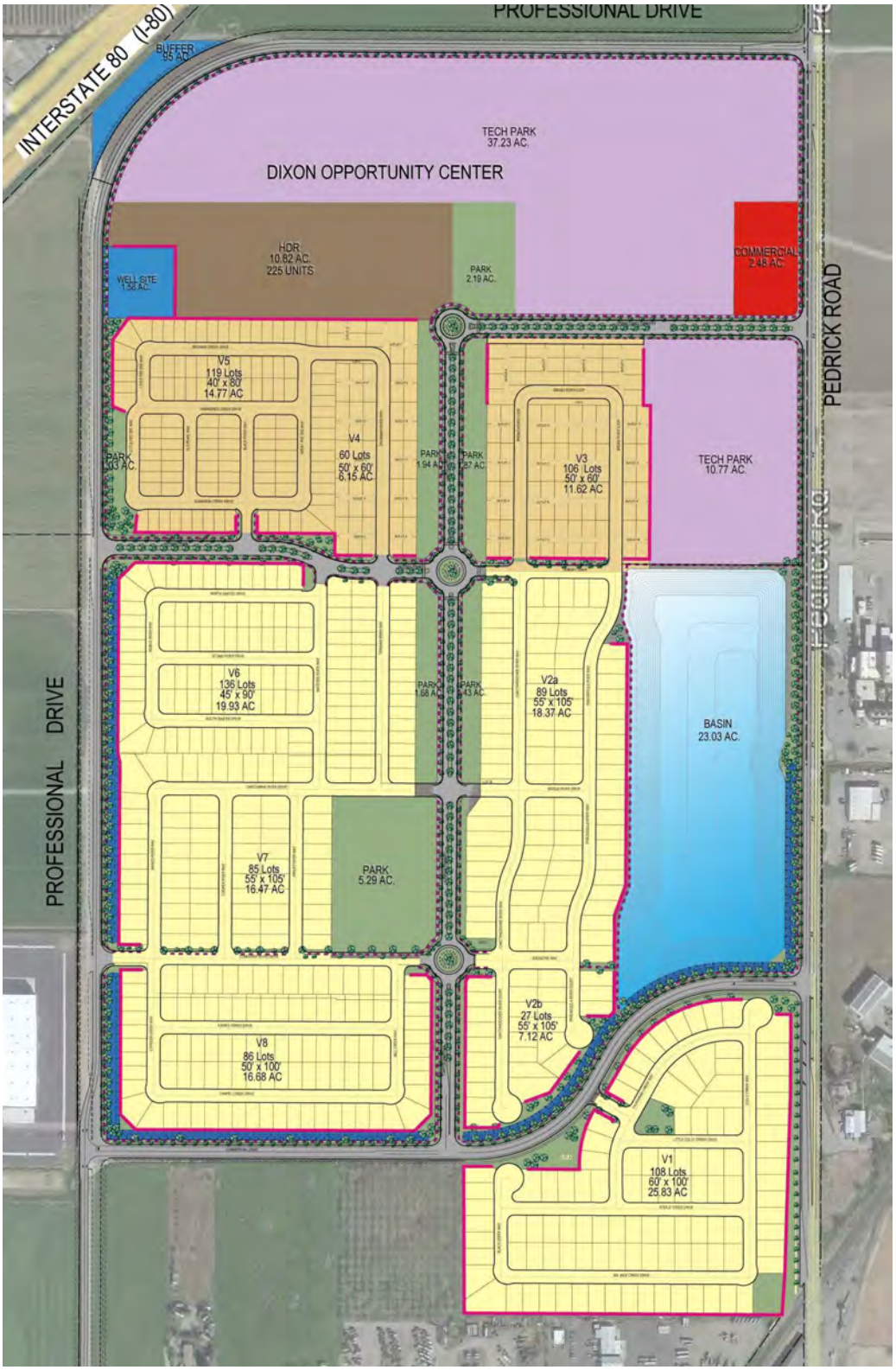
THE CAMPUS EIR

LEGEND

Phase 1 | Phase 1A | Phase 2

Figure 2-13. Proposed Phasing Plan

Sources: Morton & Pitalo, January 4, 2024. Map date: January 24, 2025.



LEGEND

- Low Density Residential
- Medium Density Residential
- High Density Residential
- Community Commercial
- Dixon Opportunity Center/Tech Park
- Park
- Drainage Basin
- Other

THE CAMPUS EIR

Figure 3.15-3. Site Plan and Internal Circulation

0 250 500
Feet

Sources: Morton & Pitalo, January 4, 2024. Map date: January 24, 2025.

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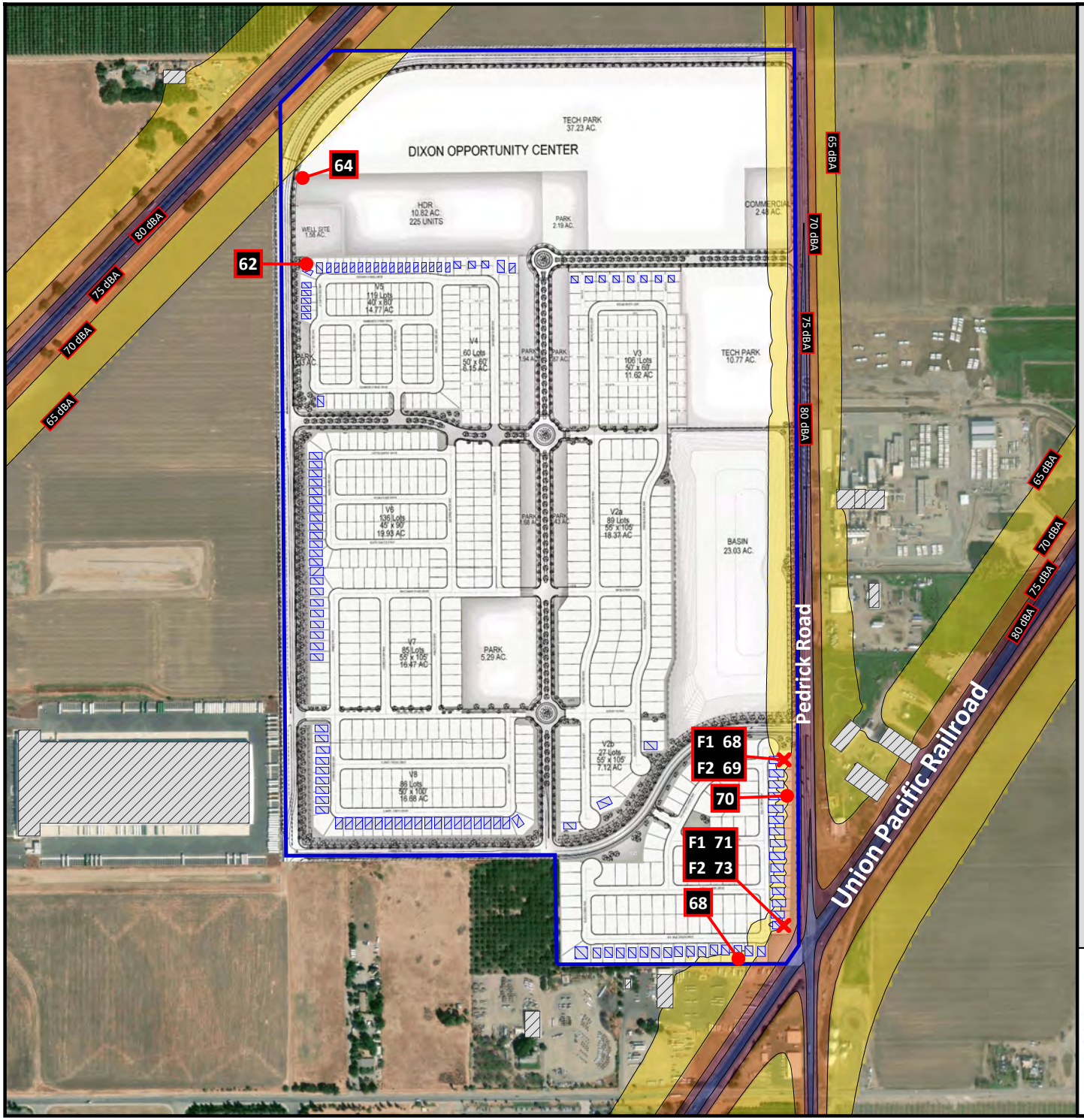


The Campus Development

City of Dixon, California

Figure 3.12-3

Transportation Noise on Project Site
Ldn, dB(A)

Notes: F# = Floor #

Noise Level, dB(A)

65 <	<=	70	
70 <	<=	75	
75 <	<=	80	
80 <			

Legend

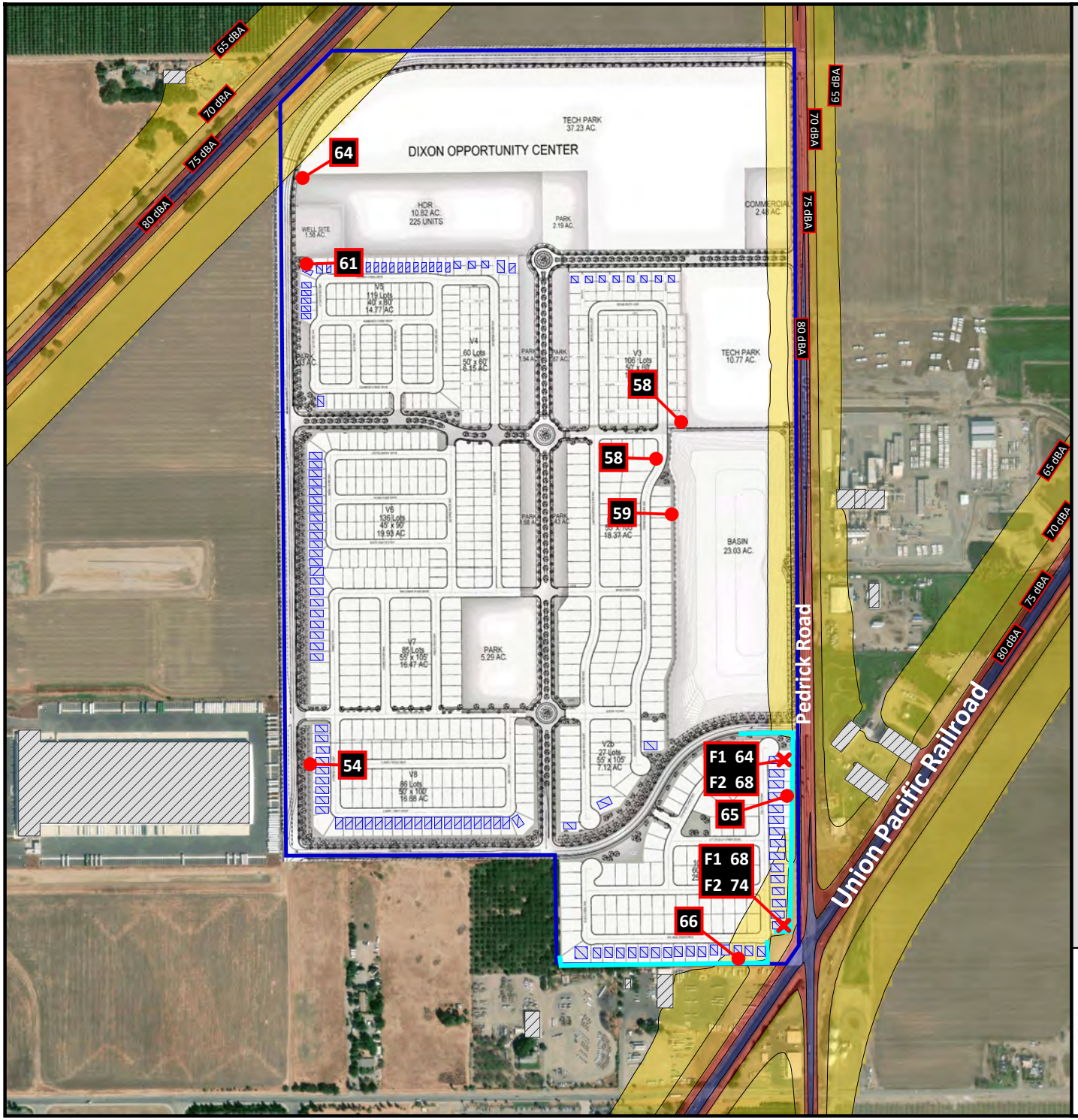
- Project Building
- Existing Building
- Project Site
- Facade Noise Level
- Outdoor Area Noise Level

Scale 1:735

0 100 200 400 600 800 feet

N

SAXELBY ACOUSTICS
Acoustics · Noise · Vibration



The Campus Development

City of Dixon, California

Figure 3.12-4

Transportation Noise on Project Site
with Soundwall
Ldn, dB(A)

Notes: F# = Floor #

Noise Level, dB(A)

65 <	<=	70
70 <	<=	75
75 <	<=	80
80 <		

Legend

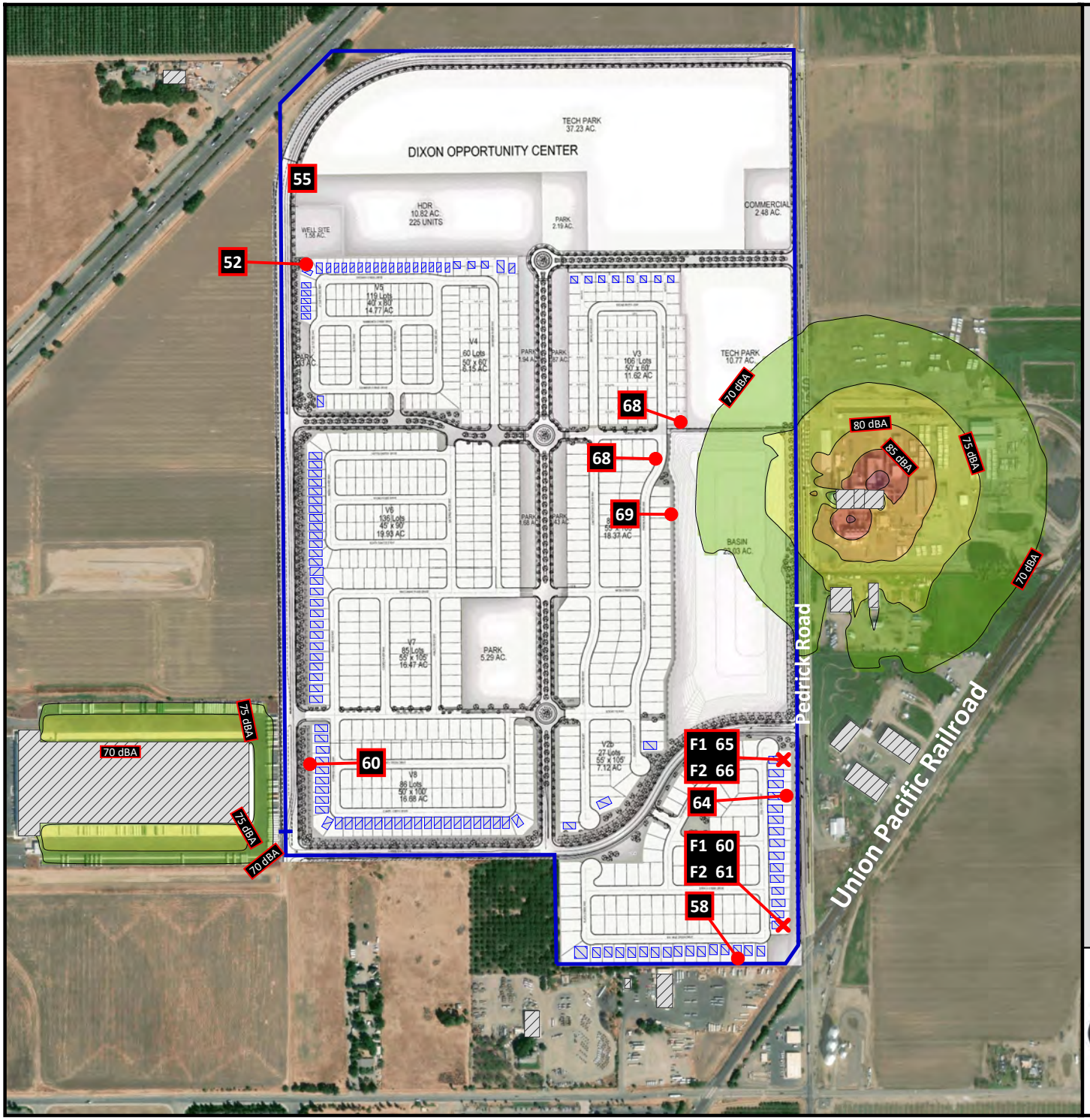
- Project Building
- Existing Building
- Project Site
- 8-foot Sound Wall
- Facade Noise Level
- Outdoor Area Noise Level

Scale 1:735

0 100 200 400 600 800 feet

N

SAXELBY ACOUSTICS
Acoustics · Noise · Vibration



The Campus Development

City of Dixon, California

Figure 3.12-5

Non-Transportation Noise
on Project Site
Ldn, dB(A)

Notes: F# = Floor #

Noise Level, dB(A)

70 <	<=	75	
75 <	<=	80	
80 <	<=	85	
85 <	<=	90	
90 <			

Legend

- Project Building
- Existing Building
- Project Site
- Facade Noise Level
- Facade point with conflict

Scale 1:735

0 100 200 400 600 800 feet

N

SAXELBY ACOUSTICS
Acoustics · Noise · Vibration

Appendix D

Dixon 257 Project

Biological Resources Assessment

July 2023 | 07997.00003.001

Prepared for:

Dixon Venture, LLC
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Sacramento, CA 95864

Prepared by:

HELIX Environmental Planning, Inc.
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Roseville, CA 95661

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LIST OF APPENDICES

LIST OF FIGURES

Acronyms and Abbreviations

amsl	above mean sea level
BRA	Biological Resources Assessment
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CSA	California Special Animals
CWA	Clean Water Act
DBH	diameter at breast height
FESA	Federal Endangered Species Act
HCP	Habitat Conservation Plan
HELIX	HELIX Environmental Planning, Inc.
IPaC	Information for Planning and Consultation
MBTA	Migratory Bird Treaty Act
NCCP	Natural Community Conservation Plan
NEPA	National Environmental Policy Act
NPPA	Native Plant Protection Act
NRCS	Natural Resource Conservation Service
OHWM	ordinary high water mark
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SSC	Species of Special Concern
SWRCB	State Water Resources Control Board
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

EXECUTIVE SUMMARY

HELIX Environmental Planning, Inc. (HELIX) conducted a Biological Resources Assessment (BRA) for the ±279.76-acre Dixon 257 Project (Study Area) on February 14, 2023. The Study Area is located east of Pedrick Road, north of Vaughn Road, and south of Interstate 80 (I-80), in the City of Dixon, Solano County, California. The Study Area is situated in Sections 1 and 12 of Township 7 North and Range 1 East, as depicted on the U.S. Geological Survey (USGS) *Dixon, CA* 7.5-minute quadrangle map. The approximate center of the Study Area is at latitude 38.4758555 and longitude -121.8089351, NAD 83, and is located at an elevation between 60 and 67 feet above mean sea level.

The purpose of this BRA is to describe baseline conditions within the Study Area, summarize the general biological resources occurring or potentially occurring in the Study Area, to assess the suitability of the Study Area to support special-status species and sensitive vegetation communities or habitats, and to provide recommendations for regulatory permitting or further analysis that may be required prior to development activities occurring on the site.

The ±279.76-acre Study Area is located in an agricultural setting and is currently used to cultivate various row crops. The Study Area is comprised of cropland (261.19 acres), developed/disturbed areas (17.43 acres), and ditches (1.14 acres total). Surrounding land uses include agricultural land, industrial areas, and I-80.

Known or potential biological constraints in the Study Area include:

- Potential nesting and/or foraging habitat for special-status and migratory birds including tricolored blackbird (*Agelaius tricolor*), burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), white-tailed kite (*Elanus leucurus*), and northern harrier (*Circus hudsonius*).

- Aquatic resources that may be considered waters of the U.S. and/or State.

1.0 INTRODUCTION

This report summarizes the findings of a Biological Resources Assessment (BRA) completed by HELIX Environmental Planning, Inc. (HELIX) for the 279.76-acre Dixon 257 Project (Study Area). The Study Area is located east of Pedrick Road, north of Vaughn Road, and south of Interstate 80 (I-80), in the City of Dixon (City), Solano County, California. This document addresses the on-site physical features, plant communities present, and the common plant and wildlife species occurring or potentially occurring in the Study Area. In addition, the suitability of habitats to support special-status species and sensitive habitats are analyzed, as well as any potential impacts to biological resources that could occur as a result of development of the proposed project. Where applicable, mitigation measures are provided to avoid and/or reduce any such impacts to less than significant.

1.1 PROJECT DESCRIPTION

The Proposed Project includes development of a mixed-use development consistent with the City's recently created Campus Mixed-Use General Plan designation. The Project is located within the City's Northeast Quadrant Specific Plan (NEQSP) and comprises nearly 40 percent of the NEQSP's total ±643 acres. The project site is located on the eastern edge of the NEQSP adjacent to Pedrick Road.

1.1.1 Tech Campus

As defined by the City's 2040 General Plan, the intent of the Campus Mixed Use designation is "*…to foster new mixed employment districts with a range of job generated uses, housing, and easy access to the regional transportation network.*" Project implementation would include a 50-acre Campus Mixed Use area (Tech Campus) at the northern boundary of the site providing direct access to the future Professional Drive extension connecting to Pedrick Road. A two-acre commercial site is proposed in the southeast corner of the Tech Campus with direct access to Pedrick Road and adjacent residential land use.

1.1.2 Residential

Residential land uses would include high-, medium-, and low-density housing comprising approximately eight villages situated around a central vehicular and pedestrian corridor that runs south to north and with connection to the Tech Campus. In addition, linear parks and landscape corridors are proposed to provide opportunities for pedestrian and bicycle connections within the Project, the NEQSP, and the City of Dixon.

1.1.3 Access and Circulation

Current property access consists of an existing roadway (Pedrick Road) along the eastern boundary of the Project site. As planned for in the NEQSP, a future four-lane arterial (Professional Drive) will be located along the western and northern Project boundary. In addition, a planned extension of Dorset Drive will connect to Professional Drive near the center of Tech Campus providing connectivity to the commercial and industrial uses currently under development to the west of the Project site.

Also, as defined in the proposed amendment to the NEQSP, the planned Vaughn Road cut-off is proposed as "Commercial Drive" as defined in the original NEQSP. This will allow traffic to go from Professional Drive to Pedrick Road and allow for the termination of Vaughn Road and eliminating the

Vaughn Road Railroad crossing. The intersection of Commercial Drive and Pedrick Road is located such that it allows maximum flexibility to address the future Pedrick Road over-crossing of the railroad located at the extreme southeastern corner of the project site.

1.1.4 Drainage/Stormwater Control

The proposed NEQSP amendment defines a Conceptual Drainage Plan solution for the NEQSP area that includes defining a stand-alone drainage solution for the Tech Campus. This solution proposes the use of the on-site land area south of the Vaughn Road realignment.

Additionally, a proposed detention basin would be constructed in the southeast corner of the Project site with an outfall to the existing culvert at Pedrick Road which is tributary to the Tremont 3 drainage facility. This new basin will meet the specific needs of the NEQSP, more specifically the Tech Campus and allow the proposed Project to develop independent of the surrounding properties, as well as prior to the identification of the final City-wide regional storm drainage and conveyance system solution for the NEQSP area.

2.0 REGULATORY FRAMEWORK

Federal, State, and local environmental laws, regulations, and policies relevant to the California Environmental Quality Act (CEQA) review process are summarized below. Applicable CEQA significance criteria are also addressed in this section.

2.1 FEDERAL REGULATIONS

2.1.1 Federal Endangered Species Act

The U.S. Congress passed the Federal Endangered Species Act (FESA) in 1973 to protect species that are endangered or threatened with extinction. FESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

FESA prohibits the “take” of endangered or threatened wildlife species. “Take” is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (FESA Section 3 [(3) (19)]). Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 CFR §17.3). Harass is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR §17.3). Actions that result in take can result in civil or criminal penalties.

In the context of the proposed Project, FESA consultation with the U.S. Fish and Wildlife Service (USFWS) and/or the National Marine Fisheries Service (NMFS) would be initiated if development resulted in the potential for take of a threatened or endangered species or if issuance of a Section 404 permit or other federal agency action could result in take of an endangered species or adversely modify critical habitat of such a species.

2.1.2 Migratory Bird Treaty Act

Raptors, migratory birds, and other avian species are protected by a number of State and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior.

2.1.3 The Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (Eagle Act) prohibits the taking or possession of and commerce in bald and golden eagles with limited exceptions. Under the Eagle Act, it is a violation to "*take, possess, sell, purchase, barter, offer to sell, transport, export or import, at any time or in any manner, any bald eagle commonly known as the American eagle, or golden eagle, alive or dead, or any part, nest, or egg, thereof.*" Take is defined to include pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, and disturb. Disturb is further defined in 50 CFR Part 22.3 as "*to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.*"

2.2 STATE JURISDICTION

2.2.1 California Endangered Species Act

The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA is similar to the FESA but pertains to State-listed endangered and threatened species. CESA requires state agencies to consult with the California Department of Fish and Wildlife (CDFW), when preparing CEQA documents. The purpose is to ensure that the State lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction, or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (Fish and Game Code §2080). CESA directs agencies to consult with CDFW on projects or actions that could affect listed species. It also directs CDFW to determine whether jeopardy would occur and allows CDFW to identify "reasonable and prudent alternatives" to the project consistent with conserving the species. CESA allows CDFW to authorize exceptions to the State's prohibition against take of a listed species if the "take" of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (Fish & Game Code §2081).

2.2.2 California Department of Fish and Game Codes

A number of species have been designated as "fully protected" species under Sections 5515, 5050, 3511, and 4700 of the Fish and Game Code, but are not listed as endangered (Section 2062) or threatened (Section 2067) species under CESA. Except for take related to scientific research, all take of fully protected species is prohibited. The California Fish and Game Code defines take as "*hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.*" Additionally, Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibits the killing of birds or the destruction of bird nests.

2.2.3 Native Plant Protection Act

The Native Plant Protection Act (NPPA), enacted in 1977, allows the Fish and Game Commission to designate plants as rare or endangered. The NPPA prohibits take of endangered or rare native plants, with some exceptions for agricultural and nursery operations and emergencies. Vegetation removal from canals, roads, and other sites, changes in land use, and certain other situations require proper advance notification to CDFW.

2.3 JURISDICTIONAL WATERS

2.3.1 Federal Jurisdiction

Any person, firm, or agency planning to alter or work in "waters of the U.S.," including the discharge of dredged or fill material, must first obtain authorization from the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA; 33 USC 1344). Permits, licenses, variances, or similar authorization may also be required by other federal, state, and local statutes. Section 10 of the Rivers and Harbors Act prohibits the obstruction or alteration of navigable waters of the U.S. without a permit from USACE (33 USC 403).

Waters of the U.S. generally consist of the following four categories of regulated waters:

- The territorial seas and traditional navigable waters
- Tributaries to those waters
- Certain lakes, ponds, and impoundments
- Wetlands adjacent to jurisdictional waters

Features generally not considered waters of the U.S. include the following:

- Groundwater
- Diffuse stormwater run-off
- Artificial ditches constructed wholly in uplands
- Prior converted cropland (PCC)
- Artificially irrigated areas
- Artificial lakes and ponds
- Water-filled depressions incidental to mining or construction activity
- Stormwater control features
- Groundwater recharge, water reuse, and wastewater recycling structures
- Waste treatment systems

With non-tidal waters, in the absence of adjacent wetlands, the extent of USACE jurisdiction extends to the ordinary high water mark (OHWM) – the line on the shore established by fluctuations of water and indicated by a clear, natural line impressed on the bank, shelving, changes in soil character, destruction of terrestrial vegetation, or the presence of litter and debris. Wetlands are defined in 33 CFR Part 328 as:

> *"those areas that are inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions."*

Federal and state regulations pertaining to waters of the U.S., including wetlands, are discussed below.

Clean Water Act (33 USC 1251-1376). The CWA provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters.

Section 401 requires that an applicant for a federal license or permit that allows activities resulting in a discharge to waters of the U.S. must obtain a state certification that the discharge complies with other provisions of CWA. The Regional Water Quality Control Board (RWQCB) administers the certification program in California and may require State Water Quality Certification before other permits are issued.

Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the U.S.

Section 404 establishes a permit program administered by USACE that regulates the discharge of dredged or fill material into waters of the U.S. (including wetlands). Implementing regulations by USACE are found at 33 CFR Parts 320-332. The Section 404 (b)(1) Guidelines were developed by the U.S. Environmental Protection Agency (USEPA) in conjunction with USACE (40 CFR Part 230), allowing the discharge of dredged or fill material for non-water dependent uses into special aquatic sites only if there were no practicable alternative that would have less adverse impacts.

2.3.2 State Jurisdiction

2.3.2.1 Regional Water Quality Control Board

Any action requiring a CWA Section 404 permit, or a Rivers and Harbors Act Section 10 permit, must also obtain a CWA Section 401 Water Quality Certification. The State of California Water Quality Certification (WQC) Program was formally initiated by the State Water Resources Control Board (SWRCB) in 1990 under the requirements stipulated by Section 401 of the Federal Clean Water Act. Although the Clean Water Act is a Federal law, Section 401 of the CWA recognizes that states have the primary authority and responsibility for setting water quality standards. In California, under Section 401, the State and Regional Water Boards are the authorities that certify that issuance of a federal license or permit does not violate California's water quality standards (i.e., that they do not violate Porter-Cologne and the Water Code). The WQC Program currently issues the WQC for discharges requiring USACE permits for fill and dredge discharges within Waters of the United States, and now also implements the State's wetland protection and hydromodification regulation program under the Porter Cologne Water Quality Control Act.

On May 28, 2020, the SWRCB implemented the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures) for inclusion in the forthcoming Water Quality Control Plan for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California (SWRCB 2019). The Procedures consist of four major elements:

I. A wetland definition;

II. A framework for determining if a feature that meets the wetland definition is a water of the state;

III. Wetland delineation procedures; and

IV. Procedures for the submittal, review, and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities.

Under the Procedures and the State Water Code (Water Code §13050(e)), "Waters of the State" are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state." "Waters of the State" includes all "Waters of the U.S."

More specifically, a wetland is defined as: *"An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation."* The wetland definition encompasses the full range of wetland types commonly recognized in California, including some features not protected under federal law, and reflects current scientific understanding of the formation and functioning of wetlands (SWRCB 2019).

Unless excluded by the Procedures, any activity that could result in discharge of dredged or fill material to Waters of the State, which includes Waters of the U.S. and non-federal Waters of the State, requires filing of an application under the Procedures.

2.3.2.2 California Department of Fish and Wildlife

The CDFW is a trustee agency that has jurisdiction under Section 1600 et seq. of the California Fish and Game Code. Under Sections 1602 and 1603, a private party must notify CDFW if a proposed project will "substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds… except when the department has been notified pursuant to Section 1601." Additionally, CDFW asserts jurisdiction over native riparian habitat adjacent to aquatic features, including native trees over four inches in diameter at breast height (DBH). If an existing fish or wildlife resource may be substantially adversely affected by the activity, CDFW may propose reasonable measures that will allow protection of those resources. If these measures are agreeable to the parties involved, they may enter into an agreement with CDFW identifying the approved activities and associated mitigation measures. Generally, CDFW recommends submitting an application for a Streambed Alteration Agreement (SAA) for any work done within the lateral limit of water flow or the edge of riparian vegetation, whichever is greater.

2.4 CEQA SIGNIFICANCE

Section 15064.7 of the State CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study Checklist included in Appendix G of the State CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if the project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS;

- Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

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

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and

- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan.

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish or result in the loss of an important biological resource, or those that would obviously conflict with local, State, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of, an important resource on a population-wide or region-wide basis.

2.4.1 California Native Plant Society

The California Native Plant Society (CNPS) maintains a rank of plant species native to California that have low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the *Inventory of Rare and Endangered Vascular Plants of California*. Potential impacts to populations of CNPS-ranked plants receive consideration under CEQA review. The following identifies the definitions of the CNPS Rare Plant Ranking System:

Rank 1A: Plants presumed Extinct in California and either rare or extinct elsewhere

Rank 1B: Plants Rare, Threatened, or Endangered in California and elsewhere

Rank 2A: Plants presumed extirpated in California but common elsewhere

Rank 2B: Plants Rare, Threatened, or Endangered in California, but more common elsewhere

Rank 3: Plants about which we need more information – A Review List

Rank 4: Plants of limited distribution – A Watch List

All plants appearing on CNPS Rank 1 or 2 are considered to meet CEQA Guidelines Section 15380 criteria. While only some of the plants ranked 3 and 4 meet the definitions of threatened or endangered species, the CNPS recommends that all Rank 3 and Rank 4 plants be evaluated for consideration under CEQA. Furthermore, the CNPS Rare Plant Rankings include levels of threat for each species. These threat ranks include the following:

0.1 Seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat);

0.2 Moderately threatened in California (20-80 percent occurrences threatened/moderate degree and immediacy of threat); and

0.3 Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known).

Threat ranks do not designate a change of environmental protections, so that each species (i.e., CRPR 1B.1, CRPR 1B.2, CRPR 1B.3, etc.), be fully considered during preparation of environmental documents under CEQA.

2.4.2 California Department of Fish and Wildlife Species of Concern

Additional fish, amphibian, reptile, bird, and mammal species may receive consideration by CDFW and lead agencies during the CEQA process, in addition to species that are formally listed under FESA and CESA or listed as fully protected. These species are included on the *Special Animals List*, which is maintained by CDFW. This list tracks species in California whose numbers, reproductive success, or habitat may be in decline. In addition to "Species of Special Concern" (SSC), the *Special Animals List* includes species that are tracked in the California Natural Diversity Database (CNDDB) but warrant no legal protection. These species are identified as "California Special Animals" (CSA).

2.5 LOCAL JURISDICTION

2.5.1 Solano County Water Agency

2.5.1.1 Solano Multispecies Habitat Conservation Plan

The Solano Multispecies Habitat Conservation Plan (Solano HCP) is currently in the draft stages and is not a final document or plan as of the date of this report. If the Solano HCP becomes final prior to Project initiation, the Project proponent may apply for coverage under the Solano HCP.

The proposed Solano HCP establishes a framework for complying with State and Federal endangered species regulations while accommodating future urban growth, development of infrastructure, and ongoing operations and maintenance activities associated with flood control, irrigation facilities, and other public infrastructure undertaken by or under the permitting authority/control of the Plan Participants within Solano County (Solano County Water Agency 2012).

2.5.2 City of Dixon

2.5.2.1 Dixon General Plan 2040

In addition to federal and State regulations described above, the *Dixon General Plan 2040* (General Plan) includes goals, objectives, and policies regarding biological resources within the City limits (Dixon 2021). Sections of the General Plan regarding biological resources can be found under the Natural Environment section and applicable sections to the Project are included below:

GOAL NE-1: Preserve, protect, and enhance natural resources, habitats, and watersheds in Dixon and the surrounding area, promoting responsible management practices.

Agricultural Land and Natural Open Space Conservation

Policies

- **NE-1.1** Preserve the natural open space and agricultural lands that surround Dixon through continued leadership in cross-jurisdictional conservation initiatives such as the Vacaville-Dixon Greenbelt and the Davis-Dixon greenbelt.

- **NE-1.2** Support regional efforts to place additional land under permanent conservation easements and continue to use the Agricultural Land Mitigation Fund to collect development impact fees for the purpose of funding greenbelt expansion.

- **NE-1.3** Encourage open space preservation through easements, open space designation, or dedication of lands for the purpose of connecting conservation areas, protecting biodiversity, accommodating wildlife movement, and sustaining ecosystems.

- **NE-1.4** Prior to annexing land into the city or expanding the SOI, continue to require agricultural mitigation consistent with the Solano County Local Agency Formation Commission's Standards and Procedures when agricultural lands would be converted to nonagricultural purposes.

- **NE-1.5** Continue to allow agriculture as an interim use on land within the City that is designated for future urban use.

Water Resources

Policies

- **NE-1.6** Recognize the Sacramento Valley - Solano Groundwater Subbasin as a critical resource for Dixon and proactively promote sustainable groundwater management practices.

- **NE-1.7** Continue to work with the Solano Subbasin Groundwater Sustainability Agency Collaborative to develop and implement strategies for the long-term health and viability of the Solano Groundwater Subbasin.

- **NE-1.8** Facilitate groundwater recharge in Dixon by encouraging development projects to use Low Impact Development (LID) practices such as bioretention, porous paving, and green roofs, and by encouraging private property owners to design or retrofit landscaped or impervious areas to better capture storm water runoff.

- **NE-1.9** Ensure that drainage ditches which discharge directly to or are located within open space lands are regularly repaired and maintained.

Wildlife and Habitats

Policies

- **NE-1.10** Support regional habitat conservation efforts, including implementation of the Solano Countywide Multispecies Habitat Conservation Plan.

- **NE-1.11** Ensure that adverse impacts on sensitive biological resources, including special-status species, sensitive natural communities, sensitive habitat, and wetlands are avoided or mitigated to the greatest extent feasible as development takes place.

- **NE-1.12** In areas where development (including trails or other improvements) has the potential for adverse effects on special-status species, require project proponents to submit a study conducted by a qualified professional that identifies the presence or absence of special-status species at the proposed development site. If special-status species are determined by the City to be present, require incorporation of appropriate mitigation measures as part of the proposed development prior to final approval.

- **NE-1.13** Protect the nests of raptors and other birds when in active use, as required by State and federal regulations. In new development, avoid disturbance to and loss of bird nests in active use by scheduling vegetation removal and new construction during the non-nesting season or by conducting a pre-construction survey by a qualified biologist to confirm nests are absent or to define appropriate buffers until any young have successfully fledged the nest.

- **NE-1.14** Recognize the importance of the urban forest to the natural environment in Dixon and expand the tree canopy on public and private property throughout the community.

- **NE-1.15** Enhance tree health and the appearance of streets and other public spaces through regular maintenance as well as tree and landscape planting and care of the existing canopy.

- **NE-1.16** Minimize removal of, and damage to, trees due to construction-related activities and continue to require replacement of trees, including street trees lost to new development.

- **NE-1.17** Require new development to provide and maintain street trees suitable to local climatic conditions.

2.5.2.2 Northeast Quadrant Specific Plan

The Dixon Northeast Quadrant Specific Plan (NQSP) establishes a land use and circulation plan, policies, and guidelines for the ultimate development of 643 acres in the northeast portion of the City of Dixon. The proposed Project is within the NQSP area. The specific plan defines the land use and development concepts to be applied in the plan area and is intended to implement the objectives and policies of the City of Dixon General Plan. Applicable goals and policies of the NQSP are included below.

Resource Management Element

Wetlands

- Any wetlands determined to be subject to state or federal regulation will be subject to review by the appropriate agencies. Requirements of any permit issued by state and federal agencies will be fully implemented.

- Any enhancement/compensation program required pursuant to state or federal permits will be the responsibility of the property owners. Where excavation is utilized to create or enhance wetlands, excavated soils should be reshaped to form gentle contours and then planted with appropriate native species.

- If removal or total destruction of the wetland area is unavoidable as a result of the project, after examination of all feasibility alternatives, it may be required that the impacted wetland should be mitigated at a 1:1 ratio so that no net loss of wetland habitat occurs. Onsite mitigation is preferable, although offsite mitigation may be allowed. The Community Director in consultation with CDFW shall define a set of conditions applicable to wetland mitigation for approval on any affected development within the plan area.

- Implementation of both a short-term and long-term monitoring program to ensure the success of the required appropriate permits and EIR mitigation measures is required. The property owners will be responsible for required monitoring.

- If publicly accessible, wetland areas should be limited to passive recreation activities compatible with the primary purpose of wetland habitat restoration. In general access should be controlled or restricted.

- Prior to construction approval of improvement plans, or the issuance of any permits for adjacent property a chain link fence, or acceptable alternative, shall be installed along the wetland area. The fencing should not be removed until the completion of construction activity. A written release from the Community Development Department must be received prior to the removal of any fencing.

- Proposed detention/retention facilities located within or adjacent to wetland preserve areas should be in compliance with appropriate permit requirements.

Sensitive Species

- Proponents of development applications within the specific plan area shall consult with CDFW regarding the take of an endangered species or its habitat pursuant to the CESA and CDFW codes.

- A breeding survey should be conducted between April and July, prior to construction, to determine if the species nest on-site, if further impacts are a possibility, and to develop appropriate mitigation strategies.

- The Dixon Community Development Director in consultation with CDFW shall define a set of conditions for approval on any development within the plan area consistent with the County

Habitat Conservation Plan, if such a plan is in effect at that time. Such conditions shall be applied by the Planning Commission and City Council, in the City review and entitlement process. Such conditions shall be enforced by the Community Development Department and the Engineering Department, during the review and approval of any land use or improvement plans pursuant to the land use entitlement.

Trees and Orchards

- Development plans shall identify the location, species, size, and general condition of all existing trees on site, except trees within an orchard. Existing trees should be incorporated in the development plan where feasible.

- Signs, ropes, cables, or other similar appendages should not be attached to trees designated for preservation unless specifically required by a certified arborist.

- No tree identified for preservation in approved plans may be removed or significantly altered without approval by the Dixon Community Development Department.

- Tree preservation and site development policies set forth herein should be incorporated into Covenants, Conditions and Restrictions (CC&Rs) for all projects within the plan area to ensure that subsequent property owners are aware of their obligation to protect any trees designated for preservation.

- All development projects should be designed to avoid:

    - compaction of the tree root zone,
    - discharge of concentrated run-off to the root zone of trees,
    - placement of parking or walkways across the root zone, and
    - heat damage or scorching of trees from highly reflective building materials or paving.

Soil Protection and Grading

- All development plans submitted for City review and approval shall provide an erosion and sediment control plan in compliance with the City's grading control ordinance. Required measures will include seeding of graded areas and watering during grading activities to reduce wind erosion.

- If created, slopes should be rounded at top and bottom. Steep slopes (greater than 3: I) and large retaining walls (higher than five feet) should be avoided.

- Soil exposed during grading which will be left exposed and will not be under active construction during the rainy season (assumed to occur between October 15 and April 15) should be promptly replanted with native compatible, drought-resistant vegetation.

- Prior to the development of any individual project area, a master conceptual grading plan should be submitted which identifies the overall grading concept for the project area.

- Drainage problems resulting from poor soil permeability should be reduced through development of gravel subdrains and the creation of swales and channels to convey runoff.

Water Quality

- Paved parking areas should be designed to provide the minimum amount of paving area necessary to meet required parking standards. Permeable paving materials may be considered where feasible.

- Best management practices (BMPs) such as sediment traps, evaporation basins, flow reduction devices, and other methods to treat pollutants draining from parking areas and streets shall be installed in the storm drain system for individual projects within the plan area in accordance with City standards.

- Plan proposed detention ponds shall incorporate similar BMP devices and methods in accordance with City standards.

- Design of storm detention facilities should be consistent with the City's retention/detention system design standards. In general, allowable storage capacity shall be determined by the city engineer. Low growing ground cover is recommended around the periphery of the pond. Other aesthetic enhancements may be allowed with approval from the city engineer.

3.0 METHODS

Available information pertaining to the natural resources of the region was reviewed prior to conducting the field survey. The following published information was reviewed for this BRA:

- California Department of Fish and Wildlife (CDFW). 2023. *California Natural Diversity Database* (CNDDB); For: *Dixon, Winters, Merritt, Davis, Saxon, Liberty Island, Dozier, Elmira,* and *Allendale* USGS 7.5-minute series quadrangles, Sacramento, CA. Accessed [January 31, 2023];

- California Native Plant Society (CNPS). 2023. *Inventory of Rare and Endangered Plants* (online edition, v8-03 0.45) For: *Dixon, Winters, Merritt, Davis, Saxon, Liberty Island, Dozier, Elmira,* and *Allendale* USGS 7.5-minute series quadrangles, Sacramento, CA. Accessed [January 31, 2023];

- U.S. Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS). 1993. *Solano County, California*. USDA, NRCS, in cooperation with the Regents of the University of California (Agricultural Experiment Station);

- USDA, NRCS. 2023. *Web Soil Survey*. Available at: http://websoilsurvey.sc.egov.usda.gov. Accessed [January 31, 2023];

- U.S. Fish and Wildlife Service (USFWS). 2023. *Information for Planning and Consultation* (IPaC) *Dixon 257.* Accessed [January 31, 2023]; and

- USGS. 2021. *Dixon, California*. 7.5-minute series topographic quadrangle. United States Department of Interior.

Prior to conducting biological field surveys, existing information concerning known habitats and special-status species that may occur in the Study Area was reviewed. The results of the database query and a five-mile radius CNDDB query for the Study Area are included in Appendix A, *CNDDB, CNPS, and USFWS*

Lists of Regionally Occurring Special-Status Species. Biological field surveys were conducted on February 2, 2023, by HELIX biologist Patrick Martin, and on February 14, 2023, by HELIX biologist Christine Heckler. The weather during the field surveys was mostly sunny with an average temperature of 55°F. The Study Area was systematically surveyed on foot to ensure total search coverage, with special attention given to portions of the Study Area with the potential to support special-status species and sensitive habitats. Binoculars were used to further extend site coverage and identify species observed. All plant and animal species observed were recorded, and all biological communities occurring on-site were characterized. All resources of interest were mapped with Global Positioning System (GPS)-capable tablets equipped with GPS receivers running ESRI Field Maps for ArcGIS with sub-meter accuracy.

Following the field survey, the potential for each species identified in the database query to occur within the Study Area was determined based on the site survey, soils, habitats present within the Study Area, and species-specific information, as shown in Appendix B, *Special-Status Species to Occur in the Study Area*. Species observed within the Study Area during the survey are included in Appendix C, *Plant and Wildlife Species Observed in the Study Area*, and photographs taken during the survey are included in Appendix D, *Representative Site Photographs*.

4.0 RESULTS

4.1 SITE LOCATION AND DESCRIPTION

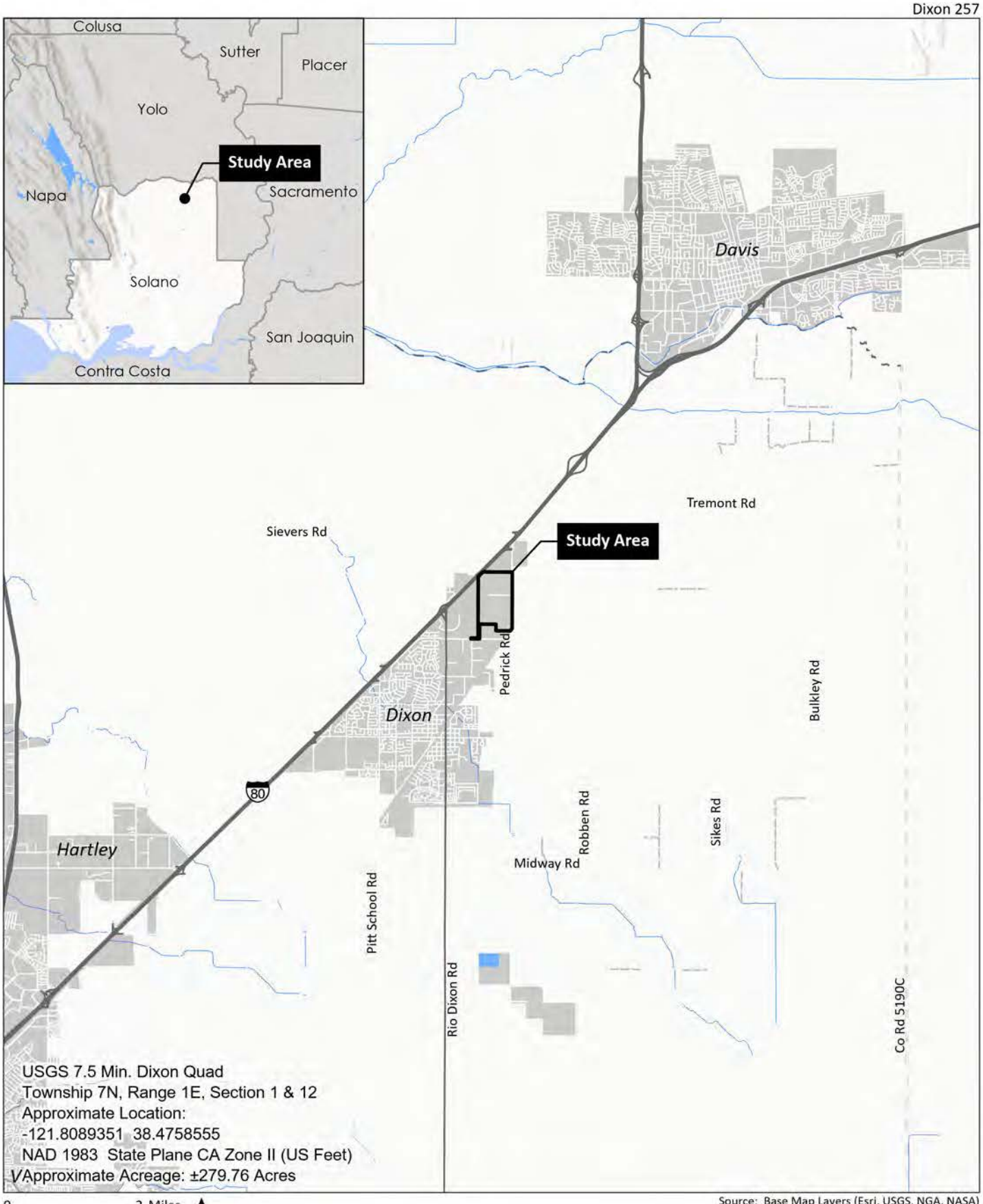
The ±279.76-acre Study Area is located east of Pedrick Road, north of Vaughn Road, and south of I-80, in the City of Dixon, California. The site is situated in Sections 1 and 12 of Township 7 North and Range 1 East, and is depicted on the USGS *Dixon, CA* 7.5-minute quadrangle map (Figure 1, *Site and Vicinity Map*). The Study Area is in an agricultural setting and is currently used to cultivate various row crops. Aerial imagery of the Study Area indicates row crops have been cultivated on the site for at least the past thirty-five years. Dirt access roads and ditches occur throughout the Study Area along the perimeters of the fields, and aerial imagery also indicates the ditches are created, moved, and filled as crops are rotated and cultivated (Google Earth 2023). A rectangular area in the west-central portion of the Study Area is not utilized for crops and is currently supporting bee boxes. Old pavement, rubble piles, and evidence of previous structures were observed in this area. A topographic map of the Study Area is included as Figure 2, *USGS Topographic Map*, and an aerial image of the Study Area is included as Figure 3, *Aerial Map*.

4.2 PHYSICAL FEATURES

4.2.1 Topography and Drainage

Terrain in the Study Area is generally flat, and fields have been leveled for crop cultivation. Elevations range from approximately 60 feet above mean sea level (amsl) in the north to 67 feet amsl in the south.

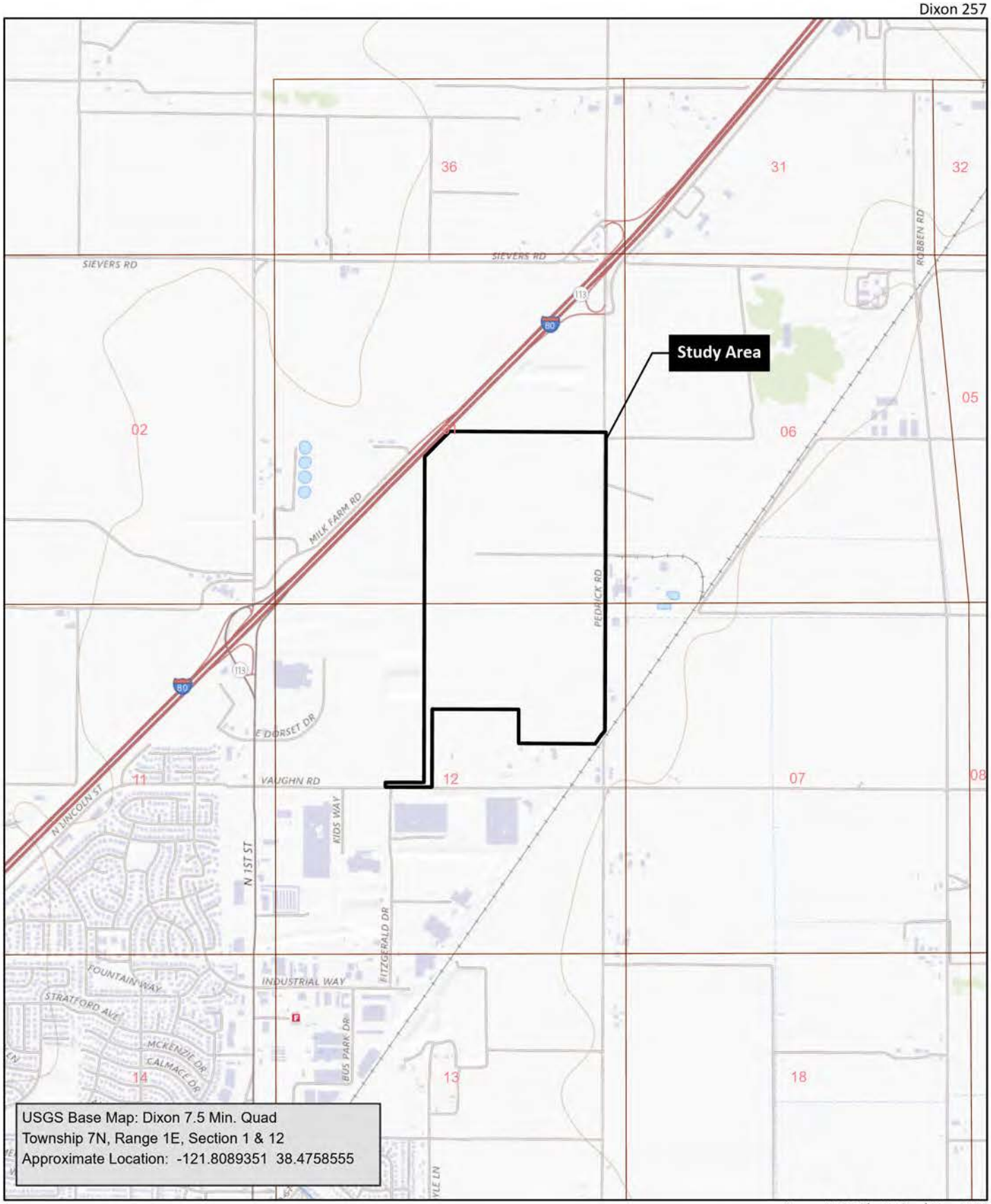
The Study Area is in the Lower Sacramento watershed (USGS Hydrologic Unit Code [HUC8] 18020163). The site appears to drain into the various ditches throughout the Study Area and then offsite through a network of agricultural ditches/canals. One non-functioning well was observed onsite and culverts are located in ditches on the perimeter of the Study Area. No natural aquatic resources were observed within the Study Area and the site has no apparent natural source of water other than direct precipitation.



HELIX Environmental Planning

Site and Vicinity Map

Figure 1

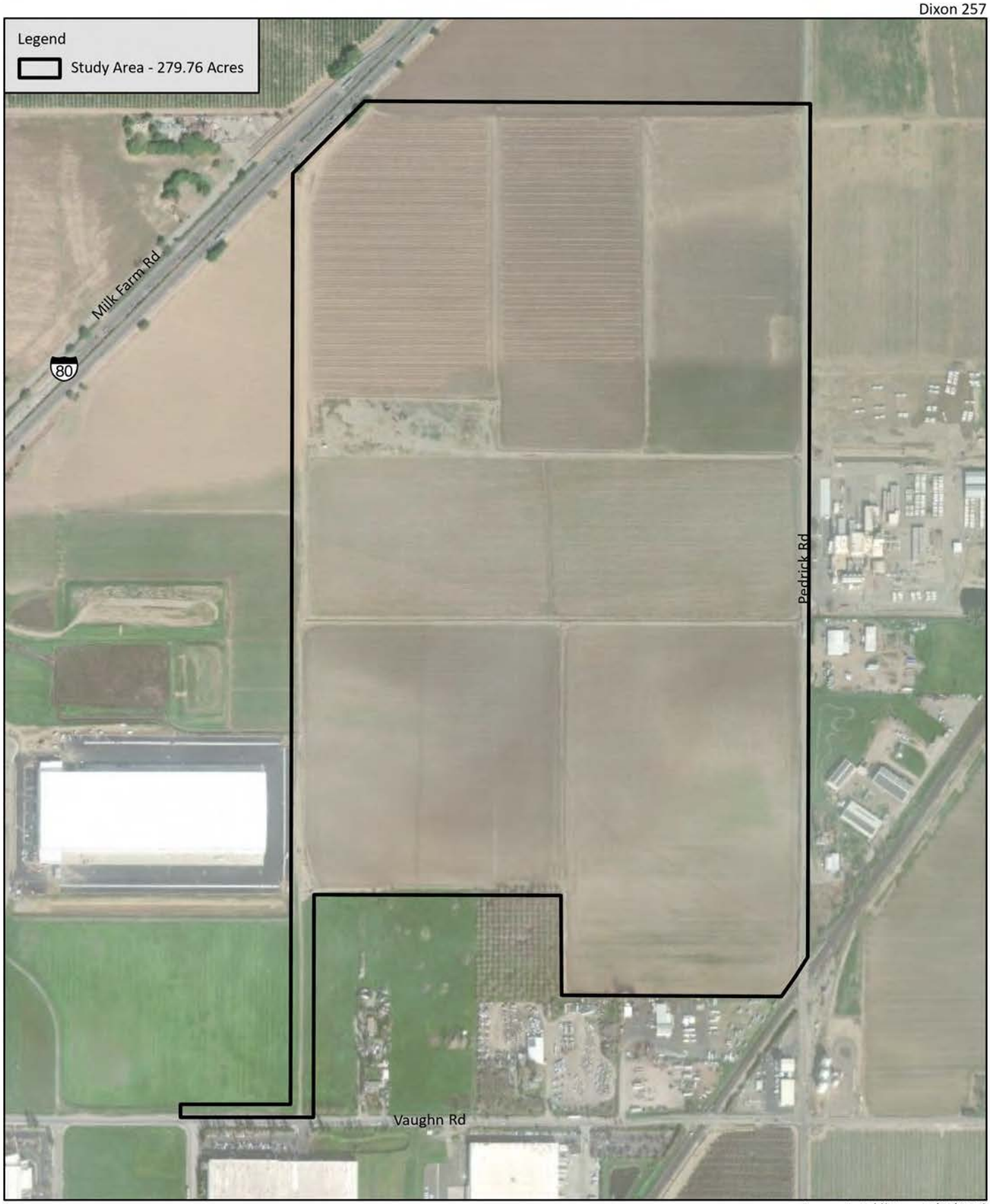


Source: USGS, The National Map, 2021

HELIX Environmental Planning

USGS Topographic Map

Figure 2



Source: Aerial ((Maxar, 1/21/2022)

HELIX Environmental Planning

Aerial Map

Figure 3

4.3 SOILS

Four soil map units are mapped within the Study Area: Brentwood Clay Loam, 0 to 2 Percent Slopes; Capay Silty Clay Loam, 0 Percent Slopes; Yolo Loam, 0 to 4 Percent Slopes; and Yolo Silty Clay Loam, 0 to 2 Percent Slopes. (Figure 4, *Soils Map*). The general characteristics and properties associated with these soils are described below.

- Brentwood Clay Loam, 0 to 2 Percent Slopes: These soils are derived from alluvium from sedimentary rock. A typical soil profile is clay loam from 0 to 60 inches. They are well drained, have a medium runoff class, and no frequency of flooding or ponding. The hydric soils list for Solano County does not identify any hydric inclusions within this soil type (NRCS 2023).

- Capay Silty Clay Loam, 0 Percent Slopes: These soils are derived from alluvium from igneous, metamorphic, and sedimentary rock. A typical soil profile is silty clay loam from 0 to 81 inches, sandy clay loam from 81 to 88 inches, and fine sandy loam from 88 to 102 inches. They are moderately well drained, have a high runoff class, rare frequency of flooding, and occasional ponding. The hydric soils list for Solano County does not identify any hydric inclusions within this soil type (NRCS 2023).

- Yolo Loam, 0 to 4 Percent Slopes: These soils are formed in mixed alluvium derived from sedimentary rock and are mildly alkaline within the first 18 inches. A typical soil profile is loam from 0 to 60 inches. They are well drained, have a low runoff class, rare frequency of flooding, and no frequency of ponding. The hydric soils list for Solano County does not identify any hydric inclusions within this soil type.

- Yolo Silty Clay Loam, 0 to 2 Percent Slopes: These soils are derived from alluvium from igneous, metamorphic, and sedimentary rock. A typical soil profile is silty clay loam from 0 to 28 inches, clay loam from 28 to 36 inches, and loam from 36 to 60 inches. They are well drained, have a low runoff class, rare frequency of flooding, and no frequency of ponding. The hydric soils list for Solano County does not identify any hydric inclusions within this soil type.

4.4 BIOLOGICAL COMMUNITIES

Two biological communities occur within the Study Area: cropland and developed/disturbed. Ditches also occur within these habitat types. A discussion of these habitats is included below and a comprehensive list of all plant and wildlife species observed within the Study Area is provided in Appendix C. Representative site photographs are included in Appendix D.

4.4.1 Cropland

Cropland makes up the majority of the Study Area and is common in the surrounding lands. Vegetation in this habitat type is varied and does not conform to normal habitat stages. Vegetation can either be annual or perennial, vary according to location in the state, and germinate at various times of the year. Crop rotation is typically used to conserve soil nutrients and maintain productivity. These crops are often established on fertile soils which historically supported an abundance of wildlife. Many species of wildlife have adapted to croplands but are often controlled by fencing, trapping, and poisoning to prevent excessive crop losses. Availability of irrigation water during dryer months benefits many wildlife

species as a source of water (Mayer and Laudenslayer 1988). Approximately 261.19 acres of cropland occurs in the Study Area (Figure 5, *Biological Communities*).

Few plants species were observed within the cropland during the field survey and the majority of the fields were bare. Plant species observed along the perimeters of the fields are ruderal and invasive in nature and include species such as black mustard (*Brassica nigra*), cheeseweed mallow (*Malva parviflora*), foxtail barley (*Hordeum murinum*), and slim oats (*Avena barbata*).

4.4.2 Developed/Disturbed

Developed habitat is often comprised of little to no vegetation and typically contains built structures and/or maintained surfaces such as roads or parking lots. Vegetation that does occur within this habitat type is often ornamental, rather than invasive or noxious weeds such as in ruderal habitat types. Disturbed habitats typically retain a soil substrate, but the vegetation communities are either lacking or are comprised of mostly ruderal plant species. Approximately 17.43 acres of developed/disturbed habitat occurs within the Study Area and is made up of dirt access roads, paved roads, and a bare area within the Study Area that likely historically contained structures (Figure 5).

Few plant species were observed within the developed/disturbed areas in the Study Area; dominant plant species observed include yellow star-thistle (*Centaurea solstitialis*), stinkwort (*Dittrichia graveolens*), field bindweed (*Convolvulus arvensis*), and slim oats.

4.5 AQUATIC RESOURCES

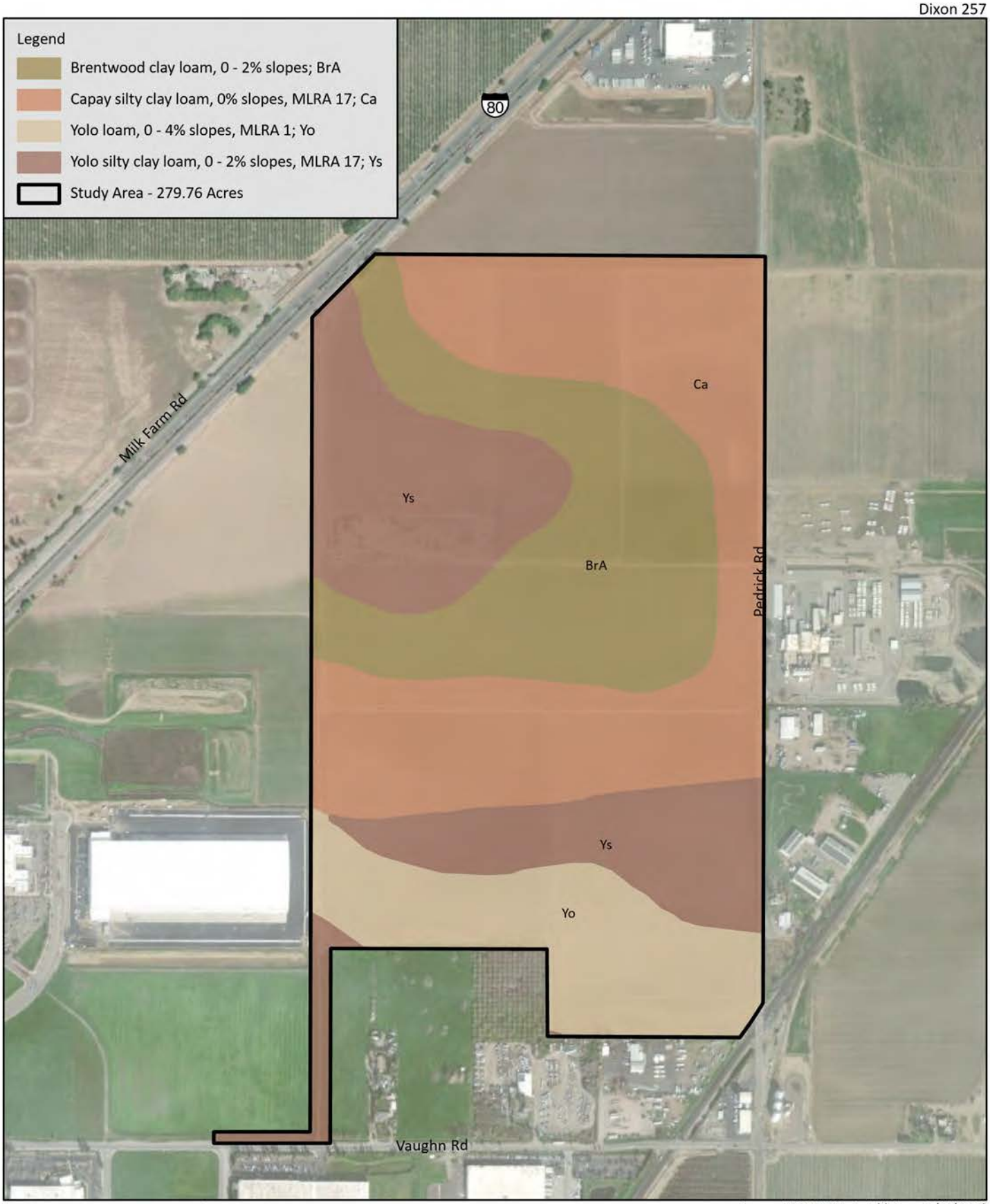
An aquatic resources delineation of the Study Area was conducted by Bargas Environmental Consulting in 2021 (Bargas 2021). Within the Study Area for this BRA, 18 agricultural ditches were mapped totaling 1.143 acres (Figure 5). The delineation is currently being verified by the USACE to determine if the agricultural ditches are potential waters of the U.S. and/or State.

4.5.1 Ditches

A network of agricultural ditches occurs within the Study Area (approximately 1.143 acres in total). The ditches are constructed features that are earthen lined, void of vegetation, and were completely dry at the time of the field surveys. Aerial imagery indicates the ditches are created, moved, and filled as crops are rotated and cultivated (Google Earth 2023). Some isolated ditches that appeared to be abandoned from any agricultural activity contained broken concrete culverts, rubble, and riprap. These ditches are overgrown with dense, ruderal vegetation such as foxtail barley, black mustard, and bristly oxtongue (*Helminthotheca echioides*). Several groundwater pumps were observed within portions of the ditches, and culverts are located in ditches on the perimeter of the Study Area that drain to offsite agricultural ditches.

4.6 SPECIAL-STATUS SPECIES

Special-status species are plant and wildlife species that have been afforded special recognition by federal, State, or local resource agencies or organizations. They are generally of relatively limited distribution and may require specialized habitat conditions. Special-status species are defined as meeting one or more of the following criteria:

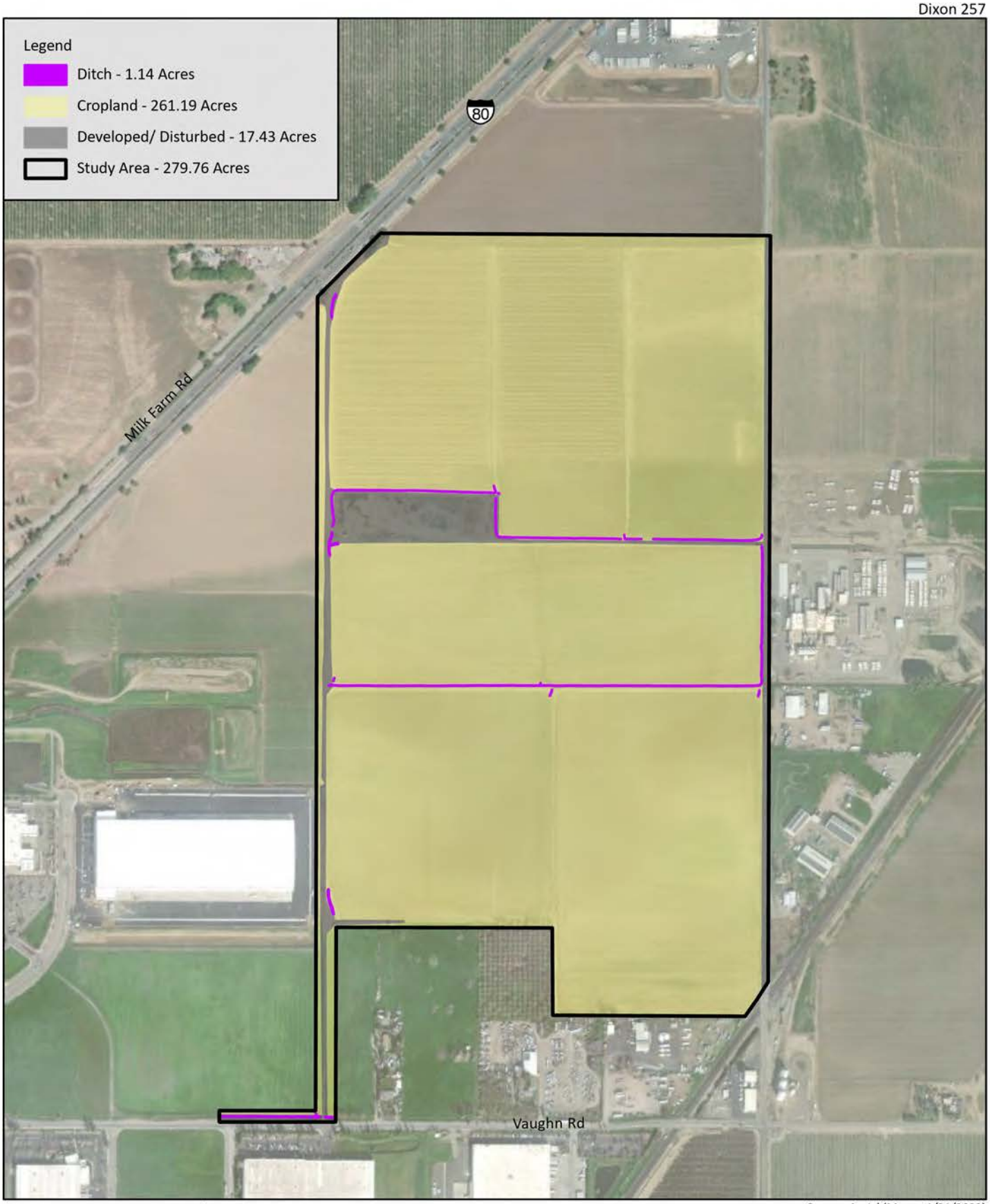


Source: NRCS, 2022; Aerial (Maxar, 1/21/2022)

HELIX Environmental Planning

Soils Map

Figure 4



Source: Aerial (Maxar, 1/21/2022)

HELIX Environmental Planning

Biological Communities

Figure 5

- Listed or proposed for listing under CESA or FESA;
- Protected under other regulations (e.g., the PCCP, MBTA);
- Included on the CDFW Special Animals List or Watch List;
- Identified as Rare Plant Rank 1 to 4 by CNPS; or
- Receive consideration during environmental review under CEQA.

Special-status species considered for this analysis are based on queries of the CNDDB, the USFWS, and CNPS ranked species (online versions) for the *Dixon, CA* USGS quadrangle and eight surrounding quadrangles (Appendix A). Appendix B includes the common name and scientific name for each species, regulatory status (federal, State, local, CNPS), habitat descriptions, and potential for occurrence within the Study Area. The following set of criteria has been used to determine each species' potential for occurrence within the Study Area:

Will Not Occur: Species is either sessile (i.e., plants) or so limited to a particular habitat that it cannot disperse on its own and/or habitat suitable for its establishment and survival does not occur on the Study Area;

Not Expected: Species moves freely and might disperse through or across the Study Area, but suitable habitat for residence or breeding does not occur in the Study Area, potential for an individual of the species to disperse through or forage in the site cannot be excluded with 100% certainty;

Presumed Absent: Habitat suitable for residence and breeding occurs in the Study Area; however, focused surveys conducted for the current project were negative;

May Occur: Species was not observed on the site and breeding habitat is not present, but the species has the potential to utilize the site for dispersal;

High: Habitat suitable for residence and breeding occurs in the Study Area and the species has been recorded recently in or near the Study Area, but was not observed during surveys for the current project; and

Present: The species was observed during biological surveys for the current project and is assumed to occupy the Study Area or utilize the Study Area during some portion of its life cycle.

Only those species that are known to be present, have a high potential to occur, or may occur are discussed further in the following sections. Species that are not expected to occur or will not occur are included in Appendix B.

4.6.1 Listed and Special-Status Plants

According to the database query, thirty-six listed and/or special-status plants have the potential to occur onsite or in the vicinity of the Study Area (CDFW 2023; CNPS 2023). Based on field observations, published information, and literature review, no special-status plants have potential to occur within the Study Area. All the regional special-status plants identified in the query occur on adobe, alkaline, or serpentine soils, within vernal pools or other aquatic habitats, or within natural habitat types which do not occur in the Study Area. In addition, herbicide was observed being sprayed onsite during the survey

on February 2, 2023, and herbicide equipment was observed onsite during the survey on February 14, 2023. The application of herbicide and the consistent disturbance of the site in association with agricultural activities further reduces the chance of special-status plants occurring onsite.

4.6.2 Listed and Special-Status Wildlife

According to the database query, forty-one listed and/or special-status wildlife species have the potential to occur onsite or in the vicinity of the Study Area (CDFW 2023; USFWS 2023). Based on field observations, published information, and literature review, five special-status wildlife species have the potential to occur within the Study Area. These include tricolored blackbird (*Agelaius tricolor*), burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), white-tailed kite (*Elanus leucurus*), and northern harrier (*Circus hudsonius*). These species are discussed in more detail below. In addition to these special-status wildlife species, other birds and raptors protected under federal, State, and local laws/policies also have potential to occur within the Study Area.

The following species may pass through the Study Area but are not expected to use the Study Area in any significant way and are not discussed further in this report: crotch bumblebee (*Bombus crotchii*), western bumblebee (*Bombus occidentalis*), Monarch butterfly (*Danaus plexippus*), western pond turtle (*Actinemys marmorata*), Song sparrow "Modesto" population (*Melospiza melodia*), pallid bat (*Antrozous pallidus*), western red bat (*Lasiurus blossevillii*), and Yuma myotis (*Myotis yumanensis*).

4.6.2.1 Special-Status Wildlife with Potential for Occurrence

Tricolored Blackbird

This species is listed as Threatened by CDFW. Tricolored blackbirds nest and seek cover in emergent wetland vegetation and thorny vegetation such as Himalayan blackberry (*Rubus armeniacus*), cattail (*Typha* spp.), willow (*Salix* spp.), and tules (*Scirpus* spp.). The nesting area must be large enough to support a minimum colony of 50 pairs as they are a highly colonial species. As many as 30,000 nests have been recorded in cattail marshes of four hectares or less (Shuford and Gardali 2008). This species forages on the ground in croplands, grasslands, flooded land, and edges of ponds for insects. The basic requirements for selecting breeding sites are open accessible water, a protected nesting substrate, including either flooded or thorny or spiny vegetation, and a suitable foraging space providing adequate insect prey within a few miles of the nesting colony (Beedy and Hamilton 1999).

Tricolored blackbird may forage in the Study Area; however, the Study Area does not contain suitable nesting habitat for this species. Emergent wetland vegetation and other substrates suitable for nesting do not occur in the Study Area. Although suitable nesting habitat is absent, this species may forage within the cropland in the Study Area. Suitable breeding sites may also be within a few miles of the Study Area and tricolored blackbirds are known to forage in areas a few miles away from a nesting colony (CDFW 2023). There is one documented occurrence of this species within five miles of the Study Area, approximately 4.88 miles away (CDFW 2023). Based on suitable foraging habitat in the Study Area and nearby documented occurrences, tricolored blackbird may occur in the Study Area.

Burrowing Owl

The burrowing owl is designated as a Species of Special Concern by CDFW. This species occurs in a variety of open habitats, typically grasslands, desert scrub, agricultural fields, washes, and disturbed areas such as golf courses or vacant lots. Burrows, perch sites, and friable soil are necessary for this

species, and areas with low-lying, sparse vegetation are preferred. Burrowing owls may utilize culverts, abandoned pipes, rubble piles, and other artificial structures for nesting if burrows are absent. They are often associated with high densities of burrowing mammals such as prairie dogs and ground squirrels. Breeding pairs stay near a dedicated nesting burrow, while wintering owls may move around and may roost in tufts of vegetation rather than in burrows.

The entire Study Area provides suitable habitat for this species. Ground squirrel (*Otospermophilus beecheyi*) burrows were observed within the Study Area that provide suitable nesting/refuge habitat, and rubble piles, culverts, and other artificial structures that may also be suitable for this species are also within the Study Area. Burrowing owl may forage throughout the Study Area and this species is known to occupy agricultural habitats. There are thirteen documented occurrences of this species within five miles of the Study Area, with the closest approximately 375 feet from the Study Area (CDFW 2023). Based on suitable habitat in the Study Area and the number and proximity of nearby documented occurrences, burrowing owl has a high potential to occur in the Study Area.

Swainson's Hawk

The Swainson's hawk is listed as a Threatened by CDFW. This species is a long-distance migrant with nesting grounds in western North America, and wintering grounds in Mexico and South America. Swainson's hawks typically arrive in the California Central Valley between March and early April to establish breeding territories. Breeding occurs from late March to August, peaking in late May through July (Zeiner et al. 1988-1990). In the Central Valley, Swainson's hawks generally nest in isolated trees, small groves of trees in agricultural land, or in large woodlands next to open grasslands or agricultural fields. This species typically nests near riparian areas; however, it has been known to nest in urban areas as well. In the Central Valley, the most commonly used trees include Fremont's cottonwood (*Populus fremontii*), sycamores (*Platanus* spp.), valley oaks (*Quercus lobata*), walnut (*Juglans* spp.), and occasionally gum trees (*Eucalyptus* spp.), redwood (*Sequoia* spp.) and pine (*Pinus* spp.) (Woodbridge 1998). Nest locations are usually in close proximity to suitable foraging habitats, which include fallow fields, all types of grasslands, irrigated pastures, alfalfa and other hay crops, and low-growing row crops, especially post-harvest when the height of the vegetation is short and easy to observe prey (Bechard et al. 2010; SAIC 2012). Swainson's hawks leave their breeding grounds to return to their wintering grounds in late August or early September (Bloom and Van De Water 1994).

The croplands within the Study Area (261.19 acres) provide suitable foraging habitat for this species and suitable nest trees are located adjacent to the Study Area and in the surrounding vicinity. There are 131 documented occurrences of this species within five miles of the Study Area and two of those occurrences overlap with the Study Area (CDFW 2023). Based on suitable habitat in the Study Area and the number and proximity of nearby documented occurrences, Swainson's hawk has a high potential to occur in the Study Area. However, it should be noted that if tall-growing crops such as corn are planted within the Study Area, the portion of the Study Area that is planted with corn may be unsuitable for Swainson's hawk foraging. Once the crops reach a certain height, foraging opportunities are minimal for this species. Swainson's hawk can forage in a variety of agricultural settings, including early-stage corn fields, but tall, dense vegetation/crops are typically unsuitable for foraging by this species.

White-Tailed Kite

The white-tailed kite is classified as Fully Protected by CDFW. This species occurs in a variety of open habitats including grasslands, savannah, oak woodland, riparian woodland, open suburban areas, and

agriculture fields. Nesting generally occurs within riparian or edge habitats or in lone trees that are adjacent to foraging habitat. Foraging habitat consists of a variety of open habitats that contain a high rodent population; especially grasslands, pastures, alfalfa fields, and other agricultural crops/fields.

The entire Study Area provides suitable foraging habitat for this species and suitable nest trees are located adjacent to the Study Area and in the surrounding vicinity. There is one documented occurrence of this species within five miles of the Study Area, approximately 4.58 miles away (CDFW 2023). However, this species is not typically reported to the CNDDB, and it is a common species in the area (eBird 2023). Based on suitable habitat in the Study Area and nearby documented occurrences, white-tailed kite has a high potential to occur in the Study Area. However, it should be noted that if tall-growing crops such as corn are planted within the Study Area, that area of Study Area may be unsuitable for foraging once the crops reach a certain height that limits the success of foraging. White-tailed kites can forage in a variety of agricultural settings, including early-stage corn fields, but tall, dense vegetation/crops are typically unsuitable for foraging by this species.

Northern Harrier

The northern harrier is designated as a Species of Special Concern by CDFW. This species occurs in a variety of open habitats; typically, large tracts of coastal scrub, grasslands, marsh, riparian scrub, and wetland habitats with low, dense vegetation. This species is also known to occur in agricultural habitats. The northern harrier builds a nest on the ground in thick, emergent wetland vegetation usually at the edge of aquatic habitat (CDFW 2023).

Northern harrier may forage in the Study Area; however, the Study Area does not contain suitable nesting habitat for this species. Emergent wetland vegetation does not occur in the Study Area and aquatic habitat is also absent. Although suitable nesting habitat is absent, this species may forage within the cropland in the Study Area and two northern harriers were observed foraging within the Study Area during the field survey on February 14, 2023. There are no documented occurrences of this species within five miles of the Study Area (CDFW 2023); however, this species is not regularly reported to the CNDDB. Based on suitable foraging habitat in the Study Area and observations of this species foraging in the Study Area, northern harrier is present in the Study Area.

Other Nesting Migratory Birds and Raptors

Migratory birds are protected under the MBTA of 1918 (16 U.S.C. 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed under 50 CFR 10; this also includes feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Additionally, Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 specifically states that it is unlawful to take, possess, or destroy any raptors (i.e., hawks, owls, eagles, and falcons), including their nests or eggs; and Section 3513 specifically states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

A number of migratory birds and raptors in addition to the species listed in Section 4.6.2 have the potential to nest in or adjacent to the Study Area. Suitable nest locations within and adjacent to the Study Area include trees, grass, artificial structures, and bare ground.

4.7 SENSITIVE HABITATS

Sensitive habitats include those that are of special concern to resource agencies or those that are protected under CEQA; Section 1600 of the California Fish and Game Code, which includes riparian areas; and/or Sections 401 and 404 of the Clean Water Act, which include wetlands and other waters of the U.S. Sensitive habitats or resource types within the Study Area are discussed below.

4.7.1 Aquatic Resources

A total of 1.143 acres of ditches were delineated within the Study Area during the 2021 delineation conducted by Bargas Environmental Consulting (Bargas 2021). These ditches may be potential waters of the U.S. or State subject to USACE and Central Valley Regional Water Quality Control Board (CVRWQCB) jurisdiction under Section 404 and 401 of the Clean Water Act.

4.7.2 Wildlife Migration Corridors

Wildlife corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. This fragmentation of habitat can also occur when a portion of one or more habitats is converted into another habitat; for instance, when woodland or scrub habitat is altered or converted into grasslands after a disturbance such as fire, mudslide, or construction activities. Wildlife corridors mitigate the effects of this fragmentation by: (1) allowing animals to move between remaining habitats thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk of catastrophic events (such as fire or disease) on population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs.

The Study Area is located within an agricultural area that is surrounded by agricultural fields, industrial areas, and streets/I-80. Although wildlife may disperse through the Study Area on a local level, the Study Area is not considered a wildlife migration or movement corridor.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The Study Area contains 261.19 acres of cropland habitat, 17.43 acres developed/disturbed habitat, and 1.143 acres of ditches. Based on the current site plan, the proposed Project is expected to result in permanent impacts to the entire Study Area: 261.19 acres of cropland, 17.43 acres of developed/ disturbed habitat, and 1.14 acres of ditches (Figure 6, *Impacts to Biological Communities*).

One special-status wildlife species was observed within the Study Area during the field survey on February 14, 2023, northern harrier. Suitable habitat is present for several special-status wildlife species and there is potential these species may occur within the Study Area. Recommendations, including avoidance and minimization measures to limit or avoid impacts to special-status species are included in Section 5.1.

Known or potential biological constraints in the Study Area include:

- Potential foraging and/or nesting habitat for special-status and migratory birds including tricolored blackbird (*Agelaius tricolor*), burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), white-tailed kite (*Elanus leucurus*), and northern harrier (*Circus hudsonius*).

- Aquatic resources that may be considered waters of the U.S. and/or State.

5.1 RECOMMENDATIONS

5.1.1 Burrowing Owl

- A qualified biologist shall conduct focused burrowing owl surveys in the Project area and surrounding 500 feet, where accessible, in accordance with the CDFW's Staff Report on Burrowing Owl Mitigation (Staff Report), published March 7, 2012. Surveys shall be repeated if project activities are suspended or delayed more than 14 days.

    - According to the Staff Report, four survey visits shall be conducted during the breeding season (February 1 to August 31): 1) at least one site visit between February 15 and April 15, and 2) a minimum of three survey visits, at least three weeks apart, between April 15 and July 15, with at least one visit after June 15.

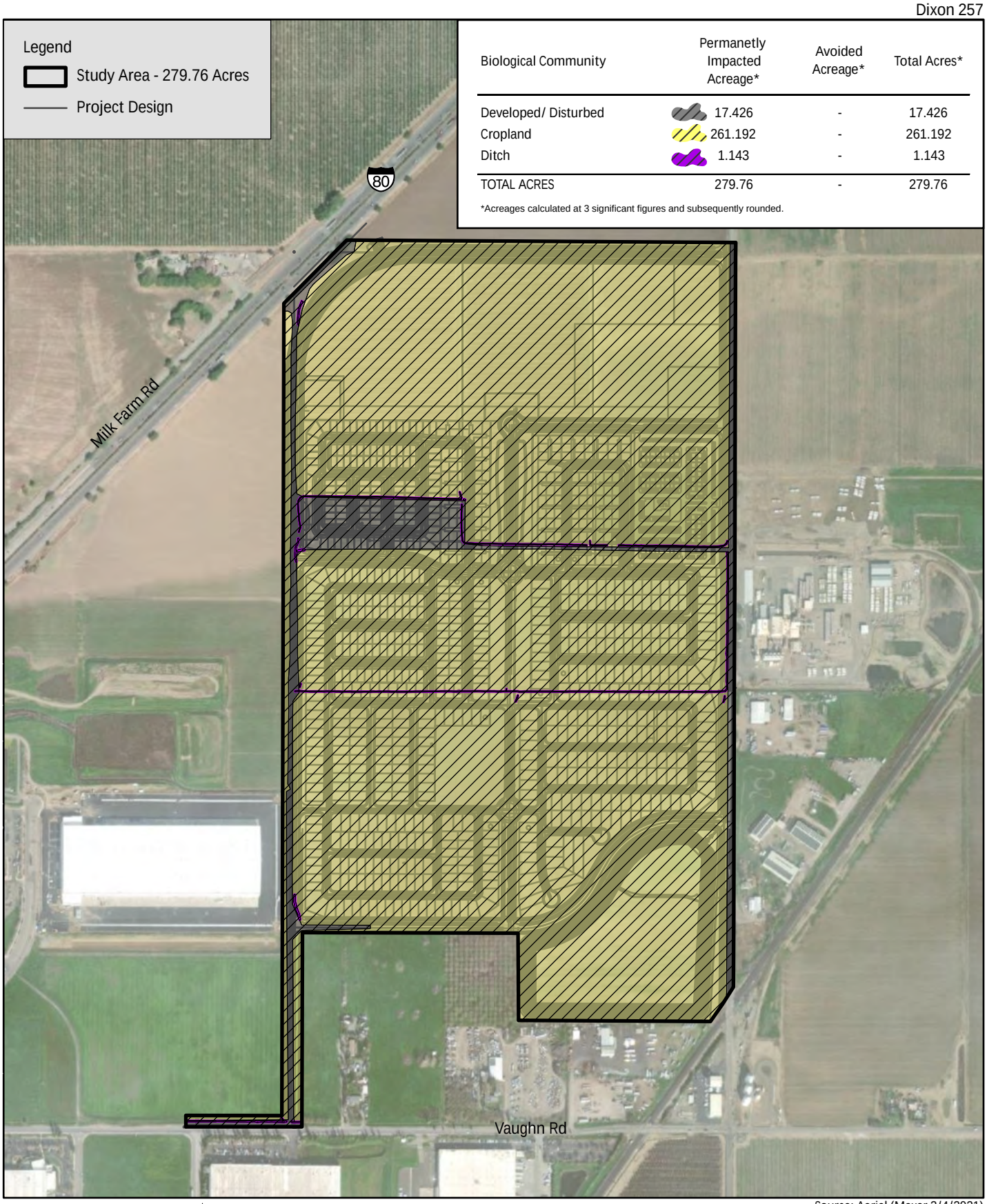
    - Non-breeding season surveys shall be conducted during four site visits, spread evenly apart.

    - Take avoidance surveys may also be conducted. An initial take avoidance survey shall be conducted no less than 14 days prior to initiating ground disturbance activities using the methods outlined in the Staff Report. Implementation of avoidance and minimization measures would be triggered by positive owl presence on the site where project activities will occur. The development of avoidance and minimization approaches would be informed by monitoring the burrowing owls. Burrowing owls may re-colonize a site after only a few days. Time lapses between project activities trigger subsequent take avoidance surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance.

- If no burrowing owls are detected, no further measures are required. If active burrowing owl burrows are detected, the avoidance, minimization, and mitigation methodologies outlined in the CDFW's Staff Report on Burrowing Owl Mitigation shall be followed prior to initiating Project related activities that may impact burrowing owls.

5.1.2 Swainson's Hawk

- If construction activities will begin during the Swainson's hawk nesting season (March 20 to September 15), a qualified biologist should conduct at least the minimum number of surveys called for within at least two survey periods prior to the initiation of construction in accordance with the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk Technical Advisory Committee 2000) or the current



Biological Community	Permanetly Impacted Acreage*	Avoided Acreage*	Total Acres*
Developed/ Disturbed	17.426	-	17.426
Cropland	261.192	-	261.192
Ditch	1.143	-	1.143
TOTAL ACRES	279.76	-	279.76

*Acreages calculated at 3 significant figures and subsequently rounded.

Source: Aerial (Maxar 3/4/2021)

HELIX Environmental Planning

Proposed Project and Impacts to Biological Communities

Figure 6

CDFW-approved protocol. Current survey periods specified by the Guidelines are March 20 to April 5, April 5 to April 20, April 21 to June 10, and June 10 to July 30. All potential nest trees within 0.5-mile of the proposed Project footprint should be visually examined for potential Swainson's hawk nests, as accessible.

- If no active Swainson's hawk nests are identified on or within 0.5-mile of the proposed Project, a letter report documenting the survey methodology and findings should be submitted to the Project proponent and no additional mitigation measures are recommended.

- If active Swainson's hawk nests (a nest becomes active once the first egg is laid and remains active until the fledged young are no longer dependent on the nest [USFWS 2018]) are found within 0.5-mile of the Project footprint, a survey report should be submitted to CDFW, and an avoidance and minimization plan should be developed for approval by CDFW prior to the start of construction. The avoidance plan should identify measures to minimize impacts to the active Swainson's hawk nest depending on the location of the nest relative to the project footprint. These measures may include:

    - Conduct a worker awareness training program prior to the start of construction;

    - Establish a buffer zone and work schedule to avoid impacting the nest during critical periods. If possible, no work will occur within 200 yards of the nest while it is in active use. If work will occur within 200 yards of the nest, then construction will be monitored by a qualified biologist to ensure that no work occurs within 50 yards of the nest during incubation or within 10 days after hatching (Swainson's Hawk Technical Advisory Committee 2000);

    - Have a biological monitor conduct regular monitoring of the nest during construction activities; and

    - Should the project biologist determine that the construction activities are disturbing the nest; the biologist should halt construction activities until the CDFW is consulted.

- The Study Area contains 261.19 acres of cropland habitats which provide suitable foraging habitat for Swainson's hawks. CDFW has provided guidelines for mitigating impacts to Swainson's hawk foraging habitat as summarized below (CDFW 1994):

    a) Projects within 1 mile of an active nest tree shall provide:

        - One acre of foraging habitat for each acre of development at a ratio of 1:1. Mitigated lands shall consist of 10 percent of the land requirements met by fee title acquisition or a conservation easement allowing for the active management of the habitat, and the remaining 90 percent of the land protected by a conservation easement on agricultural lands or other suitable habitats which provide foraging habitat for Swainson's hawk (grasslands, rangeland, etc.) and no requirements for active management of the habitat; or

        - One-half acre of foraging habitat for each acre of development authorized at a ratio of 0.5:1. All the land requirements shall be met by fee title acquisition or a conservation easement, which allows for the active management of the habitat for

prey production on the land. Prey abundance and availability is determined by land and farming patterns including crop types, agricultural practices, and harvesting regimes. Actively managed land for prey production may result in the land becoming less valuable for crop production due to management limitations but increases the value for Swainson's hawk through functional lift.

b) Projects within 5 miles of an active nest tree but greater than 1 mile from the nest tree shall provide 0.75 acre of foraging habitat for each acre of urban development at a ratio of 0.75:1. All foraging habitat may be protected through fee title acquisition or conservation easement on agricultural lands or other suitable habitats.

c) Projects within 10 miles of an active nest tree but greater than 5 miles from an active nest tree shall provide 0.5 acre of Habitat Management land for each acre of urban development at a ratio of 0.5:1. All foraging habitat may be protected through fee title acquisition or a conservation easement on agricultural lands or other suitable habitat.

The City of Dixon as the CEQA lead agency will make the final determination as to the extent of the proposed project's impacts to Swainson's hawk foraging habitat and any appropriate mitigation that might be necessary associated with project development. Mitigation bank credits could also be used to satisfy Swainson's hawk mitigation requirements as approved by the City and CDFW.

5.1.3 Tricolored Blackbird, Northern Harrier, White-Tailed Kite and Other Special-Status Birds and Nesting Migratory Birds and Raptors

Special-status birds and migratory birds and raptors protected under federal, State, and/or local laws and policies have potential to nest and forage within the Study Area. Northern harrier was observed foraging in the Study Area during the field survey and tricolored blackbird may also forage within the Study Area. These species are not anticipated to nest within the Study Area but other species, including white-tailed kite, have a high potential to nest and forage within the Study Area. Although no active nests were observed during the field survey, the Study Area and adjacent land contain suitable habitat to support a variety of nesting birds within trees, shrubs, structures, and on bare ground.

Active nests and nesting birds are protected by the California Fish and Game Code Sections 3503 and 3503.5, 3513 and the MBTA. Ground-disturbing and other development activities including grading, vegetation clearing, tree removal/trim, and construction could impact nesting birds if these activities occur during the nesting season (generally February 1 to August 31). To avoid impacts to nesting birds, all ground disturbing activity should be completed between September 1 and January 31, if feasible. If construction cannot occur outside of the nesting season, the following measures are recommended:

- If construction activities occur during the nesting season, a qualified biologist should conduct a nesting bird survey to determine the presence of any active nests within the Study Area. Additionally, the surrounding 500 feet of the Study Area should be surveyed for active raptor nests, where accessible. The nesting bird survey should be conducted within 14 days prior to commencement of ground-disturbing or other development activities. If the nesting bird survey shows that there is no evidence of active nests, then a letter report should be prepared to document the survey and be provided to the project proponent and no additional measures are recommended. If development does not commence within 14 days of the nesting bird survey,

or halts for more than 14 days, then an additional survey is required prior to starting or resuming work within the nesting season.

    - If active nests are found, then the qualified biologist should establish a species-specific buffer to prohibit development activities near the nest to and minimize nest disturbance until the young have successfully fledged or the biologist determines that the nest is no longer active. Buffer distances may range from 30 feet for some songbirds and 0.5 mile for some raptors. Nest monitoring may also be warranted during certain phases of construction to ensure nesting birds are not adversely impacted. If active nests are found within any trees slated for removal, then an appropriate buffer should be established around the tree and all trees within the buffer should not be removed until a qualified biologist determines that the nest has successfully fledged and/or is no longer active.

- A qualified biologist should conduct environmental awareness training that is given to all onsite personnel prior to the initiation of work.

- If construction occurs outside of the nesting bird season (September 1 to January 31) a nesting bird survey and environmental training for nesting birds would not be required.

5.1.4 Aquatic Resources

A total of 1.143 acres of ditches were identified with the Study Area. Although these features have not been verified by the USACE, they are likely to be classified as a water of the U.S. and/or water of the State. The Project is currently expected to impact the entirety of the ditches (Figure 6).

Section 404 authorization from the USACE and a Section 401 Water Quality Certification from the RWQCB may be required prior to the start of construction that will impact any waters of the U.S. Any waters of the U.S. or jurisdictional wetlands that would be lost or disturbed should be replaced or rehabilitated on a “no-net-loss” basis in accordance with the USACE mitigation guidelines and City of Dixon requirements. Habitat restoration, rehabilitation, and/or replacement should be at a location and by methods agreeable to the agencies.

If a 404 permit is required for the proposed project, then water quality concerns during construction would be addressed in the Section 401 water quality certification from the Regional Water Quality Control Board. A Storm Water Pollution Prevention Plan (SWPPP) would also be required during construction activities. SWPPPs are required in issuance of a National Pollutant Discharge Elimination System (NPDES) construction discharge permit by the U.S. Environmental Protection Agency. Implementation of Best Management Practices (BMPs) during construction is standard in most SWPPPs and water quality certifications. Examples of BMPs include stockpiling of debris away from regulated wetlands and waterways; immediate removal of debris piles from the site during the rainy season; use of silt fencing and construction fencing around regulated waterways; and use of drip pans under work vehicles and containment of fuel waste throughout the site during construction.

If the ditches are determined to not be subject to federal jurisdiction, then these features may still be subject to waste discharge requirements under the Porter-Cologne Water Quality Control Act. Section 13260(a) of the Porter-Cologne Water Quality Control Act (contained in the California Water Code) requires any person discharging waste or proposing to discharge waste, other than to a community

sewer system, within any region that could affect the quality of the waters of the State (all surface and subsurface waters) to file a report of waste discharge. The discharge of dredged or fill material into the ditches may constitute a discharge of waste that could affect the quality of waters of the State. A report of waste discharge will be filed for impacts to non-federal waters, if required.

5.1.5 Solano Habitat Conservation Plan

In the event the Solano HCP is adopted prior to commencement of ground disturbing activities associated with the Project, the Project may then be developed in accordance with the Solano HCP and the Programmatic Endangered Species Act Consultation issued by the U.S. Fish and Wildlife Service. The Solano HCP is proposed to include avoidance and minimization measures as well as mitigation protocols for covered species and sensitive habitats. The City of Dixon is a voluntary participant in the proposed Solano HCP.

6.0 REFERENCES

Bargas Environmental Consulting. 2021. *Aquatic Resource Delineation Dixon 257, City of Dixon*. Prepared For: Steve Gidaro, on behalf of 5G Consulting Group.

Bechard, Marc J., C. Stuart Houstan, Jose H. Saransola, and A. Sidney England. 2010. Swainson's Hawk (Buteo swainsoni). The Birds of North America (P.G. Rodewald, editor). Cornell Lab of Ornithology. Ithaca, New York. Available at: https://birdsna.org/Species-Account/bna/species/swahaw/introduction.

Beedy, E. C., and Hamilton, W. J., III. 1999. Tricolored Blackbird (*Agelaius tricolor*), in The Birds of North America (A. Poole and F. Gill, eds.), no. 423. Birds N. Am., Philadelphia.

Bloom, P., and D. Van De Water. 1994. Swainson's Hawk in Life on the Edge: A Guide to California's Endangered Natural Resources: Wildlife. BioSystems Books, Santa Cruz, California.

California Department of Fish and Wildlife (CDFW). 2023. *California Natural Diversity Database* (CNDDB); For: *Dixon, Winters, Merritt, Davis, Saxon, Liberty Island, Dozier, Elmira,* and *Allendale* USGS 7.5-minute series quadrangles, Sacramento, CA.

2012. *Staff Report on Burrowing Owl Mitigation*. State of California Natural Resources Agency Department of Fish and Game. March 7, 2012.

1994. *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California*. State of California Department of Fish and Game. November 8, 1994.

California Native Plant Society (CNPS). 2023. *Inventory of Rare and Endangered Plants* (online edition, v8-03 0.45) For: *Dixon, Winters, Merritt, Davis, Saxon, Liberty Island, Dozier, Elmira,* and *Allendale* USGS 7.5-minute series quadrangles, Sacramento, CA.

City of Dixon. 2021. *Final Compiled Dixon General Plan 2040*. Available online at: https://www.cityofdixon.us/GeneralPlan.

eBird. 2023. The Cornell Lab of Ornithology. Available at: https://ebird.org/home.

Google Earth. 2023. https://earth.google.com/web/.

Mayer, K.E. and W.F. Laudenslayer. 1988. A Guide to Wildlife Habitats of California. State of California, Resources Agency, Department of Fish and Game, Sacramento, CA 166pp.

Science Applications International Corporation (SAIC). 2012. *Preliminary Public Draft Report for the Butte Regional Habitat Conservation Plan/Natural Community Conservation Plan*. Appendix A: Covered Species Accounts. Prepared for: Butte County Association of Governments, Chico, California. November 30, 2012.

Shuford, W. D., and Gardali, T., editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

Solano County Water Agency. 2012. *Solano Multispecies Habitat Conservation Plan*. Available online at: https://www.scwa2.com/solano-multispecies-habitat-conservation-plan/.

State Water Resources Control Board (SWRCB). 2019. *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State [For inclusion in the Water Quality Control Plans for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California]*. Adopted April 2. Available at: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (ca.gov).

U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). 2023. Web Soil Survey. Available at: Web Soil Survey | Natural Resources Conservation Service (usda.gov).

1993. Soil Survey of Placer County, California. USDA, NRCS, in cooperation with the Regents of the University of California (Agricultural Experiment Station).

U.S. Fish and Wildlife Service (USFWS). 2023. *Information for Planning and Consultation* (IPaC) *Dixon 257.*

2018. Destruction and Relocation of Migratory Bird Nest Contents. Available at: https://www.fws.gov/sites/default/files/documents/Nest%20Memo_6.12.18_final.pdf.

U.S. Geological Survey (USGS). 2021. *Dixon, California*. 7.5 -minute series topographic quadrangle. U.S. Department of the Interior.

Woodbridge, B. 1998. *Swainson's Hawk (Buteo swainsoni). The Riparian Bird Conservation Plan: A Strategy for Reversing the Decline of Riparian-associated Birds in California*. California Partners in Flight. Available at: https://www.prbo.org/calpif/htmldocs/species/riparian/swainsons_hawk.htm.

Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. *California's Wildlife: California Wildlife Habitat Relationships*. Volumes I-III. Wildlife and Habitat Data Analysis Branch, California Department of Fish and Game. Available at: California Wildlife Habitat Relationships.

Appendix A

CNDDB, CNPS, and USFWS Lists of Regionally Occurring Special-Status Species

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Dixon (3812147) OR Winters (3812158) OR Merritt (3812157) OR Davis (3812156) OR Saxon (3812146) OR Liberty Island (3812136) OR Dozier (3812137) OR Elmira (3812138) OR Allendale (3812148))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Acipenser medirostris pop. 1 green sturgeon - southern DPS	AFCAA01031	Threatened	None	G2T1	S1	
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
Ambystoma californiense pop. 1 California tiger salamander - central California DPS	AAAAA01181	Threatened	Threatened	G2G3T3	S3	WL
Ammodramus savannarum grasshopper sparrow	ABPBXA0020	None	None	G5	S3	SSC
Andrena blennospermatis Blennosperma vernal pool andrenid bee	IIHYM35030	None	None	G2	S1	
Antrozous pallidus pallid bat	AMACC10010	None	None	G4	S3	SSC
Ardea alba great egret	ABNGA04040	None	None	G5	S4	
Astragalus tener var. ferrisiae Ferris' milk-vetch	PDFAB0F8R3	None	None	G2T1	S1	1B.1
Astragalus tener var. tener alkali milk-vetch	PDFAB0F8R1	None	None	G2T1	S1	1B.2
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Atriplex cordulata var. cordulata heartscale	PDCHE040B0	None	None	G3T2	S2	1B.2
Atriplex depressa brittlescale	PDCHE042L0	None	None	G2	S2	1B.2
Atriplex persistens vernal pool smallscale	PDCHE042P0	None	None	G2	S2	1B.2
Bombus crotchii Crotch bumble bee	IIHYM24480	None	Candidate Endangered	G2	S2	
Bombus occidentalis western bumble bee	IIHYM24252	None	Candidate Endangered	G3	S1	
Branchinecta conservatio Conservancy fairy shrimp	ICBRA03010	Endangered	None	G2	S2	
Branchinecta lynchi vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
Branchinecta mesovallensis midvalley fairy shrimp	ICBRA03150	None	None	G2	S2S3	
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Centromadia parryi ssp. parryi pappose tarplant	PDAST4R0P2	None	None	G3T2	S2	1B.2
Charadrius nivosus nivosus western snowy plover	ABNNB03031	Threatened	None	G3T3	S3	SSC
Chloropyron molle ssp. hispidum hispid salty bird's-beak	PDSCR0J0D1	None	None	G2T1	S1	1B.1
Cicindela hirticollis abrupta Sacramento Valley tiger beetle	IICOL02106	None	None	G5TH	SH	
Cicuta maculata var. bolanderi Bolander's water-hemlock	PDAPI0M051	None	None	G5T4T5	S2?	2B.1
Circus hudsonius northern harrier	ABNKC11011	None	None	G5	S3	SSC
Coastal and Valley Freshwater Marsh Coastal and Valley Freshwater Marsh	CTT52410CA	None	None	G3	S2.1	
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Delphinium recurvatum recurved larkspur	PDRAN0B1J0	None	None	G2?	S2?	1B.2
Desmocerus californicus dimorphus valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2T3	S3	
Downingia pusilla dwarf downingia	PDCAM060C0	None	None	GU	S2	2B.2
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Elaphrus viridis Delta green ground beetle	IICOL36010	Threatened	None	G1	S1	
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Eryngium jepsonii Jepson's coyote-thistle	PDAPI0Z130	None	None	G2	S2	1B.2
Extriplex joaquinana San Joaquin spearscale	PDCHE041F3	None	None	G2	S2	1B.2
Fritillaria liliacea fragrant fritillary	PMLIL0V0C0	None	None	G2	S2	1B.2
Fritillaria pluriflora adobe-lily	PMLIL0V0F0	None	None	G2G3	S2S3	1B.2
Gonidea angulata western ridged mussel	IMBIV19010	None	None	G3	S1S2	
Gratiola heterosepala Boggs Lake hedge-hyssop	PDSCR0R060	None	Endangered	G2	S2	1B.2
Hibiscus lasiocarpos var. occidentalis woolly rose-mallow	PDMAL0H0R3	None	None	G5T3	S3	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Hydrochara rickseckeri Ricksecker's water scavenger beetle	IICOL5V010	None	None	G2?	S2?	
Hypomesus transpacificus Delta smelt	AFCHB01040	Threatened	Endangered	G1	S1	
Isocoma arguta Carquinez goldenbush	PDAST57050	None	None	G1	S1	1B.1
Lasionycteris noctivagans silver-haired bat	AMACC02010	None	None	G3G4	S3S4	
Lasiurus cinereus hoary bat	AMACC05032	None	None	G3G4	S4	
Lasiurus frantzii western red bat	AMACC05080	None	None	G4	S3	SSC
Lasthenia chrysantha alkali-sink goldfields	PDAST5L030	None	None	G2	S2	1B.1
Lasthenia conjugens Contra Costa goldfields	PDAST5L040	Endangered	None	G1	S1	1B.1
Lasthenia glabrata ssp. coulteri Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
Laterallus jamaicensis coturniculus California black rail	ABNME03041	None	Threatened	G3T1	S1	FP
Lathyrus jepsonii var. jepsonii Delta tule pea	PDFAB250D2	None	None	G5T2	S2	1B.2
Legenere limosa legenere	PDCAM0C010	None	None	G2	S2	1B.1
Lepidium latipes var. heckardii Heckard's pepper-grass	PDBRA1M0K1	None	None	G4T1	S1	1B.2
Lepidurus packardi vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G4	S3	
Lilaeopsis masonii Mason's lilaeopsis	PDAPI19030	None	Rare	G2	S2	1B.1
Limosella australis Delta mudwort	PDSCR10030	None	None	G4G5	S2	2B.1
Linderiella occidentalis California linderiella	ICBRA06010	None	None	G2G3	S2S3	
Melospiza melodia pop. 1 song sparrow ("Modesto" population)	ABPBXA3013	None	None	G5T3?Q	S3?	SSC
Myotis yumanensis Yuma myotis	AMACC01020	None	None	G5	S4	
Myrmosula pacifica Antioch multilid wasp	IIHYM15010	None	None	GH	SH	
Navarretia leucocephala ssp. bakeri Baker's navarretia	PDPLM0C0E1	None	None	G4T2	S2	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Neostapfia colusana Colusa grass	PMPOA4C010	Threatened	Endangered	G1	S1	1B.1
Northern Claypan Vernal Pool Northern Claypan Vernal Pool	CTT44120CA	None	None	G1	S1.1	
Oncorhynchus mykiss irideus pop. 11 steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	
Orcuttia inaequalis San Joaquin Valley Orcutt grass	PMPOA4G060	Threatened	Endangered	G1	S1	1B.1
Plagiobothrys hystriculus bearded popcornflower	PDBOR0V0H0	None	None	G2	S2	1B.1
Puccinellia simplex California alkali grass	PMPOA53110	None	None	G2	S2	1B.2
Rana boylii pop. 1 foothill yellow-legged frog - north coast DPS	AAABH01051	None	None	G3T4	S4	SSC
Sagittaria sanfordii Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
Sidalcea keckii Keck's checkerbloom	PDMAL110D0	Endangered	None	G2	S2	1B.1
Spea hammondii western spadefoot	AAABF02020	None	None	G2G3	S3S4	SSC
Spirinchus thaleichthys longfin smelt	AFCHB03010	Candidate	Threatened	G5	S1	
Symphyotrichum lentum Suisun Marsh aster	PDASTE8470	None	None	G2	S2	1B.2
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Thamnophis gigas giant gartersnake	ARADB36150	Threatened	Threatened	G2	S2	
Trifolium amoenum two-fork clover	PDFAB40040	Endangered	None	G1	S1	1B.1
Trifolium hydrophilum saline clover	PDFAB400R5	None	None	G2	S2	1B.2
Tuctoria mucronata Crampton's tuctoria or Solano grass	PMPOA6N020	Endangered	Endangered	G1	S1	1B.1
Valley Needlegrass Grassland Valley Needlegrass Grassland	CTT42110CA	None	None	G3	S3.1	

Record Count: 79

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To:
Project Code: 2023-0046900
Project Name: Dixon 257

February 17, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

PROJECT SUMMARY

Project Code: 2023-0046900
Project Name: Dixon 257
Project Type: New Constr - Above Ground
Project Description: Private development.
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.47562835,-121.80861937712322,14z

Counties: Solano County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 7 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

REPTILES

NAME	STATUS
Giant Garter Snake *Thamnophis gigas*	Threatened

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/4482

AMPHIBIANS

NAME	STATUS
California Tiger Salamander *Ambystoma californiense*	Threatened

Population: U.S.A. (Central CA DPS)
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/2076

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus*	Candidate

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/9743

Valley Elderberry Longhorn Beetle *Desmocerus californicus dimorphus*	Threatened

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/7850

CRUSTACEANS

NAME	STATUS
Conservancy Fairy Shrimp *Branchinecta conservatio* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8246	Endangered
Vernal Pool Fairy Shrimp *Branchinecta lynchi* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp *Lepidurus packardi* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2246	Endangered

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPAC USER CONTACT INFORMATION

Agency:	HELIX Environmental Planning Inc.
Name:	Christine Heckler
Address:	1677 Eureka Road Suite 100
Address Line 2:	Suite 100
City:	Roseville
State:	CA
Zip:	95661
Email	christineh@helixepi.com
Phone:	9164351202

CNPS Rare Plant Inventory

California Native Plant Society

Search Results

3 matches found. Click on scientific name for details

Search Criteria: CRPR is one of [**1A:1B:2A:2B:3:4**] Fed List is one of [**FE:FT:FC**] **and** State List is one of [**CE:CT:CR:CC**] , 9-Quad include [**3812147:3812158:3812157:3812156:3812146:3812136:3812137:3812138:3812148**]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Neostapfia colusana	Colusa grass	Poaceae	annual herb	May-Aug	FT	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Orcuttia inaequalis	San Joaquin Valley Orcutt grass	Poaceae	annual herb	Apr-Sep	FT	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Tuctoria mucronata	Crampton's tuctoria or Solano grass	Poaceae	annual herb	Apr-Aug	FE	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available

Showing 1 to 3 of 3 entries

Suggested Citation:
California Native Plant Society, Rare Plant Program. 2023. Rare Plant Inventory (online edition, v9.5). Website https://www.rareplants.cnps.org [accessed 17 February 2023].

Appendix B

Special-Status Species to Occur in the Study Area

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Plants			
Astragalus tener var. *ferrisiae* Ferris' milk-vetch	--/--/1B.1	An annual herb that occurs in meadows, seeps, and grassland habitats. It is typically found on subalkaline flats on overflow land in the Central Valley; usually in dry, adobe soil. Occurs from 4 to 80 meters elevation. Blooms April to May (CNPS 2023).	**Will not occur.** Suitable habitat types do not occur in the Study Area and dry, adobe soil is also absent. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.
Astragalus tener var. *tener* Alkali milk-vetch	--/--/1B.2	An annual herb that occurs in alkaline soils within alkali flats, grasslands, playas, and vernal pools from 0 to 170 meters elevation. Blooms March to June (CNPS 2023).	**Will not occur.** While some soil types mapped within the Study Area can be considered moderately alkaline, grasslands, playas, vernal pools, and alkaline flats do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur. Two documented occurrences within five miles of the Study Area (CDFW 2023).
Atriplex cordulata var. *cordulata* Heartscale	--/--/1B.2	An annual herb that occurs in sandy, saline or alkaline soils in chenopod scrub, valley and foothill grasslands, meadows, and seeps from 3 to 275 meters elevation. Blooms April to October (CNPS 2023).	**Will not occur.** While some soil types mapped within the Study Area can be considered moderately alkaline, chenopod scrub, grasslands, meadows, or seeps do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Atriplex depressa Brittlescale	--/--/1B.2	An annual herb found in alkaline and clay soils in playas, grasslands, vernal pools, chenopod scrub, meadows, and seeps from 1 to 320 meters elevation. Blooms April to October (CNPS 2023).	**Will not occur.** While some soil types mapped within the Study Area can be considered moderately alkaline, clay soils, playas, grasslands, vernal pools, chenopod scrub, meadows, and seeps do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.
Atriplex persistens Vernal pool smallscale	--/--/1B.2	An annual herb found in alkaline vernal pools from 10 to 115 meters elevation. Blooms June to October (CNPS 2023).	**Will not occur.** While some soil types mapped within the Study Area can be considered moderately alkaline, vernal pools do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.
Centromadia parryi ssp. *parryi* Pappose tarplant	--/--/1B.2	An annual herb often found on alkaline soil within chaparral, coastal prairie, meadows and seeps, coastal salt marshes and swamps, and vernally mesic valley and foothill grasslands from 0 to 420 meters elevation. Blooms May to November (CNPS 2023).	**Will not occur.** While some soil types mapped within the Study Area can be considered moderately alkaline, suitable habitat types do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.
Chloropyron molle ssp. *hispidum* Hispid salty bird's-beak	--/--/1B.1	An annual hemi-parasitic herb that occurs on alkaline soils within meadows, seeps, playas, and valley and foothill grasslands from 1 to 155 meters elevation. Blooms June to September (CNPS 2023).	**Will not occur.** While some soil types mapped within the Study Area can be considered moderately alkaline, meadows, seeps, playas, and valley and foothill grasslands do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Cicuta maculata var. *bolanderi* Bolander's water-hemlock	--/--/2B.1	A perennial herb found in coastal salt, fresh, or brackish marshes and swamps from 0 to 200 meters elevation. Blooms July to September (CNPS 2023).	**Will not occur.** Marsh and swamp habitat does not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.
Delphinium recurvatum Recurved larkspur	--/--/1B.2	A perennial herb found on alkaline soils within chenopod scrub, cismontane woodland, and valley and foothill grassland habitats from 0 to 300 meters elevation. Blooms March to June (CNPS 2023).	**Will not occur.** While some soil types mapped within the Study Area can be considered moderately alkaline, chenopod scrub, cismontane woodland, and valley and foothill grasslands do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.
Downingia pusilla Dwarf downingia	--/--/2B.2	An annual herb that occurs in vernal pools and mesic areas of valley and foothill grassland habitats from 1 to 445 meters elevation. Blooms May to July (CNPS 2023).	**Will not occur.** Vernal pool and grassland habitat do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.
Eryngium jepsonii Jepson's coyote thistle	--/--/1B.2	A perennial herb that occurs in vernal pools within valley and foothill grassland habitats from 3 to 300 meters elevation. Blooms April to August (CNPS 2023).	**Will not occur.** Vernal pool and grassland habitat do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Extriplex joaquinana San Joaquin spearscale	4.2	Annual herb found on alkaline soils in chenopod scrub, meadows, seeps, playas, and valley and foothill grasslands from 1 to 835 meters elevation. Blooms April to October (CNPS 2023).	**Will not occur.** While some soil types mapped within the Study Area can be considered moderately alkaline, chenopod scrub, meadows, seeps, playas, and valley and foothill grasslands do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.
Fritillaria liliacea Fragrant fritillary	--/--/1B.2	A perennial bulbiferous herb often found on serpentine soils within cismontane woodland, coastal prairie, coastal scrub, and valley and foothill grassland from 3 to 410 meters elevation. Blooms April to May (CNPS 2023).	**Will not occur.** Serpentine soils and suitable habitat types do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.
Fritillaria pluriflora Adobe-lily	--/--/1B.2	A perennial bulbiferous herb often found on adobe soils within chaparral, cismontane woodland, and valley and foothill grassland from 60 to 705 meters elevation. Blooms February to April (CNPS 2023).	**Will not occur.** Adobe soils and suitable habitat types do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur. One documented occurrence within five miles of the Study Area (CDFW 2023).
Gratiola heterosepala Boggs Lake hedge-hyssop	--/SE/1B.2	An annual herb found on clay soils in vernal pools and on the margins of marshes, swamps, and lakes from 10 to 2,410 meters elevation. Blooms April to August (CNPS 2023).	**Will not occur.** Clay soils and suitable aquatic habitats do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Hibiscus lasiocarpos var. *occidentalis* Wooly rose-mallow	--/--/1B.2	An emergent, perennial, rhizomatous herb often found in riprap on sides of levees and in freshwater marshes and swamps from 0 to 120 meters elevation. Blooms June to September (CNPS 2023).	**Will not occur.** Suitable aquatic habitat and riprap levees do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.
Isocoma arguta Carquinez goldenbrush	--/--/1B.1	A perennial shrub found on alkaline soils in valley and foothill grasslands from 1 to 20 meters elevation. Also known to occur on low benches near drainages and on tops and sides of mounds in swale habitat. Blooms August to December (CNPS 2023).	**Will not occur.** While some soil types mapped within the Study Area can be considered moderately alkaline, valley and foothill grasslands and suitable aquatic habitats do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.
Lasthenia chrysantha Alkali-sink goldfields	--/--/1B.1	An annual herb that occurs on alkaline soils in vernal pools within valley and foothill grassland habitats from 0 to 200 meters elevation. Blooms February to June (CNPS 2023).	**Will not occur.** While some soil types mapped within the Study Area can be considered moderately alkaline, vernal pools do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.
Lasthenia conjugens Contra Costa goldfields	FE/--/1B.1	An annual herb found in mesic areas of cismontane woodland, alkaline playas, valley and foothill grassland, and vernal pools from 0 to 450 meters elevation. Blooms March to June (CNPS 2023).	**Will not occur.** Suitable habitat types do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Lasthenia glabrata ssp. *coulteri* Coulter's goldfields	--/--/1B.1	An annual herb that is often found on alkaline soils in playas, sinks, and grasslands from 1 to 1,275 meters elevation. Also occurs in vernal pools, marshes, swamps, and coastal salt marshes (CNPS 2023).	**Will not occur.** While some soil types mapped within the Study Area can be considered moderately alkaline, suitable habitat types do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.
Lathyrus jepsonii var. *jepsonii* Delta tule pea	--/--/1B.2	A perennial herb found in freshwater or brackish marshes and swamps from 0 to 5 meters elevation. Usually found on edges in association with emergent marsh vegetation. Blooms May to July (CNPS 2023).	**Will not occur.** Suitable aquatic habitat does not occur in the Study Area and the Study Area is above the known elevational range of this species. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.
Legenere limosa Legenere	--/--/1B.1	An annual herb found in vernal pools from 1 to 1,005 meters elevation. Blooms April to June (CNPS 2023).	**Will not occur.** Vernal pools do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.
Lepidium latipes var. *heckardii* Heckard's pepper-grass	--/--/1B.2	An annual herb found on alkaline soils in vernal pools within valley and foothill grassland habitats from 1 to 30 meters elevation. Blooms March to May (CNPS 2023).	**Will not occur.** While some soil types mapped within the Study Area can be considered moderately alkaline, vernal pools and grasslands do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Lilaeopsis masonii Mason's lilaeopsis	--/--/1B.1	A perennial herb that occurs in brackish or freshwater marsh habitats from 0 to 10 meters elevation. Also known to occur in riparian scrub and in muddy or silty soil formed through river deposition or riverbank erosion. Blooms April to November (CNPS 2023).	**Will not occur.** Suitable aquatic habitat does not occur in the Study Area and the Study Area is above the known elevational range of this species. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.
Limosella australis Delta mudwort	--/--/2B.1	A perennial, stoloniferous herb found on mud banks within freshwater or brackish marshes and swamps as well as riparian scrub habitat from 0 to 3 meters elevation. Blooms May to August (CNPS 2023).	**Will not occur.** Suitable aquatic habitat does not occur in the Study Area and the Study Area is above the known elevational range of this species. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.
Navarretia leucocephala ssp. *bakeri* Baker's navarretia	--/--/1B.1	An annual herb found on adobe or alkaline soils in vernal pools and swales within cismontane woodland, lower montane coniferous forest, meadow, and valley and foothill grassland habitats from 3 to 1,680 meters elevation. Blooms April to July (CNPS 2023).	**Will not occur.** While some soil types mapped within the Study Area can be considered moderately alkaline, suitable habitat types do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.
Neostapfia colusana Colusa grass	FT/SE/1B.1	Annual herb that occurs on adobe soils in large vernal pools from 5 to 200 meters elevation. Blooms May to August (CNPS 2023).	**Will not occur.** Adobe soils and vernal pools do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.
Orcuttia inaequalis San Joaquin Valley Orcutt Grass	FT/SE/1B.1	Annual herb that occurs in vernal pools from 10 to 755 meters elevation. Blooms April to September (CNPS 2023).	**Will not occur.** Vernal pools do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Plagiobothrys hystriculus Bearded popcornflower	--/--/1B.1	Annual herb that occurs in vernal pools and swales within valley and foothill grasslands from 1 to 275 meters elevation. Blooms April to May (CNPS 2023).	**Will not occur.** Vernal pools and swales do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.
Puccinellia simplex California alkali grass	--/--/1B.2	An annual herb found in alkaline, vernally mesic areas of sinks, flats, and lake margins within chenopod scrub, meadow, and grassland habitats from 1 to 915 meters elevation. Blooms March to May (CNPS 2023).	**Will not occur.** While some soil types mapped within the Study Area can be considered moderately alkaline, suitable habitat types do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur. One documented occurrence within five miles of the Study Area (CDFW 2023).
Sagittaria sanfordii Sanford's arrowhead	--/--/1B.2	An emergent, perennial, rhizomatous herb found in standing or slow-moving freshwater ponds, marshes, and ditches from 0 to 605 meters elevation. Blooms April to October (CNPS 2023).	**Will not occur.** Suitable aquatic habitat does not occur in the Study Area. While this species is known to occur in ditches, the ditches within the Study Area are regularly altered in association with crop rotation and do not consistently hold water. Herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.
Sidalcea keckii Keck's checkerbloom	FE/--/1B.1	An annual herb that occurs on serpentine, clay soils in cismontane woodland and valley and foothill grassland habitats from 85 to 505 meters elevation. Blooms April to May (CNPS 2023).	**Will not occur.** The Study Area is below the known elevational range of this species and suitable soil and habitat types are absent. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Symphyotrichum lentum Suisun Marsh aster	--/--/1B.2	A perennial, rhizomatous herb found in marshes and swamps, which can be brackish or freshwater from 0 to 15 meters elevation. Blooms April to November (CNPS 2023).	**Will not occur.** Suitable aquatic habitat does not occur in the Study Area and the Study Area is above the known elevational range of this species. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.
Trifolium amoenum Two-fork clover	FE/--/1B.1	Annual herb found in coastal bluff scrub and valley and foothill grassland habitats, usually on serpentine soils. Occurs from 5 to 310 meters elevation. Blooms April to June (CNPS 2023).	**Will not occur.** Serpentine soils and suitable habitat types do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.
Trifolium hydrophilum Saline clover	--/--/1B.2	Annual herb found in marshes, swamps, and vernal pools in mesic and alkaline valley and foothill grassland habitats from 0 to 300 meters elevation. Blooms April to June (CNPS 2023).	**Will not occur.** Suitable habitat types do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.
Tuctoria mucronata Crampton's tuctoria	FR/SE/1B.1	Annual herb found in clay bottoms of drying vernal pools and lakes in valley grassland habitat from 5 to 15 meters elevation. Blooms April to August (CNPS 2023).	**Will not occur.** Vernal pools and lakes do not occur in the Study Area. In addition, the Study Area is regularly disturbed in association with agricultural activities and herbicide is also known to be used onsite which likely limits the potential for special-status plants to occur.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Wildlife			
Invertebrates			
Andrena blennospermatis Blennosperma vernal pool andrenid bee	--/--/CSA	Solitary ground nesting bee that occurs in uplands near vernal pools. Specialist pollinator to vernal pool *Blenosperma* species (CDFW 2023).	**Will not occur.** Vernal pools do not occur in or adjacent to the Study Area.
Bombus crotchii Crotch bumblebee	--/CE/--	Known range includes the California coast east to the Sierra-Cascade crest and south into Mexico. Occurs in grassland and shrubland habitats and requires hotter and drier conditions than other bumblebee species. Forages on milkweeds, dusty maidens, lupines, medics, phacelias, sages, clarkias, poppies, and wild buckwheats. Currently considered rare throughout its range (CDFW 2023).	**Not expected.** Plant species suitable for foraging may occur in the Study Area but were not observed during the survey. Because this species is considered rare throughout its range, it is not expected to occur in the Study Area. One documented occurrence within five miles of the Study Area (CDFW 2023).
Bombus occidentalis Western bumblebee	--/CE/--	Former range included southern British Columbia south to Central California, but this species is now considered rare throughout its range. Floral plants such as *Lupinus, Ceanothus, Centaurea, Rubus, and Trifolium* are necessary food sources. Queen establishes a colony within an abandoned rodent hole or other underground crevice (CDFW 2023).	**Not expected.** Plant species suitable for foraging may occur in the Study Area but were not observed during the field survey. Because this species is considered rare throughout its range, it is not expected to occur in the Study Area.
Branchinecta conservation Conservancy fairy shrimp	FE/--/--	Found in large, clay-bottomed vernal pool playas with turbid water within grassland habitats. Elevational ranges from 5 to 145 meters. Endemic to the grasslands of the northern two-thirds of the Central Valley (CDFW 2023).	**Will not occur.** Suitable habitat types for this species do not occur in the Study Area.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Branchinecta lynchi Vernal pool fairy shrimp	FT/--/--	Occurs in a variety of seasonally inundated habitats, especially with grassy or muddy substrates. Typically found in turbid water, but also occurs in clear water with aquatic vegetation. Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains (CDFW 2023).	**Will not occur.** Suitable habitat types for this species do not occur in the Study Area. Two documented occurrences within five miles of the Study Area (CDFW 2023).
Branchinecta mesovallensis Midvalley fairy shrimp	--/--/CSA	Occurs in a variety of seasonally inundated habitats, especially shallower vernal pools and swales (CDFW 2023).	**Will not occur.** Suitable habitat types for this species do not occur in the Study Area.
Cicindela hirticollis abrupta Sacramento Valley tiger beetle	--/--/CSA	Occurs in sandy floodplain habitat in the Sacramento Valley. Requires fine to medium sand, terraced floodplains or low sandy water edge flats (CDFW 2023).	**Will not occur.** Sandy floodplain habitat does not occur in the Study Area.
Danaus plexippus pop. 1 Monarch butterfly - California overwintering population	FC/--/--	Overwintering populations of monarch butterflies roost in wind protected tree groves, especially *Eucalyptus* spp., and species of pine or cypress with nectar and water sources nearby. Winter roost sites extend along the coast from Mendocino County to Baja California. As caterpillars, monarchs feed exclusively on the leaves of milkweed (*Asclepias* sp.) (Nial *et al*. 2019 and USFWS 2020). Monarch butterfly migration routes pass east over the Sierra Nevada in the fall and back to the California coast in the spring. The overwintering population is located along the Coast while summer breeding areas occur in interior California and North America with spring breeding areas located further east (USFWS 2020).	**Not expected.** The Study Area is outside of the winter roost range and does not contain suitable roosting habitat. Monarch butterflies may pass through the Study Area during migration but are not expected to be impacted by the Project.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Desmocerus californicus dimorphus Valley elderberry longhorn beetle	FT/--/--	Depends on elderberry shrubs (*Sambucus* spp.) and typically occurs near rivers or streams. Stems at least a 1-inch diameter or greater are necessary for larvae and pupae development. Adults emerge in spring until early summer and exit holes are visible on shrub stems year-round (CDFW 2023).	**Will not occur**. Elderberry shrubs do not occur in the Study Area. One documented occurrence within five miles of the Study Area (CDFW 2022).
Elaphrus viridis Delta green ground beetle	FT/--/--	This species is currently thought to be restricted to the margins of vernal pools in the grassland area between Jepson Prairie and Travis AFB. Appears to prefer sandy mud substrate where it slopes gently into water (CDFW 2023).	**Will not occur.** The Study Area does not contain vernal pool or grassland habitat and is outside of the current known range of this species.
Gonidea angulate Western ridged mussel	--/--/CSA	Occurs in creeks and rivers, less often in lakes. Appears to prefer constant water flow and well-oxygenated stable substrates in areas of low gradient. They can be found in substrates ranging in size from silt, clay, and sand to boulders. They are rarely found in waters that are continuously turbid (USFWS 2023).	**Will not occur.** Suitable aquatic habitat for this species does not occur in the Study Area.
Hydrochara rickseckeri Ricksecker's water scavenger beetle	--/--/CSA	Aquatic beetle associated with vernal pools, marshes, and swamps. Also known to occur in moist, freshwater-soaked riverbanks, low peat islands in sloughs, and on riprap and levees. In California, known from the Delta watershed. Occurs from 0 to 155 meters elevation (CDFW 2023).	**Will not occur.** Suitable aquatic habitat and riprap or levees do not occur in the Study Area.
Lepidurus packardi Vernal pool tadpole shrimp	FE/--/--	Occurs in a variety of seasonally inundated habitats, particularly low-alkalinity seasonal pools in grasslands. Known to occur in vernal pools, wetlands, and other freshwater habitats. Generally occurs in larger, deeper features where dissolved oxygen levels are higher and features remain inundated for longer periods (CDFW 2023).	**Will not occur.** Suitable habitat types for this species do not occur in the Study Area.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Linderiella occidentalis California linderiella	--/--/CSA	Occur in a variety of seasonally inundated habitats, especially large, clear, vernal pools. Typically found in seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions (CDFW 2023).	**Will not occur.** Suitable habitat types for this species do not occur in the Study Area.
Myrmosula pacifica Antioch multilid wasp	--/--/CSA	Detailed ecology information on this species is lacking and/or unknown. Known to occur in interior dunes (CDFW 2023).	**Will not occur.** Interior dunes do not occur in the Study Area.
Fishes			
Acipenser medirostris pop. 1 Green sturgeon	FT/--/--	Occurs in marine, estuary, and river habitats. This species is known to spawn in the Sacramento, Feather, and Yuba rivers; and may also spawn in the Stanislaus and San Joaquin rivers. Spawning occurs in cool sections of rivers with substrate containing small to medium sized sand, gravel, cobble or boulder. Non-spawning adults occupy marine/estuary habitats. The Delta Estuary is important habitat for rearing juveniles (CDFW 2023).	**Will not occur.** Suitable aquatic habitat does not occur in the Study Area.
Hypomesus transpacificus Delta smelt	FT/SE/--	Delta smelt are found only from the Suisun Bay upstream through the Delta in Contra Costa, Sacramento, San Joaquin, Solano and Yolo counties. The majority of their life span is spent within the freshwater outskirts of the mixing zone (saltwater-freshwater interface) within the Delta. Shortly before spawning, adults migrate upstream from the brackish-water habitat associated with the mixing zone and disperse into river channels and tidally-influenced backwater sloughs. They spawn in shallow, fresh or slightly brackish water upstream of the mixing zone. Most spawning happens in tidally-influenced backwater	**Will not occur.** Suitable aquatic habitat does not occur in the Study Area.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
		sloughs and channel edge-waters (USFWS 2017a).	
Oncorhynchus mykiss irideus Steelhead, Central Valley DPS	FT/--/--	Distinct population of the Sacramento and San Joaquin rivers and their tributaries. Found in cool, clear, fast-flowing permanent streams and rivers with riffles and ample riparian vegetation cover or overhanging banks. Spawning occurs in streams with pool and riffle complexes. This species requires cold water and gravelly streambed to successfully breed (CDFW 2023).	**Will not occur**. Suitable aquatic habitat does not occur in the Study Area.
Spirinchus thaleichthys Longfin smelt	FC/ST/--	Inhabits estuaries and bays in the Delta and Sacramento-San Joaquin rivers. Migrate to freshwater to spawn (CDFW 2023).	**Will not occur**. Suitable aquatic habitat does not occur in the Study Area.
Amphibians			
Ambystoma californiense pop. 1 California tiger salamander	FT/ST/WL	Requires both aquatic breeding habitat and suitable upland habitat. Typically found in grasslands, meadows, oak savannah, and oak woodland habitats. Adults aestivate in small mammal burrows and other crevices throughout summer, and typically emerge after the first heavy rains to migrate to breeding pools. Breeding takes place in vernal pools, ponds, wetlands, and other freshwater habitats where predators, such as fish, are absent. Adults have been known to inhabit upland habitats 1.24 miles from breeding pools, and juveniles have been known to occur up to 2 miles from breeding pools (Trenham 2001).	**Will not occur**. Suitable habitat does not occur in the Study Area. Aquatic habitats within the Study Area are agricultural drainage ditches that appear to be altered regularly in associated with crop rotation and do not consistently hold water. Suitable upland habitat is also lacking from the Study Area and the Study Area receives regular disturbance in association with farming activities. One documented occurrence within five miles of the Study Area (CDFW 2023).

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Rana boylii pop. 1 Foothill yellow-legged frog	--/--/CSA	Distinct population that occurs in the northern coast ranges north of the San Francisco Bay Estuary, Klamath Mountains, and Cascade Range including watershed subbasins: Lower Pit, Battle Creek, Thomes Creek, and Big Chico Creek in Lassen, Shasta, Tehama, and Butte counties. Occurs in rocky, perennial streams, creeks, and rivers, especially in areas with sunny banks and riffles. Rarely travels far from water. Typically found in forest, chaparral, and woodland habitats (CDFW 2023).	**Will not occur.** Suitable aquatic habitat does not occur in the Study Area and the Study Area is outside of this species' known range.
Spea hammondii Western spadefoot	--/--/SSC	Occurs in a variety of open habitats including grasslands, coastal sage scrub, chaparral, sandy washes, and playas. Can also be found in valley-foothill woodlands. This species spends the majority of its life underground and typically emerges between October to May to breed. Breeding occurs in vernal pools, depressional wetlands, and sometimes puddles. Breeding sites must remain inundated for at least 30 days for larvae to mature (CDFW 2023).	**Will not occur.** Suitable habitat does not occur in the Study Area. Aquatic habitats within the Study Area are agricultural drainage ditches that appear to be altered regularly in associated with crop rotation and do not consistently hold water. Suitable upland habitat is also lacking from the Study Area and the Study Area receives regular disturbance in association with farming activities.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Reptiles			
Actinemys (=Emys) marmorata Western pond turtle	--/--/SSC	Occurs in a variety of aquatic habitats; typically, permanent ponds, lakes, streams, irrigation ditches, canals, marshes, or pools in intermittent drainages. Prefers areas lined with abundant vegetation and either rocky or muddy substrates. Requires basking sites such as logs, rocks, cattail mats or exposed banks. Active from February to November, and breeding occurs from April to May. Overwintering occurs in upland terrestrial habitats close to water sources (approximately 300 feet), in which they will bury themselves under loose soil (CDFW 2023).	**Not expected**. Agricultural ditches within the Study Area appear to be regularly altered in association with crop rotation and do not consistently hold water. The ditches also lack essential habitat components for this species. Although not expected, this species may utilize the ditches within the Study Area during dispersal to/from more suitable habitat outside of the Study Area. One documented occurrence within five miles of the Study Area (CDFW 2023).
Thamnophis gigas Giant garter snake	FT/ST/--	Occurs in aquatic habitats with open, sunny areas for basking, vegetation cover along banks, and abundant prey. Typically occurs in agricultural wetlands, canals, and sloughs; especially near rice fields. Upland habitat with small mammal burrows present above flood level is also required for this species. This species is normally found in the immediate vicinity of permanent or semi-permanent sources of water (CDFW 2023 and Zeiner et al. 1990).	**Will not occur.** Suitable habitat is not present in the Study Area. Agricultural ditches within the Study Area appear to be regularly altered in association with crop rotation and do not consistently hold water. The ditches also lack essential habitat components for this species. The only occurrence within five miles of the Study Area is from 1987 and occurs along Putah Creek which is not hydrologically connected to the Study Area. One documented occurrence within five miles of the Study Area (CDFW 2023).

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Birds			
Agelaius tricolor Tricolored blackbird	--/ST/SSC	Common locally throughout central California. Nests and seeks cover in emergent wetland vegetation, thorny vegetation, and cattails and tules. Nesting area must be large enough to support a minimum colony of 50 pairs as they are a highly colonial species. Forages on ground in croplands, grassy fields, flooded land, and edges of ponds (Shuford and Gardali 2008).	**May occur.** This species may pass through or forage within the Study Area but suitable nesting habitat for this species does not occur within the Study Area or in the surrounding vicinity. One documented occurrence within five miles of the Study Area (CDFW 2023).
Ammodramus savannarum Grasshopper sparrow	--/--/SSC	Occurs in dense grasslands, lowland plains, and in valleys and hillsides of lower mountain slopes. Appears to favor native grasslands with a mix of grasses, forbs and scattered shrubs. Loosely colonial when nesting (CDFW 2023).	**Will not occur.** Suitable nesting or foraging habitat for this species is not present in the Study Area. One documented occurrence within five miles of the Study Area (CDFW 2023).
Ardea alba Great egret	--/--/CSA	Common year-round resident of California that nests and roosts in groves of trees isolated from human activities. Nesting colonies may be mixed with other species such as great blue herons. Adults will abandon nests if disturbed by human activities. This species may forage up to 20 miles from the rookery. Foraging habitat typically consists of shallow-water feeding or in open fields (Zeiner *et al*. 1990).	**Will not occur.** There is no suitable rookery habitat within the Study Area. This species could occur while foraging but because rookery habitat is absent from the Study Area, it is not anticipated to be impacted by the proposed project. One documented occurrence within five miles of the Study Area (CDFW 2023).

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Athene cunicularia Burrowing owl	--/--/SSC	Occurs in a variety of open habitats; typically grasslands, desert scrub, agricultural fields, washes, and disturbed areas such as golf courses or vacant lots. Burrows, perch sites, and friable soil are necessary for this species, and areas with low-lying, sparse vegetation are preferred. May utilize culverts, abandoned pipes, rubble piles, and other artificial structures for nesting if burrows are absent. Often associated with high densities of burrowing mammals. Breeding pairs stay near a nesting burrow and wintering owls may move around or roost outside of burrows (CDFW 2023).	**High.** The Study Area contains suitable nesting and foraging habitat for this species. Small mammal burrows, rubble piles, culverts, and other structures were observed in the Study Area and are suitable nesting sites for this species, and suitable foraging habitat occurs throughout the Study Area. Thirteen documented occurrences within five miles of the Study Area (CDFW 2022).
Buteo swainsoni Swainson's hawk	--/ST/--	Occurs in a variety of habitats, typically open grassland, riparian, riparian woodland, and agricultural. Nest sites typically occur in riparian areas or in isolated trees bordered by foraging habitat. Most used nest trees in the Central Valley include valley oak, Fremont's cottonwood, walnut, large willows, and occasionally eucalyptus, pine and redwood trees. Forages in row, hay, and grain crops, especially post-harvest when the height of the vegetation is short and easy to observe prey (CDFW 2023).	**High.** The entire Study Area contains suitable foraging habitat for this species and suitable nest trees border the Study Area and are also present surrounding the Study Area. 131 documented occurrences within five miles of the Study Area (CDFW 2023).
Charadrius nivosus nivosus Western snowy plover	FT/--/SSC	Nests on the ground on broad open beaches, salt pond levees, and shores of large alkali lakes. Needs sandy, gravelly, or friable soils for nesting. Typically builds nest adjacent to an object including kelp, driftwood, shells, rocks, and even in footprints (CDFW 2023).	**Will not occur.** Suitable habitat for this species does not occur in the Study Area.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Circus hudsonius Northern harrier	--/--/SSC	Occurs in large tracts of coastal scrub, grassland, marsh, riparian scrub, and wetland habitats with low, dense vegetation. Also known to occur in agricultural habitats. Nests on the ground in shrubby vegetation usually at the edge of aquatic habitat (CDFW 2023).	**Present.** This species was observed foraging in the Study Area during the field survey on February 14, 2023. The Study Area does not contain suitable nesting habitat for this species but suitable foraging habitat is present throughout.
Coccyzus americanus occidentalis Western yellow-billed cuckoo	FT/SE/--	An uncommon and rare summer migrant that occurs in riparian forest habitats along large rivers. Inhabits extensive deciduous riparian thickets or forests with dense, low-level or understory foliage, and which abut on slow-moving watercourses, backwaters, or seeps. Willow is almost always a dominant component of the vegetation. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape (Zeiner *et al.* 1990).	**Will not occur.** Riparian forest habitat does not occur in or near the Study Area. One documented occurrence within five miles of the Study Area (CDFW 2023).
Elanus leucurus White-tailed kite	--/FP/--	Occurs in a variety of habitats including grasslands, savannah, oak woodland, riparian woodland, open suburban areas, and agriculture fields. Nests in lone trees or trees near aquatic habitats. Foraging occurs within un-grazed or lightly-grazed fields, agricultural areas, and open grasslands (CDFW 2023).	**High**. The entire Study Area contains suitable foraging habitat for this species and suitable nest trees border the Study Area and are also present adjacent to the Study Area. One documented occurrence within five miles of the Study Area (CDFW 2022).
Laterallus jamaicensis coturniculus California black rail	--/ST/--	Occurs in marsh habitats; typically saltwater or brackish marshes that border bays. However, small, isolated populations are known from the Sierra Nevada foothills. Requires shallow permanent water within the marsh and dense vegetation (CDFW 2023).	**Will not occur.** Marsh habitat does not occur in the Study Area and the Study Area is outside of the current known range of this species.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Melospiza melodia pop. 1 Song sparrow "Modesto" population	--/--/SSC	Occurs in the Central lower basin of the Great Valley, from Colusa County south to Stanislaus County and east of Suisun Marshes. Occupies habitats containing dense emergent vegetation such as marshes, riparian forests, agricultural canals, and wetlands. Typically nests and occurs in areas dominated by tules, cattails, or willows (CDFW 2023).	**Not expected.** The Study Area does not contain dense, emergent vegetation and lacks suitable aquatic habitats. This species may pass through the Study Area but is not expected to be impacted by the proposed project due to a lack of suitable nesting habitat.
Mammals			
Antrozous pallidus Pallid bat	--/--/SSC	Occurs throughout California except for the high Sierra Nevada and the northern Coast Ranges. Habitats include grasslands, shrublands, woodlands, and forests from sea level to about 6,000 feet. Most common in open, dry habitats with rocky areas for roosting; roosts also include cliffs, abandoned buildings, and under bridges (Bolster, ed. 1998).	**Not expected**. This species may pass through the Study Area but because typical habitat types do not occur in the Study Area and suitable roosts are also absent, it is not expected to occur.
Lasionycteris noctivagans Silver-haired bat	--/--/CSA	Occurs in lower montane coniferous forests, old growth forests, and riparian woodlands. Roosts in hollow trees, beneath exfoliating bark, in abandoned woodpecker holes, and rarely in rock outcrops. They primarily occur in coastal and montane forests, feeding over streams, ponds, and open brushy areas (Zeiner *et al.* 1990).	**Will not occur.** Suitable forest and riparian habitat do not occur in the Study Area.
Lasiurus blossevillii Western red bat	--/--/SSC	Occurs in cismontane woodland, lower montane coniferous forest, and riparian woodland habitats. Appears to prefer habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging. Roosts in trees (CDFW 2023).	**Not expected**. This species may pass through the Study Area but because typical habitat types do not occur in the Study Area and suitable roosts are also absent, it is not expected to occur.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Lasiurus cinereus Hoary bat	--/--/CSA	Occurs in cismontane woodland, coniferous forest, and broadleaf upland forest habitats. Requires a water source and appears to prefer open habitats or habitat mosaics within the forest. Roosts in dense foliage of medium to large trees (CDFW 2023).	**Will not occur.** Suitable forest habitat does not occur in the Study Area.
Myotis yumanensis Yuma myotis	--/--/CSA	Occurs throughout California up to 11,000 feet elevation, although it is rare above 8,000 feet. Habitats include open forests and woodlands with a water source nearby, which this species typically forages over. This species roosts in buildings, mines, caves or rocky crevices. Roosting habitat also includes abandoned swallow nests and under bridges. (Zeiner *et al.* 1990).	**Not expected.** This species may pass through the Study Area but because typical habitat types do not occur in the Study Area and suitable roosts are also absent, it is not expected to occur.
Taxidea taxus American badger	--/--/SSC	Occurs in a variety of dry, open habitats including grasslands, open woodlands, shrublands, and open chaparral. Loose, friable soil is required for this species to dig den sites. Needs sufficient food, friable soils and open, uncultivated ground. Typically found in areas away from human activity (CDFW 2023).	**Will not occur.** Suitable habitat does not occur in the Study Area and the Study Area is regularly cultivated and disturbed in association with farming activities.

[1] Sensitive species reported in CNDDB or CNPS on the "*Dixon, Winters, Merritt, Davis, Saxon, Liberty Island, Dozier, Elmira,* and *Allendale*" USGS quads, or in the USFWS list for the Study Area.

[2] Status is as follows: Federal (ESA) listing/State (CESA) listing/other CDFW status or CRPR. F = Federal; S = State of California; E = Endangered; T = Threatened; C = Candidate; P = Proposed; FP=Fully Protected; SSC=Species of Special Concern; WL=Watch List; CSA= California Special Animal.

[3] Status in the Study Area is assessed as follows. **Will Not Occur**: Species is either sessile (*i.e.* plants) or so limited to a particular habitat that it cannot disperse on its own and/or habitat suitable for its establishment and survival does not occur on the Study Area; **Not Expected**: Species moves freely and might disperse through or across the Study Area, but suitable habitat for residence or breeding does not occur on the Study Area, potential for an individual of the species to disperse through or forage in the site cannot be excluded with 100% certainty; **Presumed Absent:** Habitat suitable for residence and breeding occurs on the Study Area; however, focused surveys conducted for the current project were negative; **May Occur**: Species was not observed on the site and breeding habitat is not present but the species has the potential to utilize the site for dispersal, **High**: Habitat suitable for residence and breeding occurs on the Study Area and the species has been recorded recently on or near the Study Area, but was not observed during surveys for the current project; **Present**: The species was observed during biological surveys for the current project and is assumed to occupy the Study Area or utilize the Study Area during some portion of its life cycle.

CRPR = California Rare Plant Rank: 1B to rare, threatened, or endangered in California and elsewhere; 2B to rare, threatened, or endangered in California but more common elsewhere. Extension codes: .1 to seriously endangered; .2 to moderately endangered.

REFERENCES

Bolster, B.C., editor. 1998. Terrestrial Mammal Species of Special Concern in California. Draft Final Report prepared by P.V. Brylski, P.W. Collins, E.D. Pierson, W.E. Rainey and T.E. Kucera. Report submitted to California Department of Fish and Game Wildlife Management Division, Nongame Bird and Mammal Conservation Program for Contract No. FG3146WM.

California Department of Fish and Wildlife (CDFW). 2023. California Natural Diversity Database (CNDDB); For: *Dixon, Winters, Merritt, Davis, Saxon, Liberty Island, Dozier, Elmira,* and *Allendale* USGS 7.5 minute series quadrangles, Sacramento, CA.

California Native Plant Society (CNPS). 2023. Inventory of Rare and Endangered Plants (online edition, v8-03 0.45) For: *Dixon, Winters, Merritt, Davis, Saxon, Liberty Island, Dozier, Elmira,* and *Allendale* USGS 7.5-minute series quadrangles, Sacramento, CA.

Nial K.R., Drizd, L. and Voorhies K.J. 2019. Butterflies Across the Globe: A Synthesis of the Current Status and Characteristics of Monarch (Danaus plexippus) Populations Worldwide. Front. Ecol. Evol. 7:362. doi: 10.3389/fevo.2019.00362

Shuford, W.D., and T. Gardali, editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

Trenham, P.C. 2001. Terrestrial Habitat Use by Adult California Tiger Salamanders. Journal of Herpetology, 35(2): 3433346. Source within Appendix G-2 to Final South Sacramento Habitat Conservation Plan EIS/EIR.

U.S. Fish and Wildlife Service (USFWS). 2023. Western ridged mussel. Available online at: https://www.fws.gov/species/western-ridged-mussel-gonidea-angulata

2020. Monarch (Danaus plexippus) Species Status Assessment Report. V2.1 96 pp + appendices.

Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1990. California's Wildlife. Vol. I-III. California Department of Fish and Game, Sacramento, California.

Appendix C

Plant and Wildlife Species Observed in the Study Area

Family	Scientific Name	Common Name	Status/Rating[1]
Native			
Asteraceae	*Erigeron canadensis*	Canada horseweed	-
	Holocarpha virgata	narrow tarplant	-
Euphorbiaceae	*Croton setiger*	turkey-mullein	-
Non-native			
Amaranthaceae	*Amaranthus californicus*	California amaranth	-
Asteraceae	*Carduus pycnocephalus*	Italian thistle	Moderate
	Centaurea solstitialis	yellow-star thistle	High
	Cichorium intybus	chicory	-
	Dittrichia graveolens	stinkwort	Moderate
	Helminthotheca echioides	bristly ox-tongue	Limited
	Lactuca serriola	prickly lettuce	-
Brassicaceae	*Brassica nigra*	black mustard	Moderate
	Capsella bursa-pastoris	shepherd's purse	-
	Raphanus sativus	wild radish	Limited
	Sinapis arvensis	charlock mustard	Limited
Cactaceae	*Opuntia ficus-indica*	mission cactus	-
Convolvulaceae	*Convolvulus arvensis*	field bindweed	-
Euphorbiaceae	*Euphorbia maculata*	spotted spurge	-
Fabaceae	*Trifolium hirtum*	rose clover	Limited
	Vicia villosa	hairy vetch	-
Juglandaceae	*Juglans hindsii*	walnut	-
Malvaceae	*Malva nicaeensis*	bull mallow	-
	Malva parviflora	cheeseweed mallow	-
Plantaginaceae	*Plantago lanceolata*	English plaintain	Limited
Poaceae	*Avena barbata*	slim oats	Moderate
	Bromus diandrus	common ripgut grass	Moderate
	Bromus hordeaceus	soft brome	Limited
	Echinochloa crus-galli	barnyard grass	-
	Elymus caput-medusae	medusa head	High
	Hordeum murinum	foxtail barley	Moderate
	Hordeum vulgare	common barley	-
Polygonaceae	*Rumex crispus*	curly dock	Limited

[1] California Rare Plant Rank (CRPR) = California Rare Plant Rank: 1B – rare, threatened, or endangered in California and elsewhere; Extension codes: .2 – moderately threatened; Cal-IPC Rating = Limited; Moderate; High

Family	Scientific Name	Common Name
Birds		
Accipitridae	*Buteo jamaicensis*	red-tailed hawk
	Circus hudsonius	northern harrier
Alaudidae	*Eremophila alpestris*	horned lark
Charadriidae	*Charadrius vociferus*	killdeer
Columbidae	*Zenaida macroura*	mourning dove
Corvidae	*Aphelocoma californica*	California scrub jay
	Pica nuttalli	yellow-billed magpie
Fringillidae	*Haemorhous mexicanus*	house finch
Mimidae	*Mimus polyglottos*	northern mockingbird
Parulidae	*Setophaga coronata*	yellow-rumped warbler
Passerellidae	*Passerculus sandwichensis*	savannah sparrow
	Zonotrichia leucophrys	white-crowned sparrow
Trochilidae	*Calypte anna*	Anna's hummingbird
Turdidae	*Sialia mexicana*	western bluebird
Tyrannidae	*Sayornis nigricans*	black phoebe
Mammals		
Sciuridae	*Otospermophilus beecheyi*	California ground squirrel

Appendix D

Representative Site Photographs

Photo 1. Representative view of cropland within the Study Area. Photo date: 02/14/2023.

Photo 2. Cropland along northern border of Study Area with trees along perimeter. Photo date: 02/14/2023.

Photo 3. Agricultural ditch within Study Area. Photo date: 02/14/2023.

Photo 4. Agricultural ditch within Study Area. Photo date: 02/14/2023.

Photo 5. Rubble pile within abandoned agricultural ditch in Study Area. Photo date: 02/14/2023.

Photo 6. Abandoned agricultural ditch adjacent to developed/disturbed habitat. Photo date 02/14/2023.

Photo 7. Small mammal burrows and rubble piles within Study Area. Photo date: 02/14/2023.

Photo 8. Small mammal burrows within Study Area. Photo date 02/14/2023.

Photo 9. Bee boxes within developed/disturbed habitat. Photo date: 02/14/2023.

Photo 10. Dirt access road at southern portion of Study Area. Photo date 02/14/2023.

ADDENDUM TO
THE CAMPUS 257 NEQSP TRAFFIC IMPACT ANALYSIS
January 2025

This addendum to the March 2024 Traffic Impact Analysis (TIA) has been prepared to address recent changes to the proposed Campus 257 Northeast Quadrant Specific Plan project (i.e. project) design and to clarify some information in the TIA.

Project Land Uses

The project will include the development of about 257 acres in the City's Northeast Quadrant Specific Plan. The project will consist of the following elements:

- 813 single family residences
- 225 high density residential living (HDR)
- 47.42 acres Tech Park
- 2.00 acres commercial development

The Tech Park is assumed to have a Floor to Area Ratio (FAR) of 0.30 while the commercial development is assumed to have an FAR of 0.25. This will result in the Tech Park containing about 619,680 square feet of space and the commercial development containing 27,780 square feet.

Two scenarios were analyzed for the study, the proposed 2025 Opening Day and 2040 Buildout conditions. The Opening Day scenario was analyzed with 495 housing units constructed. This Opening Day condition was reviewed and approved by the City prior to analysis. The full project was assumed completed by 2040.

The HDR site has since been swapped with a portion of the southwest corner of the Tech Park, adjacent to Professional Drive. It is projected that access to the HDR site will be via Professional Drive and internally at the Campus Parkway / Opportunity Parkway roundabout. Additionally, the drainage basin has been relocated from the southern portion of the project site to the center-east portion, adjacent to Pedrick Road and across from Campbell's facility. The single-family residential units that were located at the center-east of the project have been relocated to the south where the drainage basin had originally been located (see TIA Figure 2 (revised)).

Qualitatively, traffic along Opportunity Parkway will decrease with some HDR traffic using Professional Drive to access Pedrick Road. Similarly, traffic from the relocated southern residential area will use Commercial Drive to access either Pedrick Road or Professional Drive; Opportunity Drive is expected to receive inconsequential traffic from this relocated area. Traffic along Opportunity Drive accessing Pedrick Road will decrease while traffic along Pedrick Road from Commercial Drive will increase. Based on the 2040 + Project LOS results adequate capacity is available to accommodate the additional traffic along Professional Drive and Pedrick Road with the reduced traffic along Opportunity Drive.

Vaughn Road Realignment

The City of Dixon's General Plan 2040 identifies the Vaughn Road realignment project. This project, as identified in the General Plan, "will construct a four-lane bypass route to connect Vaughn Road with Pedrick Road while avoiding the Union Pacific Railroad tracks". The City's October 2021 *Dixon Area Advanced Traffic And Railroad Safety Study* further describes the recommended improvements in response to development of the project site. The proposed 2021 study shows reconstructed Vaughn Road west of the Union Pacific Railroad (UPRR) tracks with an "S" curve connecting as a tee intersection to Pedrick Road north of the existing UPRR rail crossing and the Vaughn Road / Pedrick Road intersection (see Figure A of this Addendum). Vaughn Road would be vacated at the railroad crossing. As there are some land uses between the to-be realigned Vaughn Road and the Pedrick Road intersection, Vaughn Road access to these properties would occur via a new tee intersection to the "S" curve portion of the realigned Vaughn Road. A single farmland property will exist on the south side of Vaughn Road between Pedrick Road and the UPRR while an existing commercial property with primary access along Pedrick Road would exist on the north side of the project. A single lane access on the west side of the Pedrick Road / Vaughn Road intersection would continue to exist and see few vehicles into the farmland area. The new connection at Pedrick Road would include a tee intersection with minor street stop control.

Project Roadways

With the project, the proposed local roadway layout includes a new intersection on Vaughn Road along the west side of the site. The new intersection is proposed at Professional Drive, which will extend along the west side of the project, turn to the east on the north side of the project, and intersect Pedrick Road (see TIA Figure 2 (revised)). Instead of the "S" curve connecting Vaughn Road directly to Pedrick Road, the proposed plan now includes a tee intersection along Professional Drive at the south side of the project, connecting with a tee intersection to Pedrick Road. This roadway is currently identified as Commercial Drive, as shown in TIA Figure 2 (revised). Almost all traffic between Vaughn Road west of Professional Drive and I-80 is expected to use Professional Drive.

With the construction of Professional Drive and Commercial Drive, no additional traffic is projected to travel between Vaughn Road west of Professional Drive and east of Pedrick Road as well as south on Pedrick Road. The traffic patterns will be altered with traffic either traveling along Pedrick Road through the intersection or a new turn to and from Vaughn Road east of Pedrick Road. Additionally, as noted in the *Dixon Area Advanced Traffic And Railroad Safety Study* the proposed operations of the Pedrick Road / Vaughn Road (now Commercial Drive) intersection will be minor street stop control. The existing Pedrick Road / Vaughn Road intersection will continue to be a four-way intersection; however, the west leg will serve farmland traffic.

Traffic Volumes, Truck Percentage, and Peak Hour Factors

Intersection turning movement data and truck data for background traffic was based on the information contained in the DKS *Streets Master Plan Update*, adopted by the City in October 2021. The DKS traffic count data was collected in December 2020. A review of this data showed that the truck percentage at the Pedrick Road / Vaughn Road (to be Commercial Drive under the project) intersection was 5%. The remaining study intersections along Pedrick Road used 2% truck traffic. This percentage reduction is consistent where high volume locations such as Interstate 80 are approached. The higher traffic volume would "dilute" the truck traffic, resulting in a lower truck percentage.

For the study intersections along Pedrick Road the peak hour factors (phf) used in the Master Plan Update varied between 0.92 and 0.97. In preparing the TIA, the more conservative 0.92 rate was used throughout (the analysis is conservative because a lower phf results in a higher intersection volume analyzed).

The project may generate some truck traffic along Pedrick Road between I-80 and Professional Drive, and along Professional Drive to the Tech Park driveways. The Research and Development (R&D) land use (LU 760) in ITE *Trip Generation* is considered an Office land use and does not contain truck percentage data unlike Industrial land uses in *Trip Generation.* The expected truck uses for those areas of the project are those of deliveries to the site and not of warehousing or manufacturing that would be associated with larger amounts of truck traffic. The truck traffic that may be generated by the project in this area as it has been redesigned, specifically, the R&D land use is below a level that would change conclusions in the TIA.

Crash History

The review of crash history conducted along 1st Street and Pedrick Road was completed for the TIA. An inadvertent error is noted in the 2nd half of TIA Table 4, in that the heading should read "Pedrick Road, Sievers Road / I-80 WB Ramps to Vaughn Road". TIA Table 4 (Revised) below presents the corrected headings.

TABLE 4 (REVISED) 2020-2022 COLLISION HISTORY				
N. 1ST St / Dorset Dr Intersection to N.1st St /Vaughn Rd intersection				
Crash Type	**2020**	**2021**	**2022**	**Total**
Speed	1*		3† / 1*	5
Unsafe Starting / Backing			1†	1
Improper Turn	1†	1*	1†	2
Right-of-Way	1†		1†	3
Signal Violation		1†		1
Improper Passing	1†			1
			Total Crashes	13
† N. 1st St / Dorset Dr * N. 1st St / Vaughn Rd				
Pedrick Rd / Vaughn Rd Intersection to Pedrick Rd / Sievers Rd – I-80 WB Ramps				
Following too Closely	1 Δ			1
DUI	1‡			1
Speed	1◊ / 1‡	1◊		3
Unsafe Starting / Backing			1 Δ / 1‡	2
Improper Turn	1◊	1◊	1‡	3
Right-of-Way			1‡	1
			Total Crashes	11
Δ Pedrick Rd / Sparling Ln – I-80 EB Ramps ‡ Pedrick Rd / Sievers Rd – I-80 WB Ramps ◊ Pedrick Rd (midblock)				

2040 Plus Project Analysis

To gauge the impact of adding 3% additional truck traffic an additional conservative analysis was completed using the 5% truck traffic used in the DKS study for the adjacent intersections along Pedrick Road. These intersections included Pedrick Road at Commercial Drive and Pedrick Road at the Campus 257 North intersection (now identified as Opportunity Drive). The analysis considered the 2040 Plus Project conditions for both a.m. and p.m. peak hours. These conditions are the worst-case scenario with buildout of the project during the Cumulative time frame.

Both intersections will continue to operate with the worst LOS (the eastbound approach) operating at level of service (LOS) B conditions at the Pedrick Road / Commercial Drive intersection and at LOS D or better conditions at the Pedrick Road / Campus 257 North intersection. Left turn queues along Pedrick Drive at each of the intersections will be less than one vehicle while the longest queue for either of the minor streets will be 108 feet for the eastbound Campus 257 North approach. The Synchro software analysis results are attached.

SITE PLAN

FIGURE 2 (REVISED)

FLECKER ASSOCIATES

R12/23/24

5500-01

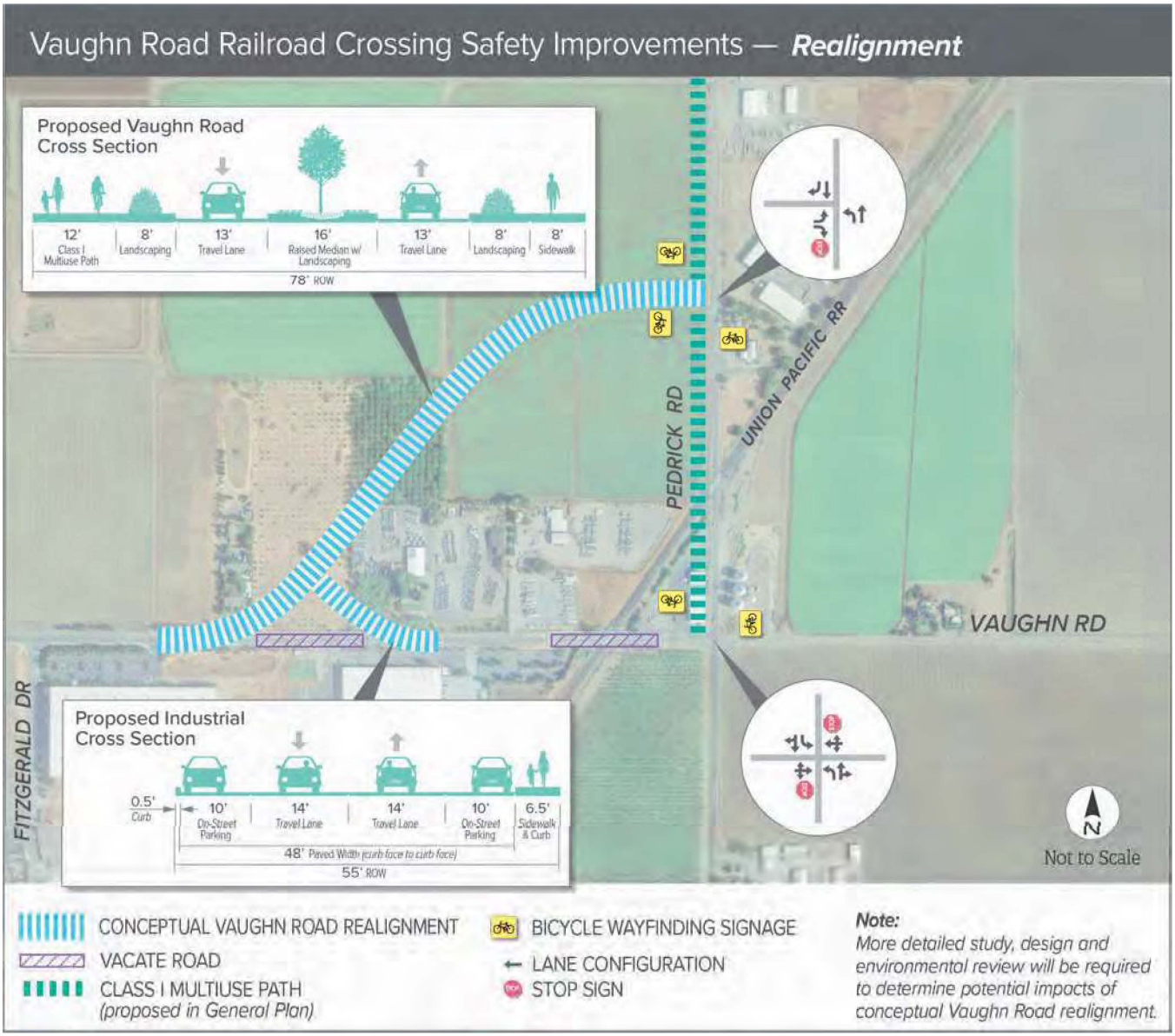

FIGURE 8. VAUGHN ROAD REALIGNMENT AND AT-GRADE RAILROAD CROSSING CLOSURE

CENTRAL AREA RAILROAD CROSSING IMPROVEMENTS

The recommended improvements at the First Street and A Street railroad crossings are described in the following sections, as well as other safety enhancements in the central area.

FIRST STREET RAILROAD CROSSING RECOMMENDED IMPROVEMENTS

Safety improvements at the First Street (SR 113) crossing were recently constructed in December 2019; accepted in the spring of 2020. Therefore, the only additional improvements recommended at this location include enhanced street lighting and simplifying signage near the railroad crossing, as detailed in *Appendix E: Diagnostic Meeting Minutes*.

FIGURE A

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	78	10	133	324	104	213
Future Vol, veh/h	78	10	133	324	104	213
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	85	11	145	352	113	232

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	870	172	345	0	-	0
Stage 1	229	-	-	-	-	-
Stage 2	641	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	306	842	1213	-	-	-
Stage 1	788	-	-	-	-	-
Stage 2	523	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	269	842	1213	-	-	-
Mov Cap-2 Maneuver	269	-	-	-	-	-
Stage 1	694	-	-	-	-	-
Stage 2	523	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	23.22	2.44	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1213	-	292	-	-
HCM Lane V/C Ratio	0.119	-	0.328	-	-
HCM Ctrl Dly (s/v)	8.4	-	23.2	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.4	-	1.4	-	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	53	85	56	404	63	17
Future Vol, veh/h	53	85	56	404	63	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	200	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	58	92	61	439	68	18

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	629	68	87	0	-	0
Stage 1	68	-	-	-	-	-
Stage 2	561	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	446	995	1509	-	-	-
Stage 1	954	-	-	-	-	-
Stage 2	571	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	428	995	1509	-	-	-
Mov Cap-2 Maneuver	428	-	-	-	-	-
Stage 1	916	-	-	-	-	-
Stage 2	571	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	11.19	0.91	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1509	-	428	995	-	-
HCM Lane V/C Ratio	0.04	-	0.135	0.093	-	-
HCM Ctrl Dly (s/v)	7.5	-	14.7	9	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	0.3	-	-

Intersection	
Int Delay, s/veh	7.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	155	103	32	181	356	173
Future Vol, veh/h	155	103	32	181	356	173
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	168	112	35	197	387	188

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	747	288	575	0	-	0
Stage 1	481	-	-	-	-	-
Stage 2	266	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	364	710	996	-	-	-
Stage 1	588	-	-	-	-	-
Stage 2	778	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	351	710	996	-	-	-
Mov Cap-2 Maneuver	351	-	-	-	-	-
Stage 1	568	-	-	-	-	-
Stage 2	778	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	26.46	1.31	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	996	-	440	-	-
HCM Lane V/C Ratio	0.035	-	0.637	-	-
HCM Ctrl Dly (s/v)	8.7	-	26.5	-	-
HCM Lane LOS	A	-	D	-	-
HCM 95th %tile Q(veh)	0.1	-	4.3	-	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	33	77	88	157	399	60
Future Vol, veh/h	33	77	88	157	399	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	200	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	84	96	171	434	65

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	796	434	499	0	-	0
Stage 1	434	-	-	-	-	-
Stage 2	362	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	356	622	1065	-	-	-
Stage 1	653	-	-	-	-	-
Stage 2	705	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	324	622	1065	-	-	-
Mov Cap-2 Maneuver	324	-	-	-	-	-
Stage 1	595	-	-	-	-	-
Stage 2	705	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	13.42	3.13	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1065	-	324	622	-	-
HCM Lane V/C Ratio	0.09	-	0.111	0.135	-	-
HCM Ctrl Dly (s/v)	8.7	-	17.5	11.7	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.4	0.5	-	-