CITY OF ARVIN MULTI-FAMILY RESIDENTIAL DEVELOPMENT GENERAL PLAN AMENDMENT AND DEVELOPMENT CODE TEXT AMENDMENT (ARVIN, CA)

INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

PUBLIC REVIEW DRAFT

MAY 2023

Prepared for

City of Arvin
200 Campus Drive
Arvin, CA 93203

Prepared by

Precision Civil Engineering, Inc.
1234 O Street
Fresno, CA 93721

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1 INTRODUCTION

Precision Civil Engineering, Inc. (PCE) has prepared this Initial Study/Mitigated Negative Declaration (IS/MND) on behalf of City of Arvin (City) to address the environmental effects of the proposed City of Arvin Multi-family Residential Development General Plan Amendment and Development Code Text Amendment for Multi-Family Housing (Project). This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et. seq., and in accordance with the City of Arvin CEQA Implementation Guidelines, Title 18 - California Environmental Quality Act Implementation – Environmental Clearance and Resolution 2022-08 CEQA Implementation Guidelines. The City of Arvin is the Lead Agency for this proposed Project. The site and the proposed Project are described in detail in SECTION 2 ENVIRONMENTAL CHECKLIST FORM.

1.1 Regulatory Information

An Initial Study (IS) is a document prepared by a lead agency to determine whether a project may have a significant effect on the environment. In accordance with California Code of Regulations Title 14 (Chapter 3, Section 15000, et seq.), also known as the CEQA Guidelines, Section 15064 (a)(1) states that an environmental impact report (EIR) must be prepared if there is substantial evidence in light of the whole record that the proposed Project under review may have a significant effect on the environment and should be further analyzed to determine mitigation measures or project alternatives that might avoid or reduce project impacts to less than significant levels.

A negative declaration (ND) may be prepared instead if the lead agency finds that there is no substantial evidence in light of the whole record that the project may have a significant effect on the environment. An ND is a written statement describing the reasons why a proposed Project, not otherwise exempt from CEQA, would not have a significant effect on the environment and, therefore, why it would not require the preparation of an EIR (CEQA Guidelines Section 15371). According to CEQA Guidelines Section 15070, a ND or mitigated ND shall be prepared for a project subject to CEQA when either:

a. The IS shows there is no substantial evidence, in light of the whole record before the agency, that the proposed Project may have a significant effect on the environment, or

b. The IS identified potentially significant effects, but:

> *1. Revisions in the project plans or proposals made by or agreed to by the applicant before the proposed MND and IS is released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur is prepared, and*
>
> *2. There is no substantial evidence, in light of the whole record before the agency, that the proposed Project as revised may have a significant effect on the environment*

1.2 Purpose of the Initial Study

The City of Arvin is the Lead Agency in regard to the proposed Project. No new development projects are proposed in this Initial Study. As subsequent projects requiring discretionary approvals are proposed in the future, those individual projects would be subject to project-specific review under CEQA. For those projects that will be considered ministerial projects as proposed under the text amendment, this document serves

to clear those future projects as they will not require future environmental review. It is the City's intent that this Initial Study can be tiered from, in compound to tiering from the General Plan Update IS/MND (2012, 2019), and General Plan MEIR (1988) (pursuant to Section 15168(c)(1) and 15168(d)), for evaluations of environmental issues associated with those later activities/subsequent projects. The City of Arvin may also use this environmental analysis for discretionary actions associated with projects developed in the Project area, or R-2, R-3, R-4 and MUO zones.

1.3 Document Format

This IS/MND contains five chapters plus appendices. SECTION 1 INTRODUCTION provides bases of the IS/MND's regulatory information and an overview of the proposed Project. SECTION 2 ENVIRONMENTAL CHECKLIST FORM provides a detailed description of proposed Project components. SECTION 3 DETERMINATION concludes that the Initial Study is a mitigated negative declaration, identifies the environmental factors potentially affected based on the analyses contained in this IS, and includes with the Lead Agency's determination based upon those analyses. SECTION 4 EVALUATION OF ENVIRONMENTAL IMPACTS presents the CEQA checklist and environmental analyses for all impact areas and the mandatory findings of significance. A brief discussion of the reasons why the Project impact is anticipated to be potentially significant, less than significant with mitigation incorporated, less than significant, or why no impacts are expected is included. SECTION 5 MITIGATION MONITORING AND REPORTING PROGRAM presents the mitigation measures recommended in the IS/MND for the Project. The CalEEMod Output Files, CNDDB List, CHRIS Record Search Result, and Project Parcels are provided as Appendix A, Appendix B, Appendix C, and Appendix D respectively, at the end of this document.

2 ENVIRONMENTAL CHECKLIST FORM

This section describes the components of the proposed Project in more detail, including project location, project objectives, and required project approvals.

2.1 Project Title

City of Arvin Multi-Family Residential Development General Plan Amendment to the Land Use Element which implements the General Plan Housing Element, Environmental Justice Element policies and Development Code Text Amendments.

2.2 Lead Agency Name and Address

City of Arvin
200 Campus Drive
Arvin, CA 93203

2.3 Contact Person and Phone Number

Lead Agency/Applicant
Chris Soriano City Planner
Planning Division, City of Arvin
(661) 606-6047

2.4 Study Prepared By

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1234 O Street
Fresno, CA 93721
(559) 449-4500

2.5 Project Location

The Project site is in the jurisdiction of the City of Arvin, Kern County, California (see Figure 2-1) and contains 399 parcels that are within the four (4) zone districts that allow multi-family residential development including the Two-Family Dwelling Zone (R-2), Limited Multiple-Family Dwelling Zone (R-3), Multiple-Family Zone (R-4) and Pedestrian-Oriented Mixed-Use Overlay Zone (MUO)Zone Districts, totaling approximately 319 acres (“Project Area”). A summary of parcel attributes in the Project Area is provided in Appendix D.

1.1 Latitude and Longitude

The centroid of the Project area is 35.19661161142381, -118.83168796946836.

Figure 2-1 Vicinity Map of Project Area

2.6 General Plan Designation

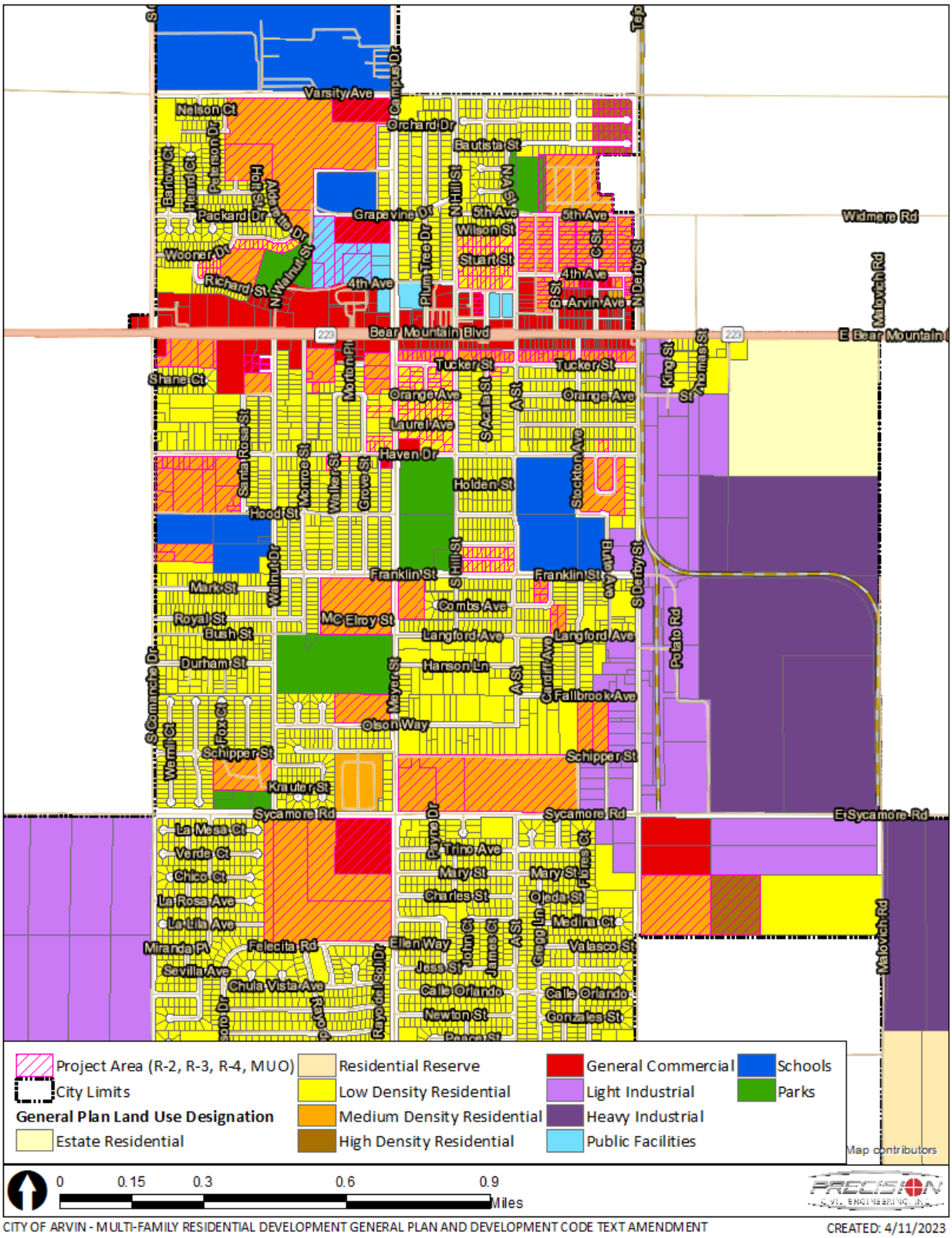
The land use designations for the Project Area are shown in Figure 2-2. There are currently three (3) land use designations contained in the Arvin General Plan that allow multi-family residential development: Low Density Residential, Medium Density Residential, and High Density Residential. Definitions of each land use designation are provided in Table 2-1.

Table 2-1. Arvin General Plan Land Use Designations for Multi-Family Residential Development

Land Use Designation	Arvin General Plan Definition
Low Density Residential (Max. Density: 6-10 units per acre)	According to the Arvin General Plan (General Plan), *"the Low Density Residential land use designation allows traditional single-family and two family homes in the City of Arvin with one to ten dwelling units per acre. This type of use is recognized as the backbone of the community and is the largest land use designation in the City. Residences in this category consist generally of single-family detached houses with private yards. The two-family homes are typically a duplex with shared front yard and either common drive approach or two separate drive approach to the off-street parking. Primary access must be from secondary, collector and local streets. Access from major streets or major highways should be considered only when special design features are included. The typical zoning designation is R-1 and R-2."*
Medium Density Residential (Max. Density: 16-21 units per acre)	The Medium Density Residential land use designation is defined by the General Plan as a land use designation that is established to *"allow for quality multifamily living environment. This category typically includes higher density single-family residential developments, two-family residential development, or lower density multi-family units, such as duplexes, apartments, or condominium units. A minimum residential density development shall be 16 units per acre. Should development be proposed at a lower minimum density, it shall be the responsibility of the developer to add additional lands to the Medium Density Residential Land Use Designation and rezone alternative sites to offset the loss of housing opportunities for affordable housing. The replacement of the site(s) for housing opportunity shall occur prior to or concurrent with the development of lower density residential or alternative land use development. Typical zoning designation is R-3."*
High Density Residential (Max. Density: 21-24 units per acre)	The General Plan defines the High Density Residential land use designation as *"…developments [that] consist typically of multi-family housing projects such as apartments and condominiums. Areas designated High Density Residential are to be integrated thorough the community adjacent to transportation, community services, and commercial developments. A minimum residential density development shall be 21 units per acre. Should development be proposed at a lower than minimum density, it shall be the responsibility of the developer to add additional lands to the High-Density Residential Land Use Designation and rezone alternative sites to offset the loss of housing opportunities for affordable housing. The replacement of the site(s) for housing opportunity shall occur prior to or concurrent with the development of lower density residential or alternative land use development. Typical zoning designation is R-4."*

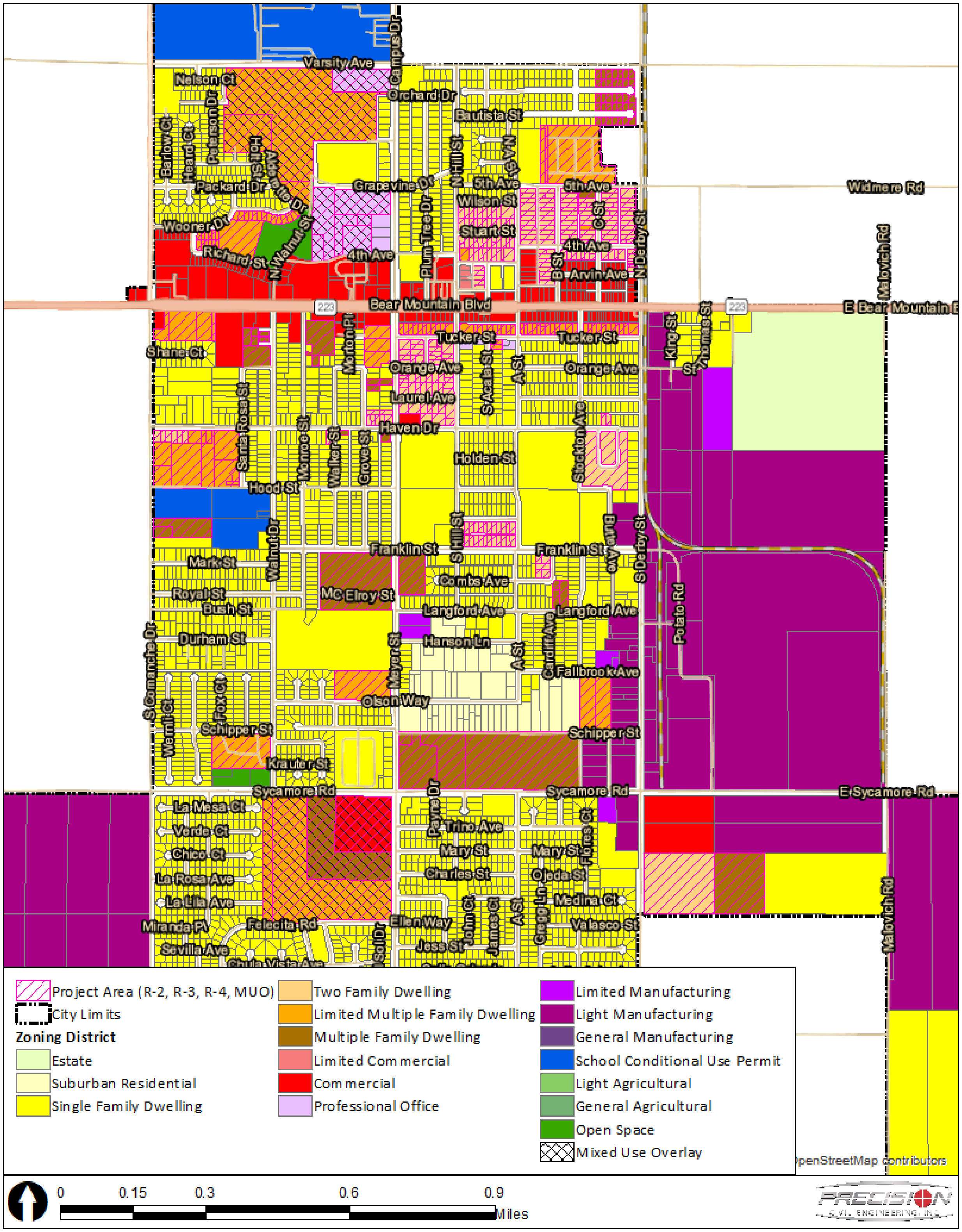
2.7 Zoning

The zone districts for the Project Area are shown in Figure 2-3. There are currently four (4) zone districts within the Arvin Municipal Code (AMC) that allow multi-family residential development: Two-Family Dwelling Zone (R-2), Limited Multiple-Family Dwelling Zone (R-3), Multiple-Family Zone (R-4), and Pedestrian-Oriented Mixed-Use Overlay Zone (MUO).



CITY OF ARVIN - MULTI-FAMILY RESIDENTIAL DEVELOPMENT GENERAL PLAN AND DEVELOPMENT CODE TEXT AMENDMENT CREATED: 4/11/2023

Figure 2-2 City of Arvin General Plan Land Use Designation Map (Existing)



CITY OF ARVIN - MULTI-FAMILY RESIDENTIAL DEVELOPMENT GENERAL PLAN AND DEVELOPMENT CODE TEXT AMENDMENT

CREATED: 4/20/2023

Figure 2-3 City of Arvin Zone District Map (Existing)

2.8 Description of Project

The City of Arvin (Applicant) proposes a General Plan Amendment and Development Code Text Amendment to modify the Arvin General Plan (General Plan) and Arvin Municipal Code (AMC) to allow ministerial approval of multi-family residential uses within specific zone districts.

The Development Code Text Amendment proposes to increase the zoning density for the three (3) zone districts within the city of Arvin (R-2, R-3 and R-4) that allow for multi-family residential development to address the need for housing. In addition, the text amendment will allow ministerial approval of eligible multi-family projects in zone districts where multi-family is currently permitted, provided certain criteria is met. These zone districts include the Two-Family Dwelling Zone (R-2), Limited Multiple-Family Dwelling Zone (R-3), Multiple-Family Zone (R-4) and the Pedestrian-Oriented Mixed-Use Overlay Zone (MUO) ("Project" or "Proposed Project").

The proposed text amendment will also make other changes within the City of Arvin zoning ordinance (Title 17 of the Arvin Municipal Code AMC), including establishing object design standards that will help facilitate ministerial approval. However, these other modifications will not alter uses permitted and will not result in any increase in the intensity of any land use above what is currently allowed or as described above. In other words, no increases in height, reduction of setbacks, or increases in permitted lot coverage are proposed.

Given that the City desires to establish objective standards to allow this ministerial approval, including standards related to sewer, water and traffic/transportation requirements, this document serves to analyze these future projects and identify thresholds that if exceeded, will result in project conditions of approval that will mitigate the impacts of these future projects.

The changes to the General Plan and Zoning Ordinance that will result in a minor increase in the density and intensity of land already designated for multi-family uses are described below.

General Plan Amendment

The Project would amend the residential density of the multi-family land uses in the General Plan Update to allow for general plan consistency. Specifically, the proposed Project would increase the maximum residential density permitted in the Medium and High Density Residential designations as shown in Table 2-2. The text amendment would also establish a new land use designation called the "Medium Low Density Residential" (MLDR) land use. This land use designation is being created to bridge the gap between Low Density Residential (current density range 6-10 du/ac) and Medium Density Residential (current density range 16-24 du/ac). While the Project proposes the addition of the MLDR land use designation, the Project does not amend the existing General Plan land use designations within the city, thus, there will be no parcels with a MLDR designation as a result of this Project. Finally, the proposed text amendment will allow a minimum of 4 units to the acre in the Low Density Residential land use designation to allow for more conventional single family developments to occur (which are typical at 4-6 dwelling units to the acre. The amendment also revises General Plan Table LU-2 to ensure consistency throughout the document.

Table 2-2 Proposed Density for Medium and High Density Land Use Designations

Land Use Designation	Current Density Range	Proposed Density Range
Low Density Residential	6-10 du/ac	4-10 du/ac
Medium Low Density Residential	N/A	10-16 du/ac
Medium Density Residential	16-21 du/ac	16-24 du/ac
High Density Residential	21-24 du/ac	21-30 du/ac

Development Code Text Amendment

In particular, the proposed Project would: (1) increase the maximum density for multi-family districts as listed in Table 2-3; (2) revise the Arvin Municipal Code (AMC) by adding Chapter 17.055, Uses Permitted Subject to Multiple Family Residential Design Review, which establishes the ministerial review and processing of Multiple Family Residential developments; (3) revise the AMC by adding Chapter 17.72, Multiple Family residential Design Review, which establishes standards for development of multiple family residential developments; and (4) amend AMC Chapter *17.05,* Uses Permitted Administrative Approval, clarifying that Multiple Family Residential developments that do not comply with the development criteria as established by Chapter 17.72 shall be subject to other review and approval process. Included in the proposed new Chapter 17.72 described above are Objective Design Standards (ODS) The ODS include objective standards that will be required of new multi-family development, including façade fenestration, finish materials, parking and circulation, open space, landscaping, grading, waste and stormwater, etc., that would be reviewed against future ministerial development projects.

Table 2-3 Proposed Density for Multi-Family Districts

Zone District	Current Density Range	Proposed Density Range
Two-Family Residential (R-2)	6-10 du/ac	6-16 du/ac
Limited Multiple-Family Dwelling Zone (R-3)	16-21 du/ac	16-24 du/ac
Multiple-Family Zone (R-4)	21-24 du/ac	21-30 du/ac

Ministerial Approval of Future Projects

As mentioned above, the proposed text amendment will revise (or add) Arvin Municipal Code (AMC) *Chapter 17.05, Chapter 17.055, and Chapter 17.72* to allow ministerial approval of multi-family residential uses in multi-family districts through a revised approval process, with no additional environmental review required. Although no additional environmental review will be required, several standards, conditions and thresholds have been established under this environmental review that will be required of future ministerial projects. In addition, objective design standards are established to ensure a streamlined review of future projects. As such, the City of Arvin will have the ability to regulate future projects that have the potential to impact traffic circulation, water supply and sewer capacity, drainage, and public services and facilities based on thresholds set by this document.

Environmental Analysis Assumptions

For the purpose of the environmental analysis, the consultant will analyze impacts from reasonably foreseeable development that would result from this Text Amendment. In order to do this, the consultant used the current maximum density as the baseline and the proposed maximum density as the potential buildout in the next few decades. A total of 76.1 acres consist of land that is considered vacant and

underutilized according to the latest ariel images provided (see Figure 2-4). [1] Of these sites, 6.7 acres are zoned R-3 and 37.6 acres are zoned R-4. Only R-3 and R-4 sites are considered here since only these two zones have changes to density proposed in the zoning ordinance as well as their corresponding land use in the General Plan. While the R-2 district also has an increase in permitted density proposed, there are no parcels with the proposed corresponding MLDR designation, thus, there will be no parcels that can be developed at the proposed density as a result of this Project. Future changes to General Plan land use designations on individual parcels to the MLDR designation will be subject to further environmental review under CEQA and the increased density will be analyzed at that time. Based on this acreage noted above and the maximum densities proposed, the total maximum buildout of residential units that could result from this Text Amendment would be 1,288 units, as compared to the current 1,042-unit capacity on those sites (see Table 2-4).

It should be noted that studies have found that the upzoning of property to allow for additional residential units has not historically been found to increase overall housing units or population within a community. [2] Thus, although the above numbers were utilized to assume maximum growth within R-3 and R-4 zones, it should be noted that the Project will not result in overall population growth but will instead result in the redistribution of housing units to these zones by allowing increases in density and a streamlined approval process.

Table 2-4 Summary of Density Increases

Zone Districts	Acres	Current Allowed Density		Proposed Density	
		DU/AC	Units	DU/AC	Units
R-3	6.7	21	140	24	160
R-4	37.6	24	902	30	1,128
Total	44.3	-	1,042	-	1,288

Tiering off of the General Plan Update ISMND, only the difference between the baseline (current allowed, 1,042 units) and proposed Project (1,288 units) is analyzed, which is 246 units. Thus, quantitative analysis in the initial study utilizes the additional 246 units developed as its primary assumption of the proposed Text Amendment. Again, it should be noted that no development is currently proposed.

[1] APNs 189-351-58 and 189-351-67 are under a development agreement to be developed as single-family subdivisions. APNs 190-020-14, 190-020-46, and 190-020-48 are a part of the Kern Community College District and will be rezoned and developed as school use. As such, these five (5) parcels are not considered as vacant and underutilized.

[2] Upzoning Chicago: Impacts of a Zoning Reform on Property Values and Housing Construction, Yonah Freemark

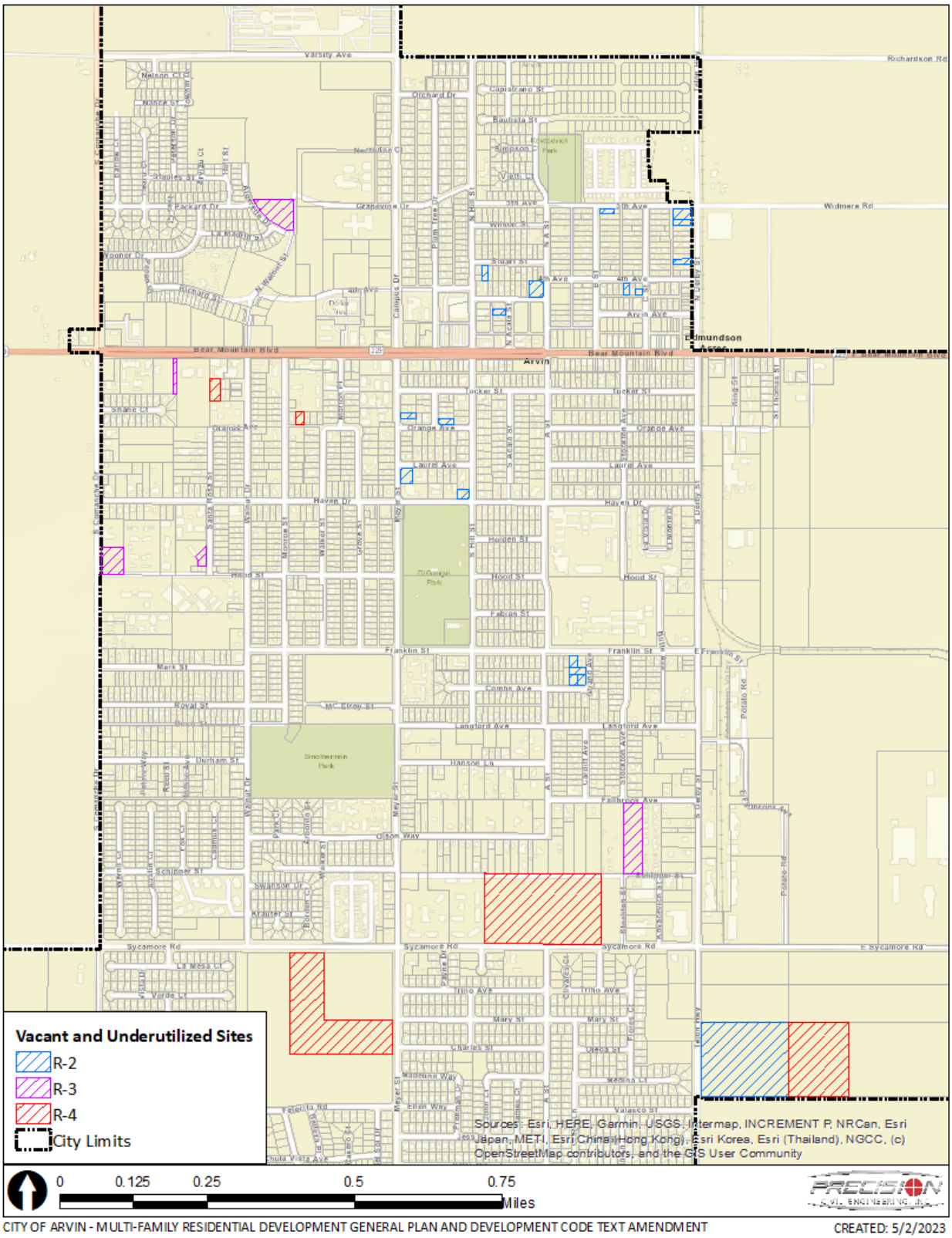


Figure 2-4 Vacant and Underutilized Land

2.9 Environmental Setting

The City of Arvin has approximately 670 acres of vacant land zoned residential and available for development as identified in the 2019 General Plan Update. The city is predominately comprised of developed urban land. Planned land uses within the city include residential, commercial, industrial, public facilities, open space, etc. Table 2-5 shows the acreage of each land uses as of 2019.

Table 2-5 2019 General Plan Land Use Acreages

Land Use Designation	Existing Acreage in 2019
Residential (including Estate Residential, Residential Reserve, Low Density Residential, Medium Density Residential, and High Density Residential)	1,600.9
Commercial	151.4
Industrial (including Light and Heavy Industrial)	803.0
Public Facilities	19.7
Parks	45.2
Schools	129.9
Agricultural	1.0
Streets and Right-of-Ways	325.0
Total	**3,077.5**

According to the 2020 Decennial Census, the City of Arvin's population is 19,495. [3] The population projection of the General Plan Update under full buildout within the General Plan Planning Area is 54,413 residents and 12,209 housing units. According to the General Plan Update IS/MND, the city is anticipated to result in an increase of 4,500 housing units and 20,060 residents. The analysis performed in the IS/MND assumes the development of approximately 226 residential units per year throughout 20 years.

Regional Housing Needs Allocation (RHNA)

California General Plan Law requires that all cities accommodate a fair share of regional housing needs to ensure a fair distribution of new housing construction among communities and a mix a housing types for all income level. Consequently, the city of Arvin's current Housing Element, year 2013 through 2023 cycle, allocates a total of 1,168 units. In addition, pursuant to AB 1233, unaccommodated 2008 lower income RHNA obligation are rolled over. As such, the city of Arvin is allocated a total of 1,168 housing units.

Arvin 2019 General Plan Update

The Text Amendment supports multiple goals of the 2019 Arvin General Plan Update Land Use Element:

> ***Goal 4:*** *Promote infill development that utilizes existing infrastructure, incorporates complementary land uses, and limits outward growth into agricultural and open space land.*

[3] United States Census Bureau. (2021). DEC Redistricting Data (PL 94-171): Arvin City, California. Accessed on February 21, 2023, https://data.census.gov/table?g=1600000US0602924&y=2020&d=DEC+Redistricting+Data+(PL+94-171)&tid=DECENNIALPL2020.P1

Goal 7: *Ensure that new housing is produced in ways that reduce greenhouse gas emissions.*

Goal 9: *Provide a variety of housing options within the City.*

2.10 Required Project Approvals

- Text Amendment
- General Plan Amendment

2.11 Technical Studies

The analysis of the Project throughout this Initial Study relied in part on the technical studies listed below prepared for the Project, as well as other sources, including, but not limited to, City of Arvin General Plan Master Environmental Impact Report (MEIR) SCH No. 1987100504 [4], the General Plan Update Mitigated Negative Declaration SCH No. 2012071044, City of Arvin Proposed Sphere of Influence Amendment 2018, 2019 General Plan Update (Resolutions No. 2012-23, 2018-23, 2019-03, and 2019-09), Municipal Services Review, and Williamson Act Ordinance Negative Declaration SCH No. 2019011017.

- Appendix A: CalEEMod Output Files
- Appendix B: CNDDB List
- Appendix C: CHRIS Record Search Result

2.12 Consultation with California Native American Tribes

The State requires lead agencies to consider the potential effects of proposed projects and consult with California Native American tribes during the local planning process for the purpose of protecting Traditional Tribal Cultural Resources through the California Environmental Quality Act (CEQA) Guidelines. Pursuant to PRC Section 21080.3.1, the lead agency shall begin consultation with the California Native American tribe that is traditionally and culturally affiliated with the geographical area of the proposed project. Such significant cultural resources are either sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe which is either on or eligible for inclusion in the California Historic Register or local historic register, or, the lead agency, at its discretion, and support by substantial evidence, choose to treat the resources as a Tribal Cultural Resources (PRC Section 21074(a)(1-2)). According to the most recent census data, California is home to 109 currently recognized Indian tribes.

Assembly Bill 52

Assembly Bill 52 (AB 52) requires consultation with California Native American tribes during the CEQA process to determine potential effects of proposed projects on a tribal cultural resource. Pursuant to Public Resources Code (PRC) *Section 21080.3.1*, the lead agency shall begin consultation with the California Native American tribe that is traditionally and culturally affiliated with the geographical area of the proposed project. Such significant cultural resources are either sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe which is either on or eligible for inclusion in the California Historic Register or local historic register, or, the lead agency, at its discretion, and support by substantial evidence, choose to treat the resources as a Tribal Cultural Resources (PRC *Section 21074(a) (1-2)*).

[4] Kern Council of Governments. (1988). City of Arvin General Plan Master Environmental Impact Report.

According to the most recent census data, California is home to 109 currently recognized Indian tribes. Tribes in California currently have nearly 100 separate reservations or Rancherias.

Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See PRC Section *21083.3.2.*) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per PRC *Section 5097.96* and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that PRC Section *21082.3(c)* contains provisions specific to confidentiality.

Senate Bill 18

Senate Bill 18 (SB 18) requires consultation with California Native American Tribes prior to the adoption or amendment of a general plan or specific plan. SB 18 went into effect January 1, 2005, and the process is summarized below:

- *Prior to the adoption or any amendment of a general plan or specific plan, a local government must notify the appropriate tribes (on the contact list maintained by the NAHC) of the opportunity to conduct consultations for the purpose of preserving, or mitigating impacts to, cultural places located on land within the local government's jurisdiction that is affected by the proposed plan adoption or amendment. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (Government Code Section 65352.3).*
- *Prior to the adoption or substantial amendment of a general plan or specific plan, a local government must refer the proposed action to those tribes that are on the Native American Heritage Commission (NAHC) contact list and have traditional lands located within the city or county's jurisdiction. The referral must allow a 45-day comment period (Government Code Section 65352). Notice must be sent regardless of whether prior consultation has taken place. Such notice does not initiate a new consultation process.*
- *Local government must send a notice of a public hearing, at least 10 days prior to the hearing, to tribes who have filed a written request for such notice (Government Code Section 65092).*

Tribal Consultation

A consultation list of tribes with traditional lands or cultural places located within Kern County was requested and received from the California Native American Heritage Commission (NAHC) on August 8, 2022. The listed tribes include Big Pine Paiute Tribe of the Owens Valley, Coastal Band of the Chumash Nation, Kitanemuk and Yowlumne Tejon Indians, Tejon Indian Tribe, and Tule River Indian Tribe. The NAHC also conducted a Sacred Lands File (SFL) check which received negative results.

The City of Arvin conducted formal tribal consultation pursuant to AB 52 (Chapter 532, Statutes 2014) and SB 18 (Chapter 905, Statutes 2004) on August 19, 2022, and December 16, 2022, utilizing the consultation list of tribes received from the NAHC. The same five (5) tribes listed above were included in the formal consultation. Consultation for AB 52 ended on September 18, 2022, and January 15, 2023, and consultation for SB 18 ended on November 17, 2022 and March 16, 2023. No response was received.

3 DETERMINATION

3.1 Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is “a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- ☐ Aesthetics
- ☐ Agriculture and Forestry Resources
- ☒ Air Quality
- ☐ Biological Resources
- ☒ Cultural Resources
- ☐ Energy
- ☐ Geology and Soils
- ☐ Greenhouse Gas Emissions
- ☒ Hazards and Hazardous Materials
- ☐ Hydrology and Water Quality
- ☐ Land Use Planning
- ☐ Mineral Resources
- ☒ Noise
- ☐ Population and Housing
- ☐ Public Services
- ☐ Recreation
- ☒ Transportation
- ☒ Tribal and Cultural Resources
- ☒ Utilities and Service Systems
- ☐ Wildfire

For purposes of this Initial Study, the following answers have the corresponding meanings:

“No Impact” means the specific impact category does not apply to the project, or that the record sufficiently demonstrates that project specific factors or general standards applicable to the project will result in no impact for the threshold under consideration.

“Less Than Significant Impact” means there is an impact related to the threshold under consideration, but that impact is less than significant.

“Less Than Significant with Mitigation Incorporation” means there is a potentially significant impact related to the threshold under consideration, however, with the mitigation incorporated into the project, the impact is less than significant. For purposes of this Initial Study “mitigation incorporated into the project” means mitigation originally described in the GP PEIR and applied to an individual project, as well as mitigation developed specifically for an individual project.

“Potentially Significant Impact” means there is substantial evidence that an effect may be significant related to the threshold under consideration.

3.2 Determination

On the basis of this initial evaluation (to be completed by the Lead Agency):

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT (EIR) is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An EIR is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Approved By:

5-2-23

Jeff Jones, City Manager — Date
City of Arvin, Planning Division

4 EVALUATION OF ENVIRONMENTAL IMPACTS

4.1 AESTHETICS

Except as provided in Public Resources Code Section 21099, **would the project:**		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Have a substantial adverse effect on a scenic vista?				X
b)	Substantially damage scenic resources, including, but not limited to, trees, rock out-croppings, and historic buildings within a state scenic highway?				X
c)	In non-urbanized areas, substantially degrade the existing visual character or quality public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

4.1.1 Environmental Setting

The city of Arvin is located within Kern County in the San Joaquin Valley in central California. The City has a generally flat topography with low-rise buildings and visual skyline features of mountain ranges east and south of the city. Visual features within the city are primarily trees, structures, and landscaping along straight roadways with farmland and grassland at the edge of built areas.

General Plan

The Arvin General Plan does not identify scenic resources.

Municipal Code

Arvin Municipal Code (AMC) Section *17.70 – Site Development Standards* contains the following enforceable requirement for all new development, including future development facilitated by implementation of the Project, intended to prevent light and glare impacts:

I. ***Exterior Lighting.*** *Exterior lighting shall be arranged or shielded in such a manner as to contain the direct illumination on the site and avoid glare in nearby residential areas. Exterior lighting shall be powered by passive energy; for example, solar powered. All buildings must have a lighted address panel placed at approved locations for ease of identification.*

California Scenic Highway Program

The California Scenic Highway Program was established in 1963 with the purpose to protect and enhance the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment. A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the travelers' enjoyment of the view. There are no officially designated State Scenic Highways in the city of Arvin, inclusive of the Project site. [5]

4.1.2 Impact Assessment

Except as provided in PRC Section 21099, would the project:

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

No Impact. The General Plan does not identify or designate scenic vistas within the city or within the city's Sphere of Influence, inclusive of the Project site. As a result, the Project would not adversely affect scenic vistas and no impact would occur because of the Project.

b) Substantially damage scenic resources, including, but not limited to, trees, rock out-croppings, and historic buildings within a state scenic highway?

No Impact. According to the California State Scenic Highway Program, there are no State-designated Scenic Highways in the city of Arvin. The nearest eligible State Scenic Highway, Route 58, is approximately 31.7 miles east of the city of Arvin on the other side of the Piute Mountain Range. As such, the proposed Project would not damage scenic resources within a state scenic highway and no impact would occur.

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

Less than Significant Impact. In general, the Project includes infill sites and previously developed sites within city limits in areas that contain residential, commercial, office, industrial, agricultural, and recreational uses.

Although no specific development project is currently proposed, future development of the Project sites within the Project Area would be subject to the entitlement review process. Through the entitlement review process, future development would be subject to compliance with applicable policies and regulations that govern scenic quality including but not limited to the General Plan, AMC, and California Building Code. Compliance would ensure that future development of the Project sites within the Project

[5] Caltrans. California State Scenic Highway System Map. Accessed on August 10, 2022, https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa

Area would not substantially degrade the existing visual character or quality of public views of the sites and its surrounding area, nor would future development conflict with applicable zoning and other regulations governing scenic quality. Therefore, a less than significant impact would occur because of the Project.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than Significant Impact. Generally, lighting impacts are associated with artificial lighting in evening hours either through interior lighting from windows or exterior lighting (e.g., street lighting, parking lot lighting, landscape lighting, cars, and trucks). Although no specific development project is currently proposed, future development of the Project sites in the Project Area would incrementally increase the amount of light from streetlights, exterior lighting, and vehicular headlights. Such sources could create adverse effects on day or nighttime views in the area. Future development would be subject to site development standards contained in AMC *Section 17.70.010*, specifically sub-section (I) which contains specific, enforceable requirements intended to prevent light and glare impacts. In addition, future development would be required to comply with Title 24 lighting requirements which would also reduce impacts related to nighttime light. The Title 24 lighting requirements cover outdoor spaces including regulations for mounted luminaires (i.e., high efficacy, motion sensor controlled, time clocks, energy management control systems, etc.). As such, conditions imposed on future development by the City pursuant to the AMC and Title 24 would reduce light and glare impacts to a less than significant impact.

4.1.3 Mitigation Measures

None required.

4.2 AGRICULTURE AND FORESTRY RESOURCES

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farm-land), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				X
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

4.2.1 Environmental Setting

The Project sites within the Project Area are located within the Arvin city limits and are planned and zoned for residential and urbanized uses. The Project Area does not contain any agricultural or forestry resources such as agricultural land, forest land, or timberland.

Farmland Monitoring and Mapping Program

The California Department of Conservation manages the Farmland Mapping and Monitoring Program (FMMP) that provides maps and data for analyzing land use impacts to farmland. The FMMP produces the Important Farmland Finder as a resource map that shows quality (soils) and land use information. Agricultural land is rated according to soil quality and irrigation status, in addition to many other physical and chemical characteristics. The highest quality land is called “Prime Farmland” which is defined by the

FMMP as *"farmland with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date."*[6] Maps are updated every two years. According to the FMMP, California Important Farmland Finder, the sites within the Project Area are classified as "Urban and Built-Up Land" "Grazing Land", and "Vacant or Disturbed Land."[7] (See Figure 4-1)

California Land Conservation Act

The California Land Conservation Act of 1965 (i.e., the Williamson Act) allows local governments to enter contracts with private landowners to restrict parcels of land agricultural or open space uses. In return, property tax assessments of the restricted parcels are lower than full market value. The minimum length of a Williamson Act contract is 10 years and automatically renews upon its anniversary date; as such, the contract length is essentially indefinite. The Project Area is not subject to the Williamson Act.

4.2.2 Impact Assessment

Would the project:

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

Less than Significant Impact. According to the FMMP, most of the sites within the Project Area are designated as "Urban and Built-Up Land," "Grazing Land", and "Vacant or Disturbed Land." There is a site located southeast of the city that is designated as "Prime Farmland". While no development is proposed as part of the Project, future development of that site would convert Prime Farmland to non-agricultural use. However, this conversion of Prime Farmland would not be a result of the proposed Text Amendment, since the site had already been planned for urbanized uses in previous zoning and General Plan documents. As such, this potential conversion of Prime Farmland was evaluated under the City of Arvin General Plan Update IS/MND. Therefore, the Project would not increase the impact of converting Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use and a less than significant impact would occur.

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

No Impact. The Project Area is not zoned for agricultural use and is not subject to the Williamson Act. Therefore, the Project would not conflict with existing zoning for agricultural use, or a Williamson Act contract and no impact would occur.

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[6] California Department of Conservation. Important Farmland Categories. Accessed on July 28, 2022, https://www.conservation.ca.gov/dlrp/fmmp/Pages/Important-Farmland-Categories.aspx

[7] California Department of Conservation. (2018). California Important Farmland Finder. Accessed on August 16, 2022, https://maps.conservation.ca.gov/DLRP/CIFF/

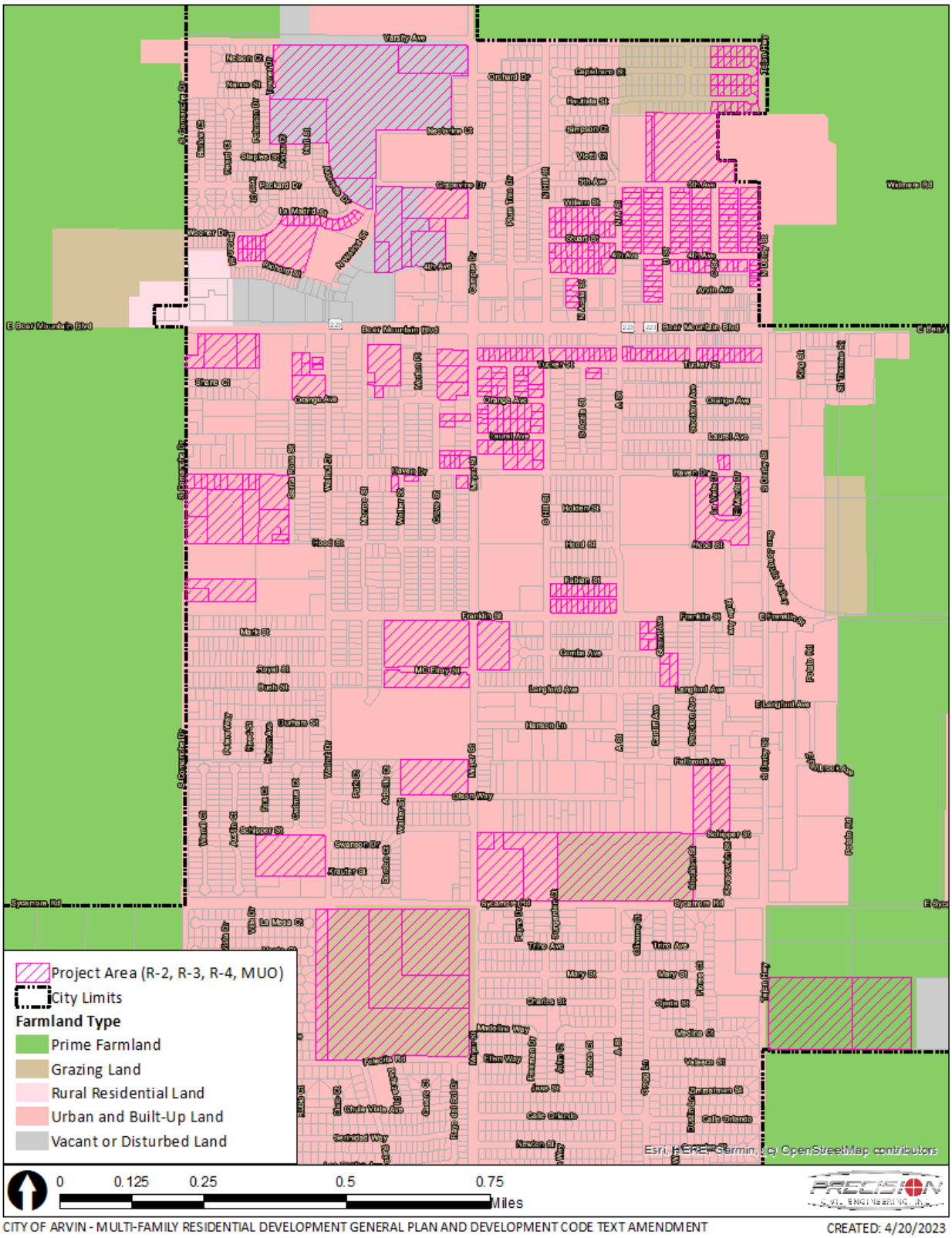

Figure 4-1 Farmland Monitoring and Mapping Program, Project Area Classifications

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

No Impact. The Project Area is not planned or zoned for forest land or timberland. Further, the Project would not cause the rezoning of forest land, timberland, or timberland zoned Timberland Production. As a result, the Project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production and no impact would occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The Project Area does not contain forest land and is not planned or zoned for forest land or forest uses. Implementation of the Project would therefore not result in the loss of forest land or conversion of forest land to non-forest use. As a result, no impact would occur.

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

Less than Significant Impact. The Project Area is within city limits, is planned and zoned for residential and urbanized uses. The Project is to amend the General Plan and Zoning Ordinance to increase residential density of multi-family residential land uses and zones. Therefore, future development of the Project Area with residential uses would be generally consistent with the existing environment of the surrounding uses. While development of the Project Area could result in conversion of existing farmland to non-agricultural uses, this impact was evaluated under the City of Arvin General Plan Update IS/MND. As a result, the Project would not involve other changes in the existing environment that could result in the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. Therefore, a less than significant impact would occur because of the Project.

4.2.3 Mitigation Measures

None required.

4.3 AIR QUALITY

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Conflict with or obstruct implementation of the applicable air quality plan (e.g., by having potential emissions of regulated criterion pollutants which exceed the San Joaquin Valley Air Pollution Control Districts (SJVAPCD) adopted thresholds for these pollutants)?		X		
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			X	
c)	Expose sensitive receptors to substantial pollutant concentrations?			X	
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

4.3.1 Environmental Setting

The Project is located within the San Joaquin Valley Air Basin (SJVAB). The San Joaquin Valley Air Pollution Control District (SJVAPCD) regulates air quality in eight (8) counties including: Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare, and oversees the SJVAB.

Impacts on air quality result from emissions generated during short-term activities (construction) and long-term activities (operations). Construction-related emissions consist mainly of exhaust emissions (NOx and PM) from construction equipment and other mobile sources, and fugitive dust (PM) emissions from earth moving activities. Operational emissions are source specific and consist of permitted equipment and activities and non-permitted equipment and activities.

Air pollution in the SJVAB can be attributed to both human-related (anthropogenic) and natural (non-anthropogenic) activities that produce emissions. Air pollution from significant anthropogenic activities in the SJVAB includes a variety of industrial-based sources as well as on- and off-road mobile sources. Four (4) main sources of air pollutant emissions in the SJVAB are motor vehicles, industrial plants, agricultural activities, and construction activities. All four of the major pollutant sources affect ambient air quality throughout the SJVAB.

These sources, coupled with geographical and meteorological conditions unique to the area, stimulate the formation of unhealthy air. Air pollutants can remain in the atmosphere for long periods and can build to

unhealthful levels when stagnant conditions that are common in the San Joaquin Valley occur. Pollutants are transported downwind from urban areas with many emission sources which are also recirculated back to the urban areas.

Further, the SJVAB is in non-attainment for ozone, PM_{10}, and $PM_{2.5}$, which means that certain pollutants' exposure levels are often higher than the normal air quality requirements. Air quality standards have been set to protect public health, particularly the health of vulnerable people. Therefore, if the concentration of those contaminants exceeds the norm, some susceptible individuals in the population are likely to experience health effects. Concentration of the pollutant in the air, the length of time exposed and the individual's reaction are factors that affect the extent and nature of the health effects.

San Joaquin Valley Air Pollution Control District

The SJVAPCD is the agency primarily responsible for ensuring that NAAQS and CAAQS are not exceeded and that air quality conditions are maintained in the SJVAB, within which the Project is located. Responsibilities of the SJVAPCD include, but are not limited to, preparing plans for the attainment of ambient air quality standards, adopting and enforcing rules and regulations concerning sources of air pollution, issuing permits for stationary sources of air pollution, inspecting stationary sources of air pollution and responding to citizen complaints, monitoring ambient air quality and meteorological conditions, and implementing programs and regulations required by the FCAA and the CCAA. The SJVAPCD rules and regulations that may apply to future development resulting from Project implementation include but are not limited to:

Rule 2010 – Permits Required. *The purpose of this rule is to require any person constructing, altering, replacing or operating any source operation which emits, may emit, or may reduce emissions to obtain an Authority to Construct or a Permit to Operate. This rule also explains the posting requirements for a Permit to Operate and the illegality of a person willfully altering, defacing, forging, counterfeiting or falsifying any Permit to Operate.*

Rule 2201 – New and Modified Stationary Source Review Rule. *The purpose of this rule is to provide for the following: The review of new and modified Stationary Sources of air pollution and to provide mechanisms including emission trade-offs by which Authorities to Construct such sources may be granted, without interfering with the attainment or maintenance of Ambient Air Quality Standards; and No net increase in emissions above specified thresholds from new and modified Stationary Sources of all nonattainment pollutants and their precursors.*

Rule 4001 – New Source Performance Standards. *This rule incorporates the New Source Performance Standards from Part 60, Chapter 1, Title 40, Code of Federal Regulations (CFR).*

Rule 4002 – National Emission Standards for Hazardous Air Pollutants. *This rule incorporates the National Emission Standards for Hazardous Air Pollutants from Part 61, Chapter I, Subchapter C, Title 40, Code of Federal Regulations (CFR) and the National Emission Standards for Hazardous Air Pollutants for Source Categories from Part 63, Chapter I, Subchapter C, Title 40, Code of Federal Regulations (CFR).*

Rule 4102 – Nuisance. *The purpose of this rule is to protect the health and safety of the public and applies to any source operation that emits or may emit air contaminants or other materials.*

Rule 4601 – Architectural Coatings. *The purpose of this rule is to limit VOC emissions from architectural coatings. This rule specifies architectural coatings storage, cleanup, and labeling requirements.*

Rule 4641 – Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations. *The purpose of this rule is to limit VOC emissions from asphalt paving and maintenance operations. This rule applies to the manufacture and use of cutback asphalt, slow cure asphalt and emulsified asphalt for paving and maintenance operations.*

Regulation VIII – Fugitive PM10 Prohibitions. *The purpose of Regulation VIII (Fugitive PM_{10} Prohibitions) is to reduce ambient concentrations of fine particulate matter (PM_{10}) by requiring actions to prevent, reduce or mitigate anthropogenic fugitive dust emissions.*

Rule 9510 – Indirect Source Review. *The purposes of this rule are to:*

1. Fulfill the District's emission reduction commitments in the PM_{10} and Ozone Attainment Plans.

2. Achieve emission reductions from the construction and use of development projects through design features and on-site measures.

3. Provide a mechanism for reducing emissions from the construction of and use of development projects through off-site measures.

General Plan

The Arvin General Plan is consistent with forecast numbers prepared by the Kern Council of Governments (COG) and policies addressing air quality impacts incorporate Senate Bill 375 and sustainability principles developed by the Strategic Growth Council (SGC) for the Sustainable Community Strategy. In regard to local measures and thresholds for air quality impacts, the Arvin General Plan Air Quality Element and Land Use Element outlines policies for addressing air quality. A sample of applicable goals and policies are as follows:

> ***LU-2.1*** *Require new development, wherever possible, to provide convenient, direct and safe bicycle and pedestrian connections.*
>
> ***LU-2.2*** *Create active neighborhood districts that cluster jobs, services, goods and cultural and recreational uses within walking distance of residences to create a focus for community activity.*
>
> ***LU-2.3*** *Develop the Jewett Square and Meyer/Sycamore opportunity sites as walkable neighborhoods, with assets and amenities that contribute positively to Arvin's quality of life and civic identity.*
>
> ***AQ-1.1*** *Encourage strategic land use patterns for businesses that reduce the number and length of motor vehicle trips, and that encourage alternative modes of travel.*
>
> ***AQ-1.2*** *Encourage employment-intensive development with a high number of jobs per unit of land area within walking or bicycling distance of existing neighborhoods, and discourage such development in more remote areas.*

Thresholds of Significance

To assist local jurisdictions in the evaluation of air quality impacts, the SJVAPCD has published the *Guide for Assessing and Mitigating Air Quality Impacts* (GAMAQI). This guidance document includes recommended thresholds of significance to be used for the evaluation of short-term construction, long-term operational, odor, toxic air contaminant, and cumulative air quality impacts. Accordingly, the SJVAPCD-recommended thresholds of significance are used to determine whether implementation of the proposed Project would result in a significant air quality impact. Projects that exceed these recommended thresholds would be considered to have a potentially significant impact on human health and welfare. The thresholds of significance are summarized, as follow:

1) Criteria Air Pollutants: SJVAPCD adopted thresholds of significance for criteria air pollutants, as shown in Table 4-1. The thresholds of significance are based on a calendar year basis. For construction emissions, the annual emissions are evaluated on a rolling 12- month period. The following summarizes these thresholds:

Short-Term Emissions of Particulate Matter (PM10): Construction impacts associated with the proposed Project would be considered significant if the feasible control measures for construction in compliance with Regulation VIII as listed in the SJVAPCD guidelines are not incorporated or implemented, or if project-generated emissions would exceed 15 tons per year (TPY).

Short-Term Emissions of Ozone Precursors (ROG and NOX): Construction impacts associated with the proposed Project would be considered significant if the project generates emissions of Reactive Organic Gases (ROG) or NO_X that exceeds 10 TPY.

Long-Term Emissions of Particulate Matter (PM10): Operational impacts associated with the proposed Project would be considered significant if the project generates emissions of PM_{10} that exceed 15 TPY.

Long-Term Emissions of Ozone Precursors (ROG and NOX): Operational impacts associated with the proposed Project would be considered significant if the project generates emissions of ROG or NOX that exceeds 10 TPY.

Table 4-1 SJVAPCD Recommended Air Quality Thresholds of Significance[8]

Pollutant	Significance Threshold	
	Construction Emissions (tons/year)	Operational Emission (tons/year)
CO	100	100
NO_X	10	10
ROG	10	10
SO_X	27	27
PM_{10}	15	15
$PM_{2.5}$	15	15

[8] SJVAPCD. (2015). Guidance for Assessing and Mitigating Air Quality Impacts. Accessed on August 16, 2022, https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF

(2) Conflict with or Obstruct Implementation of Applicable Air Quality Plan: Due to the region's nonattainment status for ozone, $PM_{2.5}$, and PM_{10}, if the project-generated emissions of either of the ozone precursor pollutants (i.e., ROG and NO_x) or PM_{10} would exceed the SJVAPCD's significance thresholds, then the project would be considered to conflict with the attainment plans. In addition, if the project would result in a change in land use and corresponding increases in vehicle miles traveled, the project may result in an increase in vehicle miles traveled that is unaccounted for in regional emissions inventories contained in regional air quality control plans.

(3) Local Mobile-Source CO Concentrations: Local mobile source impacts associated with the proposed Project would be considered significant if the project contributes to CO concentrations at receptor locations in excess of the CAAQS (i.e., 9.0 ppm for 8 hours or 20 ppm for 1 hour).

(4) Toxic Air Contaminants: Exposure to toxic air contaminants (TAC) would be considered significant if the probability of contracting cancer for the Maximally Exposed Individual (i.e., maximum individual risk) would exceed 10 in 1 million or would result in a Hazard Index greater than one (1).

As recommended by the SJVAPCD, the latest approved California Air Pollution Control Officer's Association (CAPCOA) methodology was utilized as the screening methodology. According to the CAPCOA Guidance Document titled "Health Risk Assessments for Proposed Land Use Projects," there are two types of land use project that have the potential to cause long-term public health risk impacts.[9] These project types are as follows:

- *Type A: Land use projects with toxic emissions that impact receptors, and*
- *Type B: Land use project that will place receptors in the vicinity of existing toxics sources.*

In this Guidance document, Type A projects examples are (project impacts receptors):

- *combustion related power plants,*
- *gasoline dispensing facilities,*
- *asphalt batch plants,*
- *warehouse distribution centers,*
- *quarry operations, and*
- *other stationary sources that emit toxic substances.*

(5) Odor: The intensity of an odor source's operations and its proximity to sensitive receptors influences the potential significance of odor emissions. Specific land uses that are considered sources of undesirable odors include landfills, transfer stations, composting facilities, sewage treatment plants, wastewater pump stations, asphalt batch plants and rendering plants. The SJVAPCD has identified these common types of facilities that have been known to produce odors in the SJVAB and has prepared screening levels for potential odor sources ranging from one (1) to two (2) miles of distance from the odor-producing facility to sensitive receptors. Odor impacts

[9] California Air Pollution Control Officer's Association. (2009). Health Risk Assessments for Proposed Land Use Projects. Accessed on September 12, 2022, http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf

associated with the proposed project would be considered significant if the project has the potential to frequently expose members of the public to objectionable odors.

(6) Ambient Air Quality: The SJVAPCD applies the following guidance in determining whether an ambient air quality analysis should be performed: when assessing the significance of project-related impacts on air quality, it should be noted that the impacts may be significant when on-site emission increases from construction activities or operational activities exceed the 100 pounds per day screening level of any criteria pollutant after implementation of all enforceable mitigation measures. Under such circumstances, the District recommends that an ambient air quality analysis be performed.

Methodology

California Emissions Estimator Model (CalEEMod) is a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions from land use projects. The model quantifies direct emissions from construction and operation (including vehicle use), as well as indirect emissions, such as emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. The model also identifies mitigation measures to reduce criteria pollutant and GHG emissions.

(1) CalEEMod Assumptions: Although no specific development project is currently proposed, short-term construction and long-term operational GHG emissions for the Project were estimated using CalEEMod™ (v.2020.4.0) (See Appendix A for output files) with the following assumptions:

- *Future multi-family residential development on vacant or underutilized parcels within the Project Area identified using the latest ariel image.*
- *Development to the maximum proposed density, assuming 1,000 square feet per unit (according to CalEEMod default factors).*
- *Tiering off the 2019 General Plan Update ISMND, an additional 246 units compared to the currently allowed maximum units to be developed at full buildout of the Project Area.*
- *Cumulatively, it is assumed that the units/population would increase in multi-family zones and decrease in other areas so that there would still be the same amount of growth as anticipated in the 2019 General Plan Update. Overall, long-term population projections are not expected to change based on the proposed text amendment.*
- *CalEEMod default factors with the exception of construction factors. Because only vacant and underutilized parcels were included, "demolition" was removed as a construction phase as demolition of existing structures would not be required.*

4.3.2 Impact Assessment

Would the project:

a) Would the project conflict with or obstruct implementation of the applicable air quality plan (e.g., by having potential emissions of regulated criterion pollutants which exceed the San Joaquin Valley Air Pollution Control Districts (SJVAPCD) adopted thresholds for these pollutants)?

Less than Significant Impact with Mitigation Incorporated. CalEEMod was used to determine the potential criterion pollutants for future development projects resulting from implementation of the Project (CalEEMod Assumptions). Table 4-2 and Table 4-3 below show the potential construction and operational criteria pollutants (tons per year) based on the assumed future development in relation to the GAMAQI thresholds. As shown, the estimated pollutants of the assumed future development are below all significant thresholds and can therefore be determined to be consistent with the GAMAQI. CalEEMod Output Files are presented in Appendix A.

Table 4-2 Construction Emissions of Criteria Air Pollutants, Unmitigated

Emissions Source (Tons Per Year)	CO	NO_x	ROG	PM_{10}	$PM_{2.5}$
Construction Year 2024	2.4393	2.4220	0.2712	0.8352	0.4082
Construction Year 2025	2.6361	1.8149	0.2440	0.2779	0.1221
Construction Year 2026	2.6057	1.8102	0.2397	0.2778	0.1221
Construction Year 2027	1.5730	1.0374	2.4423	0.1421	0.0669
Maximum Emissions	**2.6361**	**2.4220**	**2.4423**	**0.8352**	**0.4082**
Significant Threshold	100	10	10	15	15
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**

Source: *CalEEMod, Version 2020.4.0, ran on April 20, 2023*

Table 4-3 Operational Emissions of Criteria Air Pollutants, Unmitigated

Emissions Source (Tons Per Year)	CO	NO_x	ROG	PM_{10}	$PM_{2.5}$
Area	1.8640	0.1130	1.2572	0.0176	0.0176
Energy	0.0729	0.1713	0.0200	0.0139	0.0139
Mobile	5.2717	0.9857	0.5554	1.3942	0.3807
Total Operational Emissions	**7.2086**	**1.2700**	**1.8327**	**1.4256**	**0.4122**
Significant Threshold	100	10	10	15	15
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**

Source: *CalEEMod, Version 2020.4.0, ran on April 20, 2023*

In terms of cumulative impacts, the Project does not expect a net increase in new dwellings that exceeds that previously analyzed in the General Plan Update ISMND. As mentioned above, it is assumed that the units/population would increase in multi-family zones and decrease in other areas so that there would still be the same amount of growth in the city. Overall, long-term population projections are not expected to change based on the proposed text amendment.

Regarding TACs, anticipated development that would result from Project implementation would not be of the Type A land uses that have the potential to produce toxic emissions. Although no specific development is currently proposed, the Project would increase density in multi-family residential zone districts (specifically, R-3 and R-4 zones) which do not permit combustion related power plants, asphalt batch plants, quarry operations, or other uses that would generate toxic emissions. In addition, the Project would not result in Type B land use that would place receptors in the vicinity of existing toxic sources; there are no existing toxic sources within the vicinity of the Project Area. Thus, future development resulting from the implementation of the Project that proposes uses consistent with the General Plan and AMC would not result in production of significant TACs or place receptors in the vicinity of TAC-producing land uses.

Lastly, future development projects resulting from Project implementation would be reviewed by the SJVAPCD for compliance with applicable rules and regulations including but not limited to *Rule 9510* (Indirect Source Review), *Regulation VIII* (Fugitive PM_{10} Prohibitions), *Rule 2010* (Permits Required), *Rule*

2201 (New and Modified Stationary Source Review), *Rule 4402* (Nuisance), *Rule 4601* (Architectural Coatings), and *Rule 4641* (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). Thus, any impacts related to construction activities of future development projects would be regulated through SJVAPCD regulations and requirements.

Overall, the anticipated development of the Project site would not have potential emissions of regulated criterion pollutants that exceed the SJVAPCD adopted thresholds. In addition, future development may be subject to meet additional rules and regulations administered by the SJVAPCD to minimize and mitigate on-site emissions. Consequently, the Project would result in a less than significant impact.

Future Ministerial Projects

Future discretionary projects within the Project Area are considered in the City of Arvin General Plan Update IS/MND and will be subject to environmental review as projects are applied. Discretionary projects will be routed to the SJVAPCD for comment and subject to additional project specific Air Quality analysis individually. For projects that will be considered ministerial as a result of the proposed Text Amendment, *Mitigation Measures AIR-1* shall be implemented as project conditions, as requested by the SJVAPCD.

> ***Mitigation Measure AIR-1:*** *Future development projects that qualify for ministerial approval and exceed 225 residential units (the SJVAPCD's Small Project Analysis Levels (SPAL) threshold exemption for Mid Rise Apartments) or current SPAL thresholds, must prepare a technical assessment in consultation with the District. If the project exceeds significance thresholds, a VERA or on-site design/project changes are required to bring the project under thresholds.*

As such, the Project would have a less than significant impact since it does not exceed the cumulative impacts that is analyzed in the General Plan Update IS/MND.

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

Less than Significant Impact. As discussed above (See Environmental Setting), the SJVAB is in nonattainment for ozone, PM_{10}, and $PM_{2.5}$, which means that certain pollutants' exposure levels are often higher than the normal air quality requirements. Concentration of the pollutant in the air, the length of time exposed and the individuals' reaction are factors that affect the extent and nature of the health effects. Although the construction and operations of future development resulting from implementation of the Project would not exceed the thresholds of significant for criteria pollutants as set by the GAMAQI (See Table 4-2 and Table 4-3), there are PM_{10}, and $PM_{2.5}$ emissions associated with future development which would thereby contribute to cumulative increases. However, the construction and operational emissions analysis shows that future development would be well below the substantial thresholds of the GAMAQI and thus the Project is compliant with the applicable Air Quality Attainment Plan. Therefore, the Project would not result in significant cumulative health impacts because the emissions are not at a level that would be considered cumulatively significant. As such, the Project would have a less than significant impact.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. Sensitive receptors are defined as people that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include schools, parks and

playgrounds, day care centers, nursing homes, hospitals, and residential dwelling unit(s). A wide variety of sensitive receptors are in proximity to the Project Area, including residential dwellings, parks, schools, etc. With regard to analyzing the exposure of sensitive receptors to substantial pollutant concentrations, CEQA case law had concluded that agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future users or residents except in specific instances where such conditions could be exacerbated due to implementation of the project (*California Building Industry Association v Bay Area Air Quality Management District* (S213478, December 17, 2015).

As stated under criterion a) above, emissions during construction or operations of individual projects would not reach the significance thresholds and are not anticipated to result in concentrations that reach or surpass ambient air quality requirements. Further, anticipated development that would result from Project implementation would not be uses that would generate toxic emissions (i.e., Type A uses identified by the CAPCOA guidelines). Therefore, the Project would have a less than significant impact on nearby sensitive receptors.

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

Less than Significant Impact. Specific land uses that are considered sources of undesirable odors include landfills, transfer stations, composting facilities, sewage treatment plants, wastewater pump stations, asphalt batch plants and rendering plants. The Project would not consist of such land uses; rather, implementation of the proposed Project would facilitate future residential development, and thus is unlikely to produce odors that would be considered to adversely affect a substantial number of people. Further, there are no major odor-generating sources within the Project Area. Although some odors may be emitted during construction of the site (i.e., through diesel fuel and exhaust from equipment), these odors would be temporary and last only during construction activities. For these reasons, any odor impacts associated with the Project would be less than significant.

4.3.3 Mitigation Measures

The proposed Project shall implement and incorporate, as applicable, the air quality related mitigation measures as identified in the attached Mitigation Monitoring and Reporting Checklist dated May 2023.

4.4 BIOLOGICAL RESOURCES

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			X	
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				X
c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f)	Conflict with provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.				X

4.4.1 Environmental Setting

The Project Area is within Arvin city limits and is planned and zoned for residential and urbanized uses. The existing biotic conditions of the sites within the Project Area vary by site, as some sites are vacant and undeveloped with no onsite improvements or structures and some sites are fully developed with existing uses, improvements, and structures.

U.S. Fish and Wildlife – Special-Status Species Database

The U.S. Fish and Wildlife Service (USFWS) operates an "Information for Planning and Consultation" (IPaC) database, which is a project planning tool for the environmental review process that provides general information on the location of special-status species that are "known" or "expected" to occur (note: the database does not provide occurrences; refer to the California Department of Fish and Wildlife – Natural Diversity Database below).[10] Specifically, the IPaC database identifies 12 endangered species in the city of Arvin including: Fisher, San Joaquin kit fox, Tipton kangaroo rat, California condor, Southwestern willow flycatcher, blunt-nosed leopard lizard, delta smelt (threatened), Monarch butterfly (candidate), venal pool fairy shrimp (threatened), Bakersfield cactus, California jewelflower, and San Joaquin wooly-threads.

U.S. Fish and Wildlife – Critical Habitat Report

Once a species is listed under the federal Endangered Species Act, NOAA Fisheries is required to determine whether there are areas that meet the definition of Critical Habitat. Per NOAA Fisheries, Critical Habitat is defined as:

- *Specific areas within the geographical area occupied by the species at the time of listing that contain physical or biological features essential to conservation of the species and that may require special management considerations or protection; and*
- *Specific areas outside the geographical area occupied by the species if the agency determines that the area itself is essential for conservation.* [11]

The process of Critical Habitat designation is complex and involves the consideration of scientific data, public and peer review, economic, national security, and other relevant impacts.

According to the Critical Habitat for Threatened & Endangered Species Report updated December 10, 2021, the Project Area and its immediate vicinity (0.5-mile radius) are not located within a federally designated Critical Habitat.[12] No critical habitats are identified in the city limits. The closest federally designated Critical Habitat is located approximately 9.8 miles south of the Project Area for California condor (Gymnogypus

[10] U.S. Fish and Wildlife Service. Information and Planning Consultation Online System. Accessed on August 16, 2022, https://ecos.fws.gov/ipac/

[11] NOAA Fisheries. Critical Habitat. Accessed on August 22, 2022, https://www.fisheries.noaa.gov/national/endangered-species-conservation/critical-habitat#key-regulations

[12] U.S. Fish & Wildlife. (2021). ECOS Environmental Conservation Online System - USFWS Threatened & Endangered Species Active Critical Habitat Report (updated December 10, 2021). Accessed September 6, 2022, https://ecos.fws.gov/ecp/report/table/critical-habitat.html

californianus) and 12.7 miles southwest of the Project Area for Buena Vista Lake ornate Shrew (Sorex ornatus relictus).

U.S. Fish and Wildlife Service, Recovery Plan for the Upland Species of the San Joaquin Valley

The Recovery Plan for the Upland Species of the San Joaquin Valley provides individual species accounts for 34 species of plants and animals that occur in the San Joaquin Valley with recovery strategies organized by geographic or ecosystem areas.[13] The program is implemented as a cooperative research program working with local, state, and federal agencies, non-governmental organizations, corporations, and land owners.

U.S. Fish & Wildlife Service – National Wetlands Inventory

The USFWS provides a National Wetlands Inventory (NWI) with detailed information on the abundance, characteristics, and distribution of U.S. wetlands. A search of the NWI shows no federally protected wetlands (including but not limited to marsh, vernal pool, coastal, etc.) on the sites within the Project Area (Figure 4-2).[14] There is one water feature identified is a 1.37-acre PUBKx freshwater pond habitat on the Project Area, located within Smothermon Park north of Olson Way. R5UBFx indicates Palustrine System (P) of an unconsolidated bottom (UB) that is artificially flooded (K) and has been excavated by humans (x) (i.e., a ponding basin). Additionally, the Project Area is not within or adjacent to a riparian area.

Environmental Protection Agency – WATERS Geoviewer

The U.S. Environmental Protection Agency (EPA) WATERS GeoViewer provides a GeoPlatform based web mapping application of water features by location. According to the WATERS GeoViewer, there are no surface water features (i.e., waterbodies, pipelines, canals, streams, coastlines, catchments, hydrologic units) on or in immediate vicinity of the Project Area.

[13] U.S. Fish and Wildlife Service. (1998). Recovery Plan for the Upland Species of the San Joaquin Valley. Accessed September 12, 2022, https://biologistshandbook.com/wp-content/uploads/2018/01/Recovery-Plan-for-Upland-Species-of-the-San-Joaquin-Valley-1998.pdf

[14] U.S. Fish & Wildlife Service. National Wetlands Inventory. Accessed September 6, 2022, https://www.fws.gov/wetlands/data/Mapper.html

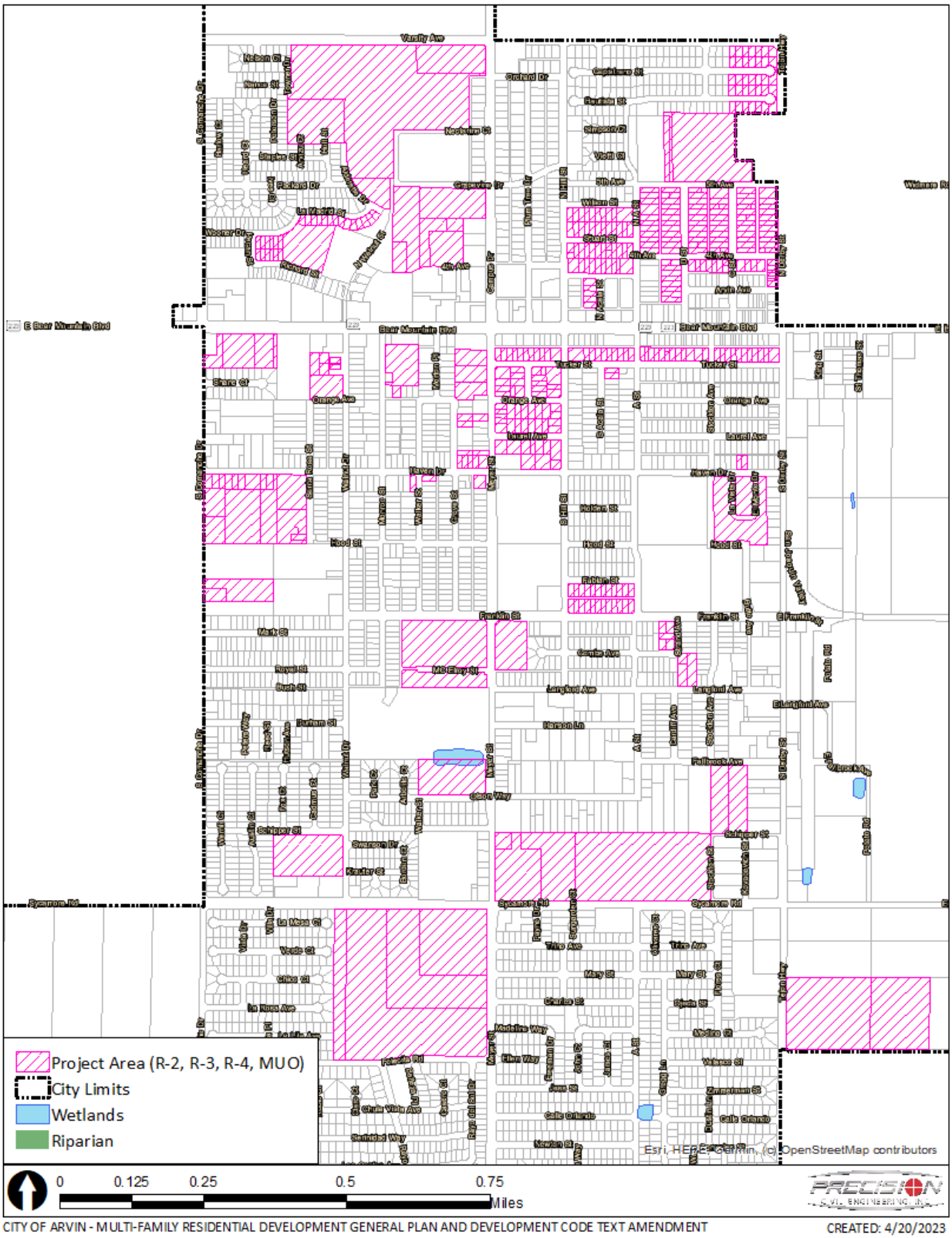

Figure 4-2 Wetlands and Riparian Map of Project Area

California Department of Fish and Wildlife – Natural Diversity Database

The California Department of Fish and Wildlife (CDFW) operates the California Natural Diversity Database (CNDDB), which is an inventory of the status and locations of rare plants and animals in California in addition to the reported occurrences of such species.[15] According to the CDFW CNDDB, there are 22 special-status species with a total of 42 occurrences that have been observed and reported to the CDFW in or near the Arvin Quad as designated by the United States Geological Survey (USGS) (i.e., city of Arvin). Of the 22 species, there are eight (8) federally or state-listed species: Swain'on's hawk, California jewelflower, Kern mallow, blunt-nosed leopard lizard, San Joaquin woollythreads, Bakersfield cactus, least Bell's vireo, and San Joaquin kit fox.[16] Appendix B lists the CNDDB-identified animal and plant species within the Arvin Quad, including their characteristics and general habitat.

The CNDDB also provides CNDDB-known occurrences within a set geographic radius. Figure 4-3 shows the CNDDB-identified occurrences of animal and plant species within the five (5)-mile radius of the Project Area. Table 4-4 lists all federally or state-listed special-status species CNDDB-known occurrences within the five (5)-mile radius of the Project Area, organized by distance to the site. As shown, the nearest occurrences are least Bell's vireo, dated 1978 and Horn's milk-vetch, dated 1936. The CNNDB ranks occurrences by the condition of habitat and ability of the species to persist over time. As shown, the occurrences within the five (5)-mile radius of the Project Area are primarily ranked as unknown.

Table 4-4 Special-Status Species Occurrences within 5-mile radius of Project Area

Species	Date	Rank	Distance to site
least B'll's vireo	1978-x-x	Unknown	N/A
H'rn's milk-vetch	1936-4-11	Unknown	0.6 miles north
blunt-nosed leopard lizard	1990-6-27	Unknown	1.8 miles east
Swain'on's hawk	2016-7-12	Unknown	1.9 miles west
San Joaquin kit fox	2012-x-x	Unknown	2.6 miles southeast
blunt-nosed leopard lizard	1991-9-29	Unknown	2.8 miles southeast
San Joaquin kit fox	1975-7-x	Unknown	2.8 miles east
San Joaquin kit fox	1975-7-x	Unknown	3.0 miles north
blunt-nosed leopard lizard	2016-7-13	Good	3.4 miles southeast
blunt-nosed leopard lizard	2011-x-x	Unknown	3.9 miles south
Kern mallow	2018-3-31	Unknown	4.0 miles south
Bakersfield cactus	2018-3-31	Good	4.0 miles south
blunt-nosed leopard lizard	1955-6-26	Unknown	4.1 miles east
Tipton kangaroo rat	2015-9-12	Unknown	4.4 miles west
San Joaquin kit fox	1988-5-x	Good	4.4 miles west
Bakersfield cactus	2011-4-16	Unknown	4.6 miles southeast
Kern mallow	2011-4-16	Unknown	4.6 miles southeast
Tipton kangaroo rat	1985-7-x	Unknown	4.7 miles southwest
Swain'on's hawk	2016-7-12	Unknown	4.9 miles west

[15] California Department of Fish and Wildlife. California Natural Diversity Database. Accessed September 7, 2022, https://wildlife.ca.gov/Data/CNDDB

[16] California Department of Fish and Wildlife. Biogeographic Information and Observation System. Accessed September 7, 2022, https://apps.wildlife.ca.gov/bios/?tool=cnddbQuick

Only federally or state-listed threatened/endangered species are listed in the table.
Extirpated or possible extirpated occurrences are not shown in the table.
** Good (–) - Population in very good condition and fairly large for this taxon AND habitat in reasonably good condition. Some disturbances may exist including dirt roads, weed encroachment, nearby incompatible land uses, logging nearby, grazing, etc., but none so severe as to seriously impair spec'es' ability to persist over at least the next 25 years.*
*** Unknown (–) - Inadequate information exists to rank the occurrence*

PG&E San Joaquin Valley Operation and Maintenance Habitat Conservation Plan

The San Joaquin Valley Operation and Maintenance Habitat Conservation Plan covers PG&E's routine operations and maintenance activities and minor new construction, on any PG&E gas and electrical transmission and distribution facilities, easements, private access routes, or lands owned by PG&E.[17] Any future development that impacts PG&E facilities would be subject to review and approval by PG&E.

Kern County Habitat Conservation Plan for the Kern County Valley Floor

The Kern County Habitat Conservation Plan (VFHCP) is a long-term program designed to conserve federally protected species, State-protected species, and/or other species of concern.[18] The VFHCP establishes the conditions under which Kern County, California Division of Oil, Gas, and Geothermal Resources, and others seek authorization to allow the taking of federally and State-protected plant and animal species, State-protected plan and animal species, and/or other species of concern. The City of Arvin is designated as a "White Zone" for habitat quality which is considered an area of limited importance due to intensive land uses such as cultivated agriculture.

General Plan

The Arvin General Plan Open Space and Conservation Element identifies the following goal and policies related to the conservation of biological and natural resources.

Goal 6. *Preserve wildlife, endangered, and/or rare species and natural habitats and eco-systems in the Arvin Planning Area.*

> ***Policy CO-6.1.*** *Protect sensitive and significant ecological areas of unique vegetation and wildlife.*
>
> ***Policy CO-6.2.*** *Protect from extinction the identified endangered species which recognize the Arvin area as part of their natural range.*
>
> ***Policy CO-6.3.*** *Consider the establishment of protected open space areas, planted with native valley vegetation, to serve as wildlife habitat and natural laboratory for public education purposes.*
>
> ***Policy CO-6.4.*** *Implement a relocation program for any rare and/or endangered animal species found in urbanized areas.*

[17] PG&E. "Habitat Conservation Plans." Accessed September 12, 2022, https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/promoting-stewardship/habitat-conservation-plan.page

[18] Kern County Planning and Natural Resources Department. (2006). Kern County Valley Floor Habitat Conservation Plan. Accessed September 12, 2022, https://psbweb.co.kern.ca.us/planning/pdfs/vfhcp_dec06.pdf

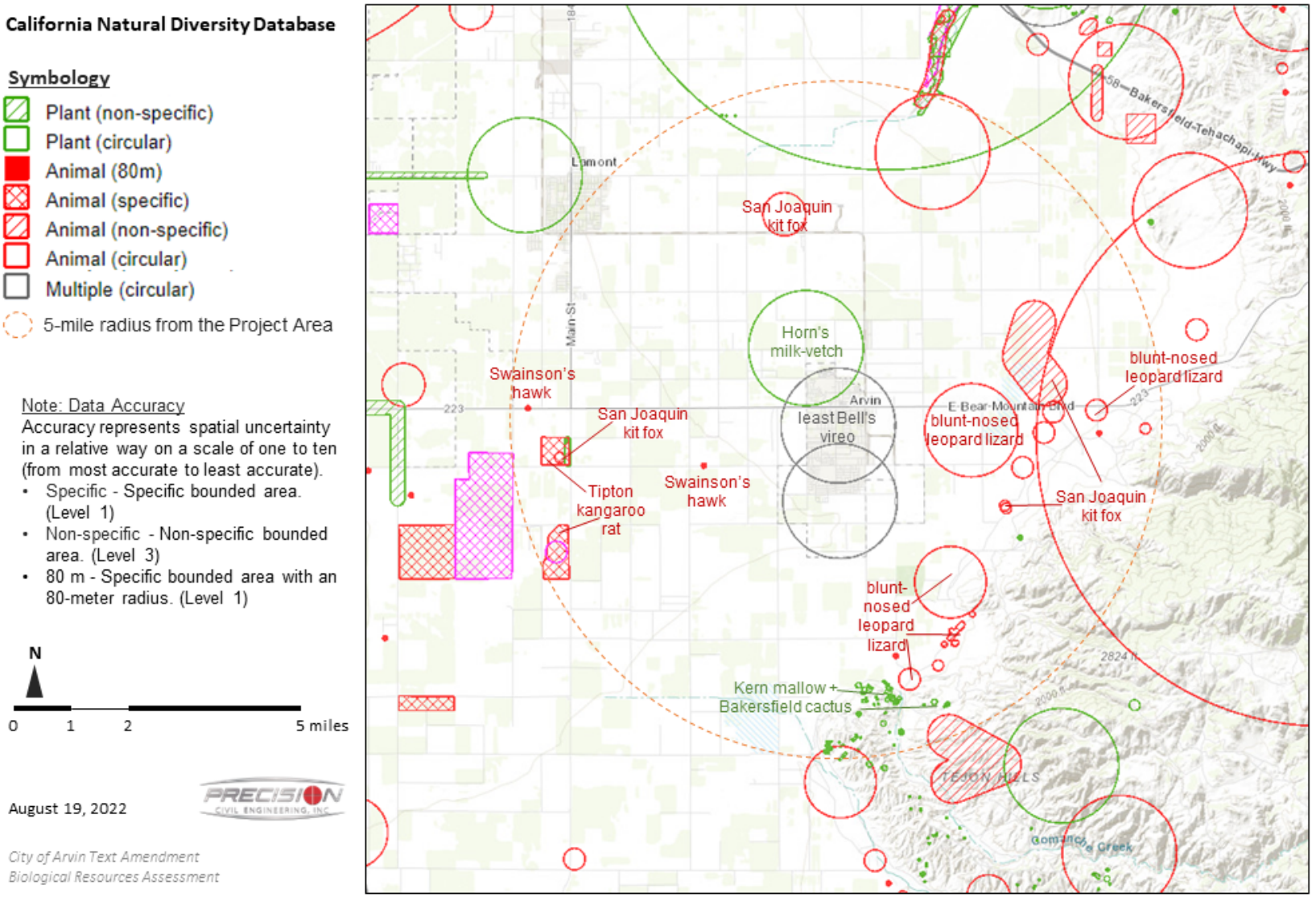

Figure 4-3 CNDDB Species Occurrences

4.4.2 Impact Assessment

Would the project:

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

Less than Significant Impact. The Project Area is within the city of Arvin's city limits and is zoned and planned for urbanized uses, specifically, residential uses. Approximately 90% of the parcels in the Project Area are developed with existing structures and improvements and are surrounded by improvements including curb, gutter, sidewalks, and streetlights. The remaining parcels are predominately vacant and undeveloped, or underdeveloped, but are highly disturbed due to periodic discing and/or grading for fire prevention. The topography of the Project Area is relatively flat.

The Project's impact on biological resources will be similar to that analyzed in the General Plan Update IS/MND since the Project is consistent with the General Plan's land use designations. Though the Project allows a higher intensity, the location of planned development will not change. Since urbanization's impact on biological resources is evaluated mostly by the location where development will happen, the Project would not cause a substantial impact in addition to that analyzed in the IS/MND.

b) *According to the U.S. Fish and Wildlife Service, there are 12 endangered species and no critical habitats in the City of Arvin. In addition, the CDFW CNDDB indicates 42 special-status species occurrences that have been observed and reported to the CDFW in or near the Arvin Quad. None of these critical habitats are located in the Project Area. In addition, there are no federally protected wetlands within city limits. In addition, Arvin General Plan Open Space and Conservation Element policies CO-6.1 through CO-6.4 further ensures that biological impacts will be less than significant. As such, the Project will have a less than significant impact. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?*

No Impact. According to the General Plan, CDFW, and U.S. Fish and Wildlife Service, there are no known riparian habitats or other sensitive natural communities identified on the Project site or within the immediate vicinity of the Project. In addition, the Project Area is heavily impacted and does not contain any water features that would provide habitat for such species. Further, the Project Area is located within city limits and is heavily impacted, thus would not provide essential habitat. For these reasons, the Project site would not result in substantial effect on any riparian or other sensitive natural community. As a result, no impact would occur.

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

No Impact. Based on the search of the NWI, the Project site does not contain any federally protected wetlands. Therefore, the Project would not result in a substantial effect on state- or federally-protected wetlands. According to the General Plan IS/MND, *"The C'ty's only surface water resources are the two man-*

made water ski lakes in the gated-residential community located along Blue Loop Road in the southern portion of the City. The other surface water resources is the partially concrete-lined Arvin-Edison Canal that extends north-south about three miles outside of the City boundaries." As a result, no impact would occur.

d) Would the project 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?

Less than Significant Impact. Wildlife movement corridors are linear habitats that function to connect two (2) or more areas of significant wildlife habitat. These corridors may function on a local level as links between small habitat patches (e.g., streams in urban settings) or may provide critical connections between regionally significant habitats (e.g., deer movement corridors).

Wildlife corridors typically include vegetation and topography that facilitate the movements of wild animals from one area of suitable habitat to another, in order to fulfill foraging, breeding, and territorial needs. These corridors often provide cover and protection from predators that may be lacking in surrounding habitats. Wildlife corridors generally include riparian zones and similar linear expanses of contiguous habitat.

The Project Area is within city limits and is greatly fragmented by existing development and structures, including developed roadways, thereby limiting wildlife movement. As such, based on the existing conditions of the Project Area, the Project would not 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. Therefore, there would be a less than significant impact because of the Project.

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

No Impact. The General Plan outlines policies related to the conservation of biological and natural resources. Due to the lack of identified special-status species or natural habitat on the Project site, the Project would not conflict with local policies or ordinances protecting biological and natural resources. As such, no impact would occur because of the Project.

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

No Impact. The Project site is within the planning areas of the PG&E San Joaquin Valley Operation and Maintenance Habitat Conservation Plan, Recovery Plan for Upland Species of the San Joaquin Valley, and the Kern County Valley Floor Habitat Conservation Plan. As discussed under criterion a), the Project would not 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 U.S. Fish and Wildlife Service. Therefore, the Project would not conflict with the provisions of habitat conservation plan. No impact would occur.

4.4.3 Mitigation Measures

None required.

4.5 CULTURAL RESOURCES

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?		X		
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		X		
c)	Disturb any human remains, including those interred outside of formal cemeteries?		X		

4.5.1 Environmental Setting

Generally, the term 'cultural resources' describes property types such as prehistoric and historical archaeological sites, buildings, bridges, roadways, and tribal cultural resources. As defined by CEQA, cultural resources are considered "historical resources" that meet criteria in Section 15064.5(a) of the CEQA Guidelines. If a Lead Agency determines that a project may have a significant effect on a historical resource, then the project is determined to have a significant impact on the environment. No further environmental review is required if a cultural resource is not found to be a historical resource.

California Historical Resource Information System Record Search

The Southern San Joaquin Information Center (SSJIC) was requested to conduct a California Historical Resources Information System (CHRIS) Record Search for the Project Area and surrounding "Project Area" area (i.e., 0.5-mile radius). Results of the CHRIS Record Search were provided on August 29, 2022 (Record Search File Number 22-326). Full results are provided in Appendix C.

The CHRIS Record Searches generally review file information based on results of Class III pedestrian reconnaissance surveys of project sites conducted by qualified individuals or consultant firms which are required to be submitted, along with official state forms properly completed for each identified resource, to the Regional Archaeological Information Center. Guidelines for the format and content of all types of archaeological reports have been developed by the California Office of Historic Preservation, and reports will be reviewed by the regional information centers to determine whether they meet those requirements.

The results of the SJJIC CHRIS Record Search indicate:

(1) There have been 11 previous cultural resource studies conducted within the project area (see Appendix C). There have been 13 additional cultural resource studies conducted within the 0.5-mile radius (see Appendix C).

(2) There are two (2) recorded resources within the project area. There are 14 known resources within the 0.5-mile radius. These resources consist of historic landscaping, trash scatters, roads, a

historical landmark, single-family properties, and multi-family properties, as well as a prehistoric lithic scatter.

(3) There are no recorded cultural resources within the project area or 0.5-mile radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, or the California State Historic Landmarks.

Further, the SJJIC provided the following comments and recommendations:

(1) Prior to any future development, a new site-specific record search should be submitted so proper recommendations can be made.

(2) Contact the NAHC for a list of Native American individuals/organizations that can assist with information regarding cultural resources; consult the Sacred Lands Inventory file.

California Native American Heritage Commission

A consultation list of tribes with traditional lands or cultural places located within Kern County was requested and received from the California Native American Heritage Commission (NAHC) on August 8, 2022. The listed tribes include Big Pine Paiute Tribe of the Owens Valley, Coastal Band of the Chumash Nation, Kitanemuk and Yowlumne Tejon Indians, Tejon Indian Tribe, and Tule River Indian Tribe. The NAHC also conducted a Sacred Lands File (SFL) check which received negative results.

AB 52 and SB 18 Tribal Consultation

The City of Arvin conducted formal tribal consultation pursuant to AB 52 (Chapter 532, Statutes 2014) and SB 18 (Chapter 905, Statutes 2004) on August 19, 2022 and December 16, 2022, utilizing the consultation list of tribes received from the NAHC. The same five (5) tribes listed above were included in the formal consultation. Consultation for AB 52 ended on September 18, 2022 and January 15, 2023, and consultation for SB 18 ended on November 17, 2022 and March 16, 2023. No response was received.

General Plan

The Arvin General Plan Conservation and Open Space Element identifies the following goal and policy related to historic and cultural resources. No historic or cultural resources are identified in the General Plan.

Goal 2 *Develop and expand public open spaces and facilities for the enjoyment, health, and well-being of community residents.*

Policy CO-2.1 *Encourage conservation and promotion of the City's historical and cultural resources.*

4.5.2 Impact Assessment

Would the project:

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

Less than Significant with Mitigation Incorporated. Based on the CHRIS Records Search conducted on August 29, 2022, there are two (2) recorded resources within the Project Area and fourteen (14) know resources within 0.5-mile of the Project Area. Since there is no development proposed as part of the Project, no further investigations are needed. However, the Project shall incorporate *Mitigation Measure CUL-1* to require site-specific record search for future development projects pursuant of SSJIC recommendations and to mitigate for possible cultural resources on ministerial project sites. Additionally, while *Mitigation Measure CUL-1* mitigates known and recorded historical resources, there is some possibility that hidden and buried resources may exist on the Project site with no surface evidence. Thus, to further assure construction activities do not result in significant impacts to any potential cultural resources discovered below ground surface, the Project shall incorporate *Mitigation Measure CUL-2*. Thus, if such resources were discovered, implementation of the required mitigation measures would reduce the impact to less than significant. As a result, the Project will have a less than significant impact with mitigation incorporated.

> ***Mitigation Measure CUL-1:*** *In order to avoid the potential for impacts to historic and prehistoric archaeological resources, the following measures shall be implemented, as necessary, in conjunction with the construction of each phase of the Project:*
>
> *a. Cultural Resources Alert on Project Plans. The project proponent shall note on any plans that require ground disturbing excavation that there is a potential for exposing buried cultural resources.*
>
> *b. Stop Work Near any Discovered Cultural Resources. The project proponent shall retain a professional archaeologist on an "on-call" basis during ground disturbing construction for the project to review, identify and evaluate cultural resources that may be inadvertently exposed during construction. Should previously unidentified cultural resources be discovered during construction of the project, the project proponent shall cease work within 100 feet of the resources, and City of Arvin shall be notified immediately. The archaeologist shall review and evaluate any discoveries to determine if they are historical resource(s) and/or unique archaeological resources under CEQA.*
>
> *c. Mitigation for Discovered Cultural Resources. If the professional archaeologist determines that any cultural resources exposed during construction constitute a historical resource and/or unique archaeological resource, he/she shall notify the project proponent and other appropriate parties of the evaluation and recommended mitigation measures to mitigate the impact to a less-than-significant level. Mitigation measures may include avoidance, preservation in-place, recordation, additional archaeological testing and data recovery, among other options. Treatment of any significant cultural resources shall be undertaken with the approval of the City of Arvin. The archaeologist shall document the resources using DPR 523 forms and file said forms with the California Historical Resources Information System, Southern San Joaquin Valley Information Center. The resources shall be photo documented and collected by the archaeologist for submittal to the City of Arvin. The archaeologist shall be required to submit to the City of Arvin for review and approval a report of the findings and method of curation or protection of the resources. Further grading or site work within the area of discovery shall not be allowed until the preceding steps have been taken.*

d. Disposition of Cultural Resources. Upon coordination with the City of Arvin, any pre-historic archaeological artifacts recovered shall be donated to an appropriate Tribal custodian or a qualified scientific institution where they would be afforded applicable cultural resources laws and guidelines.

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

Less than Significant with Mitigation Incorporated. Based on the CHRIS Records Search conducted on August 29, 2022, there are two (2) recorded resources within the Project Area. To further assure future development does not result in significant impacts to any potential cultural resources, the Project shall incorporate *Mitigation Measure CUL-1* as described in criterion a). Thus, historic and/or cultural resources are existing on site or discovered during ground-disturbing activities, implementation of the required mitigation measure would reduce the impact to less than significant. In addition, *Mitigation Measure CUL-2* is incorporated to mitigate possible archaeological resources on sites with previously undisturbed soils. As a result, the Project would have a less than significant impact.

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

Less than Significant with Mitigation Incorporated. There is no evidence that human remains exist in the Project Area. Nevertheless, there is some possibility that a non-visible buried site may exist and may be uncovered during ground disturbing construction activities which would constitute a significant impact. If any human remains are discovered during construction, CCR *Section 15064.5(e)*, PRC *Section 5097.98*, and California Health and Safety Code *Section 7050.5* will mitigate the impacts. To further ensure future construction activities do not result in significant impacts to any potential resources or human remains discovered below ground surface, the Project shall incorporate *Mitigation Measure CUL-2*. Therefore, if any human remains were discovered, implementation of this mitigation and referenced regulations would reduce the Project's impact to less than significant.

Mitigation Measure CUL-2: *In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to Health and Safety Code (HSC) Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98(a). If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage Commission (NAHC). The NAHC shall then contact the most likely descendent of the deceased Native American, who shall then serve as the consultant on how to proceed with the remains. Pursuant to PRC Section 5097.98(b), upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.*

4.5.3 Mitigation Measures

The proposed Project shall implement and incorporate, as applicable, the cultural resources related mitigation measures as identified in the attached Mitigation Monitoring and Reporting Checklist dated May 2023.

4.6 ENERGY

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

4.6.1 Environmental Setting

Appendix F – Energy Conservation of the CEQA Guidelines requires consideration of energy implications in project decisions, including a discussion of the potential energy impacts with emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy resources (Public Resources Code *Section 21100(b)(3)*). Per Appendix F, a project would be considered inefficient, wasteful, and unnecessary if it violated existing energy standards, had a negative effect on local and regional energy supplies and requirements for additional capacity, had a negative effect on peak and base period demands for electricity and other energy forms, and effected energy resources.

The California Energy Commission updates the Building Energy Efficiency Standards (Title 24, Parts 6 and 11) every three years as part of the California Code of Regulations. The standards were established in 1978 in effort to reduce the state's energy consumption. They apply for new construction of, and additions and alterations to, residential and nonresidential buildings and relate to various energy efficiencies including but not limited to ventilation, air conditioning, and lighting.[19] The California Green Building Standards Code (CALGreen), Part 11, Title 24, California Code of Regulations, was developed in 2007 to meet the state goals for reducing Greenhouse Gas emissions pursuant to AB32. CALGreen covers five (5) categories: planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality.[20] The 2019 Building Energy Efficiency Standards went into effect on January 1, 2020. Additionally, the California Air Resources Board (CARB) oversees air pollution control efforts, regulations, and programs that contribute to reduction of energy consumption. Compliance with these energy efficiency regulations and programs ensure that development will not result in wasteful, inefficient, or unnecessary consumption of energy sources. Lastly, the Energy Action Plan (EAP) for California was

[19] California Energy Commission. 2019 Building Energy Efficiency Standards. Accessed on February 23, 2023, https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency

[20] California Department of General Services. (2020). 2019 California Green Building Standards Code. Accessed on February 23, 2023, https://codes.iccsafe.org/content/CGBC2019P3

approved in 2003 by the California Public Utilities Commission (PUC). The EAP established goals and next steps to integrate and coordinate energy efficiency demand and response programs and actions.[21]

General Plan

The Arvin General Plan Air Quality Element identities the following goal and policies for energy conservation.

Goal 3. *Promote energy conservation in homes, businesses, and City operations.*

> ***Policy AQ-3.1.*** *Incorporate energy-conserving design and construction techniques into the construction and renovation of City facilities.*
>
> ***Policy AQ-3.2.*** *Encourage the use of building materials and methods that increase efficiency beyond State Title 24 standards.*
>
> ***Policy AQ-3.3.*** *Encourage the use of energy-efficient appliances, such as water heaters, cooking equipment, refrigerators, furnaces and other units, where feasible.*
>
> ***Policy AQ-3.4.*** *Encourage the implementation of cost-effective and innovative emissions-reduction technologies in building components and design.*
>
> ***Policy AQ-3.5.*** *Promote the implementation of sustainable design strategies for "cool communities" such as reflective roofing, light-colored pavement, shade trees, and other measures to reduce energy demand.*
>
> ***Policy AQ-3.6.*** *Proactively work with appropriate State, County, regional, and local agencies as well as private partners to seek funding sources and implement programs to reduce water and energy use, reduce pollutant emissions, and reduce the creation of greenhouse gases.*

The Arvin General Plan Open Space and Conservation Element identifies the following goal and policies for energy conservation.

Goal 9. *Improve energy efficiency of all new construction in the Arvin Area.*

> ***Policy CO-9.1.*** *Encourage the use of energy efficient building materials, installation of energy efficient appliances, and energy efficient design and construction.*
>
> ***Policy CO-9.2.*** *Enforce the State Energy Conservation Standards for both residential and commercial uses.*

4.6.2 Impact Assessment

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

Less than Significant Impact. Although no development is currently proposed, future development that results from Project implementation would consume energy resources. Energy would be consumed

[21] State of California. (2008). Energy Action Plan 2008 Update. Accessed on February 23, 2023, https://docs.cpuc.ca.gov/word_pdf/REPORT/28715.pdf

through future construction and operations. Construction activities typically include site preparation, grading, paving, architectural coating, and trenching. The primary sources of energy for construction activities are diesel and gasoline, from the transportation of building materials and equipment and construction worker trips. Operations would involve heating, cooling, equipment, and vehicle trips. Energy consumption related to operations would be associated with natural gas, electricity, and fuel. Future development of the Project Area would result in increased consumption of energy resources during construction and operation since a higher density is proposed. The consumption of energy resources during construction and operation are further analyzed below.

Construction

Construction would be short-term and temporary. Future development would consist of residential uses. Typically, characteristics or construction processes for residential development would not require the use of equipment that would be more energy intensive than is used for comparable activities. Construction activities would include typical demolition, site preparation, grading, paving, architectural coating, and trenching – all of which would require the transportation of building materials and equipment. Therefore, the primary source of energy for construction activities would be diesel and gasoline (i.e., petroleum fuels). All construction equipment shall conform to current emissions standards and related fuel efficiencies including applicable CARB regulations (Airborne Toxic Control Measure), California Code of Regulations (Title 13, Motor Vehicles), and Title 24 standards. Compliance with such regulations would ensure that the short-term, temporary construction activities do not result in wasteful, inefficient, or unnecessary consumption of energy resources.

Operations

Operations include those typical of residential uses, including heating, cooling, equipment, and vehicle trips. Energy consumption related to operations would be associated with natural gas, electricity, and fuel. The Project would be served by PG&E and would not require extensions of energy infrastructure or new energy supplies. Applicable state and local regulations and programs would be implemented to reduce energy waste from operation. The Project site would be served by PG&E for both electricity and natural gas. Kern County consumed approximately 14,966 GWh of electricity, or 5.4 percent of electricity generated in California in 2020 (279,510 GWh) and approximately 65,163,441,106 MMBtu, or 18 percent of natural gas generated in California in 2020 (361,315,229,767)[22] Table 4-5 shows the estimated electricity and natural gas consumption for the proposed Project based on output from CalEEMod. Development of the Project would consume less than one (1) percent of the total electricity used in Kern County in 2020 and less than one (1) percent of the total natural gas use in Kern County in 2020. These results do not raise a level of significance.

Table 4-5 Project Energy Consumption

Energy Consumption	Electricity (GWh per year)	Natural Gas (MMbtu per year)
Project	0.97654	3,716.82
Kern County	14,966.00000	65,163,441,106.00

[22] California Energy Commission. "Electricity Consumption by County." Accessed on September 7, 2022, http://ecdms.energy.ca.gov/elecbycounty.aspx

Project Percentage (%)	0.00653	0.00

Regarding energy consumed through vehicle trips, development of the Project site to the maximum would not rise to a level of significance as described under Section 4.17.

Overall, energy consumption for the Project does not rise to a level of significance. In addition, through compliance with applicable CARB regulations (Airborne Toxic Control Measure), California Code of Regulations (Title 13, Motor Vehicles), and Title 24 standards, it can be determined that the proposed Project would not consume energy in a manner that is wasteful, inefficient, or unnecessary. For these reasons, the Project would result in a less than significant impact.

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

Less than Significant Impact. As discussed under criterion a), the construction and operations of the Project would be subject to compliance with applicable energy efficiency regulations including CALGreen, Title 24, General Plan, and CARB. Thus, applicable state and local regulations and programs would be implemented to reduce energy waste from construction and operations. Therefore, through compliance, the Project would not conflict with or obstruct any state or local plan for energy efficiency and a less than significant impact would occur because of the Project.

4.6.3 Mitigation Measures

None required.

4.7 GEOLOGY AND SOILS

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Directly or Indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: *i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*				X
	ii. Strong seismic ground shaking?			X	
	iii. Seismic-related ground failure, including liquefaction?			X	
	iv. Landslides?			X	
b)	Result in substantial soil erosion or the loss of topsoil?			X	
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				X
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?				X
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	

4.7.1 Environmental Setting

The Project site is in the San Joaquin Valley which is one of the two large valleys comprising the Great Valley Geomorphic Province. The San Joaquin Valley is surrounded by Sierra Nevada (east), Coast Ranges (west), Tehachapi (south), and the Sacramento Valley (north). The sediment layer in the Arvin area is approximately 4,800 ft. thick and consists of stratified sandstone, conglomerates, and shale. [23] A search of the Web Soil Survey by the USDA Natural Resources Conservation Service indicates that the Project site is 100% categorized as ***144 – Hesperia sandy loam***, 0 to 2 percent slopes, well drained, and very low runoff. The depth to water table is more than 80 inches.[24] A brief discussion of the likelihood of seismic activities to occur in or affect the City of Arvin is provided below.

Faulting

According to the General Plan, there are no known active faults within or near city limits and seismic hazard mapping indicates that the city, inclusive of the Project Area, has low seismic hazard potential. The city of Arvin, inclusive of the Project Area, is not located in an Alquist-Priolo Earthquake Fault Zone as established by the Alquist-Priolo Fault Zoning Act (Section 2622 of Chapter 7.5, Division 2 of the California Public Resources Code). The nearest Alquist-Priolo Fault, White Wolf Fault, is located approximately 2.8 miles southeast of the Project Area. [25]

Subsurface Soils

The 2020 Kern County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) assessed a possible probability and critical impact for earthquake hazards, listing earthquake as a high priority hazard category in the city of Arvin.[26] The HMP identified that the city has exposure to strong, very strong, and severe Modified Mercalli Intensity (MMI) classes. The Project Area is located in an area categorized with exposure to strong ground shaking. Ground shaking can induce secondary seismic hazards such as liquefaction, lateral spreading, subsidence, ground fissuring, and landslides.

Secondary Seismic Hazards

According to the Arvin General Plan Safety Element, liquefaction, earthquake-induced landslide, slope failure, and seismic seiches are unlikely to occur in Arvin. The limited occurrences are confirmed by the MJHP as well as the California Geological Survey.[27]

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[23] City of Arvin. (2019) City of Arvin General Plan Update Safety Element. Accessed on February 23, 2023, https://arvin.org/DocumentCenter/View/180/February-2019-General-Plan-Part-1-of-3-PDF

[24] United States Department of Agriculture Natural Resources Conservation Service. Web Soil Survey. Accessed on February 23, 2023, https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

[25] California Department of Conservation. Alquist-Priolo Site Investigation Reports. Accessed on February 23, 2023, https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html

[26] Kern County Fire Department Office of Emergency Services. (2020). County of Kern Multi-Jurisdictional Hazard Mitigation Plan. Accessed on February 23, 2023, https://mitigatehazards.com/county-of-kern/kern-hmp-docs/

[27] California Geological Survey. Earthquake Hazards Zone Application. Accessed on February 23, 2023, https://maps.conservation.ca.gov/cgs/EQZApp/app/

California Building Code

The California Code of Regulations (CCR) Title 24 is assigned to the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. The California Building Code incorporates by reference the International Building Code with necessary California amendments. About one-third of the text within the California Building Standards Code has been tailored for California earthquake conditions. Construction within the city of Arvin is governed by the seismic safety standards of Chapter 16 of the Code. These standards are applicable to all new buildings and are required to provide the necessary safety from earthquake related effected emanating from fault activity.

General Plan

The General Plan's Safety Element identifies several goals and policies to reduce the risk of geologic and seismic hazards. Some applicable policies are as follows:

Goal SAF-2. *A community protected from loss of life or injury and damage to property due to geologic and seismic hazards.*

> ***Policy SAF-2.1:*** *Continue to incorporate geotechnical hazard data in future land use decision-making, site design, and construction standards.*
>
> ***Policy SAF-2.2:*** *Adopt the latest version of the building codes adopted by the State of California and ensure implementation in all new construction and renovations.*
>
> ***Policy SAF-2.3:*** *Require site-specific soils and/or geologic reports for development in areas where potentially serious geologic risk exist.*
>
> ***Policy SAF-2.4:*** *Monitor and enforce mitigation measures to reduce risks for projects where seismic and geologic hazards can be mitigated and prohibit development in areas where seismic and geologic hazards cannot be mitigated.*

4.7.2 Impact Assessment

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

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

No Impact. There are no known active earthquake faults in Arvin, inclusive of the Project Area, nor is Arvin within an Alquist-Priolo earthquake fault zone as established by the Alquist-Priolo Fault Zoning Act. Thus, the Project would not cause rupture of a known earthquake fault and therefore, would have no impact.

ii. Strong seismic ground shaking?

Less than Significant Impact. The City of Arvin, inclusive of the Project Area, is located in an area categorized with exposure to strong or very strong ground shaking per the Modified Mercalli Intensity (MMI) scale, which could cause slight damage in buildings such as fallen plaster or slight to moderate damage in well-built ordinary structures. Future development of the Project site would be required to comply with current

seismic protection standards in the California Building Code which would significantly limit potential damage to structures and thereby reduce potential impacts including the risk of loss, injury, or death. Compliance with the California Building Code would ensure a less than significant impact.

iii. Seismic-related ground failure, including liquefaction?

Less than Significant Impact. Ground shaking can induce secondary seismic hazards such as liquefaction. According to the Arvin General Plan Safety Element, liquefaction is unlikely to occur in Arvin. The City of Arvin, inclusive of the Project Area, is not within or near a liquefaction zone identified by the California Geological Survey. For this reason, liquefaction or seismically induced settlement or bearing loss is considered unlikely, even if there should be a substantial increase in ground water level. In addition, future development of the Project site would be required to comply with the City's grading and drainage standards which would further reduce the likelihood of settlement or bearing loss. For these reasons, the Project does not have any aspect that could result in seismic-related ground failure including liquefaction and a less than significant impact would occur because of the Project.

iv. Landslides?

Less than Significant Impact. According to the California Geological Survey, the Project site and surrounding areas are not identified as landslide zones. 2020 Kern County HMP also indicates that the city of Arvin is not located in an area of high landslide risk. The topography of the Project Area is relatively flat with stable, native soils. Furthermore, the site is not in the immediate vicinity of rivers or creeks that would be more susceptible to landslides. Therefore, there would be a less than significant impact as a result of the Project.

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

Less Than Significant Impact. Soil erosion and loss of topsoil can be caused by natural factors, such as wind and flowing water, and human activity. According to the General Plan, loss of topsoil is slight due to the low degree of slope and the highly permeable nature of soil. Although no development is proposed, future development of the Project site would require typical site preparation activities such as demolition, grading, and trenching which may result in the potential for short-term soil disturbance or erosion impacts. Soil disturbance during construction is largely caused by the use of water. Excessive soil erosion could cause damage to existing structures and roadways. In the case of anticipated future development of the Project Area, residential development, erosion will most likely occur during the construction phase and will be reduced once the site is graded and covered with pavement or landscaping.

The likelihood of erosion occurring during construction would be reduced through site grading and surfacing, which would be subject to review and approval by the City for compliance with applicable standards. The likelihood of erosion would be further reduced through compliance with regulations set by the State Water Resources Control Board (SWRCB). Namely, the SWRCB requires sites larger than one (1) acre to comply with the General Permit for Discharges of Storm Water Associated with Construction Activity (i.e., General Permit Order No. 2012-0006-DWQ). The General Permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer (QSD). The SWPPP estimates the sediment risk associated with construction activities and includes best management practices (BMP) to control erosion. BMPs specific to erosion control cover erosion, sediment, tracking, and waste management controls. Implementation of the SWPPP minimizes the potential for the Project to result in

substantial soil erosion or loss of topsoil. With these provisions in place, impacts to soil and topsoil by the Project would be considered less than significant.

c) *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*

Less than Significant Impact. Ground subsidence is the settling or sinking of surface soil deposits with little or no horizontal motion. Soils with high silt or clay content are subject to subsidence. Subsidence typically occurs in areas with groundwater withdrawal or oil or natural gas extraction.

The Project site is within the Oil and Gas Field Boundary identified by the California Department of Conservation Geologic Energy Management Division (CalGEM). According to CalGEM Well Finder, there are several active, idle, and plugged oil/gas wells on the Project Area. [28] Oil/gas extraction is regulated by the CalGEM and the city to ensure that the extraction would not cause hazards. In addition, the proposed Project promotes the development of higher-intensity residences, and future development would require the abandonment of these oil/gas wells per the Arvin Municipal Code.

According to the 2020 Kern County HMP, the city of Arvin has a low subsidence risk. Further, the topography of the site is relatively flat with stable, native soils and no apparent unique or significant landforms. Future development of the Project site would be required to comply with current seismic protection standards in the California Building Code which would significantly limit potential seismic-related hazards such as landslides, lateral spreading, subsidence, liquefaction, or collapse. Compliance with the California Building Code would ensure a less than significant impact.

d) *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?*

No Impact. The Project site is relatively flat and stable, native soils of Hesperia sandy loam. Sandy loam soils are not classified as expansive soil, as defined in Table 18-1-B of the Uniform Building Code and would not create substantial direct or indirect risks to life or property. Thus, no impact would occur because of the Project.

e) *Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

No Impact. According to the General Plan IS/MND, there are approximately 30 parcels within the City that are still dependent on septic tanks for sewer disposal in 2019. According to Veolia Water, the existing system is adequate to meet the needs of the City and future housing development will connect to the existing wastewater disposal system. Since the Project Area is within city limits, the site will be connected to the city's water and sewer systems. Thus, no septic tanks or alternative wastewater disposal systems would be installed, and no impact would occur because of the Project.

[28] California Department of Conservation Geologic Energy Management Division. Well Finder. Accessed on February 23, 2023, https://maps.conservation.ca.gov/doggr/wellfinder/#openModal/-118.94276/37.10257/6

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

Less than Significant Impact. As discussed in the Cultural Resources section above, there are no known paleontological resources or unique geological features known to the City on this site. Nevertheless, there is some possibility that a non-visible, buried site may exist and may be uncovered during ground disturbing construction activities which would constitute a significant impact. To further assure future development does not result in significant impacts to any potential resources, the Project shall incorporate *Mitigation Measures CUL-1* and *CUL-2* as described in Section 4.5. Therefore, if any paleontological resources or geologic features were discovered, implementation of *CUL-1* and *CUL-2* would reduce the Project's impact to less than significant.

4.7.3 Mitigation Measures

None required.

4.8 GREENHOUSE GAS EMISSIONS

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

4.8.1 Environmental Setting

In assessing the significance of impacts from GHG emissions, Section 15064.4(b) of the CEQA Guidelines states that a lead agency may consider the following:

- *The extent to which the project may increase or reduce GHG emissions as compared to the environmental setting;*
- *Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;*
- *The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.*

2022 Climate Change Scoping Plan

The CARB 2022 Climate Change Scoping Plan is the adopted statewide plan for reduction and mitigation of GHGs to implement Assembly Bill (AB) 1279. AB 1279 was issued on August 12, 2022 to require California to achieve "net zero greenhouse gas emissions" as soon as possible and to further reduce anthropogenic GHG emissions thereafter. It sets a statewide goal to reduce emissions 85% below 1990 levels no later than 2045.

Consequently, the Scoping Plan involves several measures for cost-effective reduction of GHG emissions, including continuing existing programs such as Renewable Portfolio Standard, Advanced Clen Cars, Low Carbon Fuel Standard, etc., and achieving new mandates to decarbonize several sectors. Along with reducing emissions, environmental justice policies are included to address the ongoing air quality disparities.

Appendix D of the 2022 Scoping Plan include recommendations to build momentum for local government actions to align with State goals, including through CEQA review. The Appendix outlines the priority GHG reduction strategies for local governments, including transportation electrification, VMT reduction, and building decarbonization. [29]

[29] California Air Resources Board. (2022). 2022 Scoping Plan Appendix D. Accessed on March 27, 2023, https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp-appendix-d-local-actions.pdf

2009 San Joaquin Valley Air Pollution Control District Guidance

As part of the SJVAPCD *Climate Change Action Plan* (CCAP), SJVAPCD adopted its *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects* under CEQA and the policy *District Policy - Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency* in 2009. [30,31] Through this guidance document, SJVAPCD recognized that project-specific emissions are cumulative and could be considered cumulatively considerable without mitigation. SJVAPCD suggested that the requirement to reduce GHG emissions for all projects is the best method to address this cumulative impact. In addition, this guidance provides screening criteria for climate change analyses, as well as draft guidance for the determination of significance. As shown in Figure 4-4, these criteria are used to evaluate whether a project would result in a significant climate change impact. Projects that meet one of these criteria would have less than significant impact on the global climate.

1. *Exempt from CEQA;*
2. *Complies with an approved GHG emission reduction plan or GHG mitigation program;*
3. *Achieves 29 percent GHG reductions by using approved Best Performance Standards; or*
4. *Achieves AB 32 targeted 29 percent GHG reductions compared with "business as usual."*

Further, the SJVAPCD requires quantification of GHG emissions for all projects which the lead agency has determined that an EIR is required. Although an EIR is not required for the Project, the GHG emissions are quantified below. Although no specific project is currently proposed, short-term construction and long-term operational GHG emissions for project buildout were estimated using CalEEMod™ (v.2020.4.0). (See Appendix A). Emissions are expressed in annual metric tons of CO_2 equivalent units of measure (i.e., $MTCO_2e$), based on the global warming potential of the individual pollutants. See Section 4.3.1 for CalEEMod Assumptions.

[30] San Joaquin Valley Air Pollution Control District. (2009). Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA. Accessed January 26, 2022, http://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf.

[31] San Joaquin Valley Air Pollution Control District. (2000). Environmental Review Guidelines: Procedures for Implementing the California Environmental Quality Act. Accessed January 26, 2022, http://www.valleyair.org/transportation/CEQA%20Rules/ERG%20Adopted%20_August%202000_.pdf

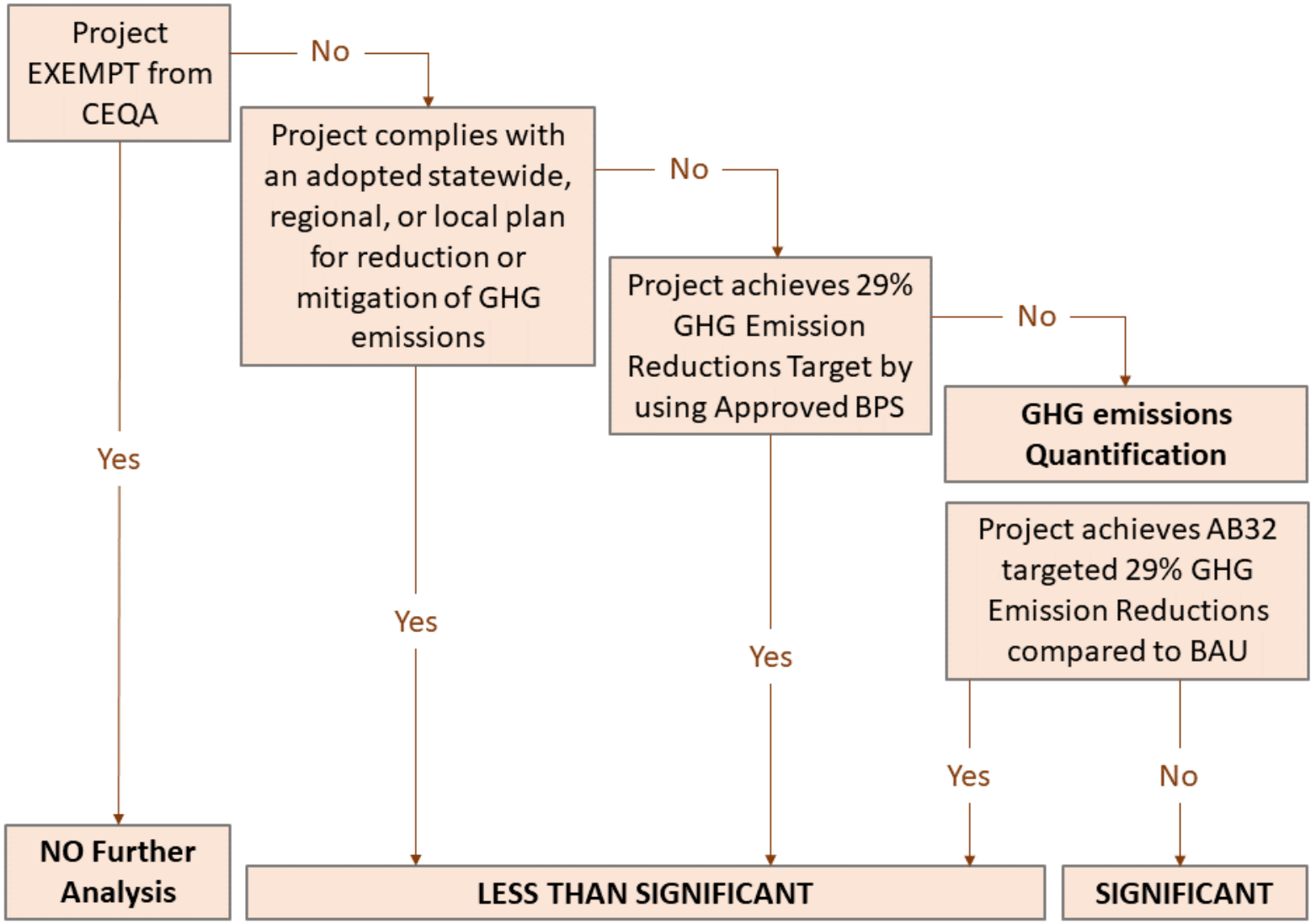

Figure 4-4 SJVAPCD's GHG Thresholds of Significance

Source: SJVAPCD Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA – Land Use Development Projects 2009

General Plan

The Land Use Element and Air Quality Element of Arvin's General Plan Update include policies to reduce greenhouse gas emissions as required by SB 375 and AB 32, some are listed as follows:

Land Use Element Goal 2: *Create high-quality walkable neighborhoods that exemplify sustainable practices and reduce greenhouse gas emissions.*

> ***Policy LU-2.1*** *Require new development, wherever possible, to provide convenient, direct and safe bicycle and pedestrian connections.*
>
> ***Policy LU-2.2*** *Create active neighborhood districts that cluster jobs, services, goods and cultural and recreational uses within walking distance of residences to create a focus for community activity.*
>
> ***Policy LU-2.3*** *Develop the Jewett Square and Meyer/Sycamore opportunity sites as walkable neighborhoods, with assets and amenities that contribute positively to 'rvin's quality of life and civic identity.*

Land Use Element Goal 7: *Ensure that new housing is produced in ways that reduce greenhouse gas Emissions.*

> ***Policy LU-7.1*** *Locate new medium and high density residential developments within walking distance of local retail, services and community facilities.*
>
> ***Policy LU-7.2*** *Encourage or facilitate the inclusion of complementary land uses not already present within a neighborhood district such as grocery markets, daily services and parks.*
>
> ***Policy LU-7.3*** *Incorporate green building practices such as on-site solar energy generation, water conservation and environmentally friendly building materials as part of new residential development.*

Air Quality Element Goal 1: *Integrate air quality, land use and transportation planning and policy to reduce the emission of criteria pollutants and greenhouse gases from mobile sources.*

> ***Policy AQ-1.5:*** *Promote infill growth within existing urban areas as a priority over outward expansion, where appropriate.*
>
> ***Policy AQ-1.6:*** *Promote site planning and design that prioritizes pedestrian and bicycle access and contributes to a safe, pleasant street environment for those arriving on foot or bicycle.*
>
> ***Policy AQ-1.7:*** *Recommend the use of traffic calming measures, where appropriate, within subdivision plans (e.g., median crossing islands, curb extensions, mini-roundabouts) in order to improve the safety and viability of pedestrian and bicycle travel.*
>
> ***Policy AQ-1.8:*** *Coordinate with the SJVAPCD on the review of proposed development projects.*
>
> ***Policy AQ-1.10:*** *To the greatest extent feasible, identify and mitigate the air quality and greenhouse gas emissions impacts of all development projects.*

Air Quality Element Goal 2: *Encourage the use of low-emission vehicles in City operations and in the larger community.*

Policy AQ-2.1: *Replace City fleet vehicles with low-emission technology vehicles wherever possible.*

Policy AQ-2.2: *Give preference to contractors using reduced-emission equipment for City construction projects, as well as for City service contracts.*

Policy AQ-2.3: *Encourage developments and street systems that accommodate the use of neighborhood electric vehicles (NEVs) for local travel.*

4.8.2 Impact Assessment

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

Less than Significant Impact. As stated above, the SJVAPCD recommends a tiered approach to assess the significance of the GHG impacts on the environment (see Figure 4-4). Neither the City of Arvin nor Kern County has developed a quantitative threshold of significance for GHG emissions. Consequently, compliance with an adopted statewide, regional, or local plan for GHG emission reduction or mitigation would the project be determined to have a less than significant individual and cumulative impact for GHG emissions. As discussed in more detail under criterion b), the Project would be generally consistent with the applicable goals and policies related to GHG reduction measures, including CARB's 2017 Scoping Plan, SJVAPCD guidelines, and the City of Arvin General Plan goals and policies that aim to reduce air emissions and improve air quality, which reduces GHG emissions as a result. Through compliance with the Scoping Plan, SJVAPCD guidelines, and General Plan, it can be determined that the Project would not occur at a scale or scope with potential to contribute substantially or cumulatively to the generation of greenhouse gas emissions and therefore the impact would be less than significant. Lastly, Project-related emissions were estimated using CalEEMod in compliance with CEQA Guidelines *Section 15064.4*. Estimated emissions are presented and discussed below. Project assumptions are provided in Section 4.3.

Construction Emissions

The SJVAPCD does not recommend assessing pollution associated with construction, as pollution-related construction will be temporary. However, other jurisdictions such as the Sacramento Metropolitan Air Quality Management District (SMAQMD) have concluded that construction emissions should be included since they may remain in the atmosphere for years after construction is complete. The SMAQMD has established quantitative significance thresholds of 1,100 MT CO_2e per year for the construction phases of land use projects. As such, annual construction emissions below the 1,100 $MTCO_2e$ would have a less than significant cumulative impact on GHGs. As presented below, maximum short-term annual construction emissions of GHG associated with development of the project are estimated to be 763.5455 MTCO2e. This is less than the 1,100 $MTCO_2e$ threshold of the SMAQMD.

Operational Emissions

Regarding the long-term operational related GHG emissions, the estimated operational emissions for buildout of the Project incorporates the potential area source and vehicle emissions, and emissions associated with utility and water usage, and wastewater and solid waste generation. Since the SJVAPCD guidance for addressing GHG impacts does not use numerical GHG emissions thresholds, at the lead agency's discretion, a neighboring air district's GHG threshold may be used to determine impacts. The

South Coast Air Quality Management District (SCAQMD) adopted the staff proposal for an interim GHG significance threshold of 10,000 MTCO2e per year for GHG for construction and operational emissions. Though the Project is under SJVAPCD jurisdiction, the SCAQMD GHG threshold provides some perspective on the GHG emissions generated by the Project. As such, annual operational emissions below 10,000 MTCO2e would have a less than significant cumulative impact on GHGs. As shown in Table 4-6, the annual operational GHG emissions associated with buildout of the Project would be 1,768.5853 $MTCO_2e$. This is less than the 10,000 $MTCO_2e$ threshold of the SCAQMD.

Table 4-6 Project Greenhouse Gas Emissions (Metric Tons Per Year)

	Total CO_2	CH_4	N_2O	CO_2e
Construction				
Construction, Unmitigated (max)	508.2813	0.1137	0.0132	514.0943
Operational				
Operational, Unmitigated	1,693.3455	1.9661	0.0875	1,768.5853

Source: *CalEEMod, Version 2020.4.0, ran on April 20, 2023*

In addition, the Project does not expect a net increase in new dwellings that exceeds that previously analyzed in the General Plan Update IS/MND. As mentioned in the Project Description, it is assumed that the units/population would increase in multi-family zones and decrease in other areas so that there would still be the same amount of growth in the city. Overall, long-term population projections are not expected to change based on the proposed text amendment, and development of residential units with higher density usually generates less GHG emissions than that lower density. As such, it is not anticipated that future development of the Project would result in increased generation of GHG emissions compared to business-as-usual/ growth without the proposed Project.

Cumulative Impacts

According to the General Plan IS/MND, the significance of GHG impacts cannot be determined due to the absence of emissions thresholds established locally, by the state, or by the SJVAPCD. However, the IS/MND recognizes that overall project-related GHG emissions would be significantly higher than existing conditions, thus proposing a Mitigation Measure: *"While the analysis indicates there will be an increase of GHG emissions resulting from the development of the proposed project, there are currently no GHG emission thresholds adopted by the City, State or SJVAPD and, therefore, the level of impact cannot be determined. In the absence of regulatory standards for GHG emissions, and to ensure that project impacts are minimized and to exercise an abundance of caution, it is recommended that the proposed project include mitigation measures, such as those recommended by the California Air Pollution Control Officers Association (CAPCOA) and the California Office of the Attorney General. In addition, the City shall develop a Climate Action Plan which establishes strategies to guide the City's efforts for reducing GHG emissions."*

Further, the Project would not exceed the thresholds of significance for construction or operation emissions as discussed in Section 4.3. In addition, future developments will be subject to the regulations and policies in the General Plan and possible Climate Action Plan. Cumulatively, these emissions would not generate a significant contribution to global climate change over the lifetime of the proposed Project. As such, it can be determined that the Project would not occur at a scale or scope with potential to contribute substantially or cumulatively to the generation of GHG emissions and therefore the impact would be less than significant.

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

Less than Significant Impact. The compatibility of the Project with the 2022 Scoping Plan, the SJVAPCD's CCAP, and the City of Arvin General Plan is evaluated below.

Consistency with the 2022 Climate Change Scoping Plan

The first approach recommended by CARB for determining whether a proposed residential development would align with the State's climate goals is to examine whether the project includes key project attributes that reduce operational GHG emissions while simultaneously advancing fair housing. As stated in the 2022 Scoping Plan, residential and mixed-use projects that have all of the key attributes shown in Table 4-7 are considered to be aligned with the State's priority GHG reduction strategies and with the State's climate and housing goals. As such, these projects would be considered to be consistent with the Scoping Plan and would result in a less significant impact under CEQA. However, lead agencies have the discretion under the Scoping Plan, with additional supporting evidence, that projects that incorporate some but not all of the key project attributes are consistent with the State's climate goals. As discussed in Table 4-7, the Project would be consistent with all applicable key project attributes.

Table 4-7 Scoping Plan Reduction Measures Consistency Analysis

Priority Areas	Key Project Attributes	Project Consistency
Transportation Electrification	Provides EV charging infrastructure that, at minimum, meets the most ambitious voluntary standard in the California Green Building Standards Code at the time of project approval.	**Consistent.** Future development projects would be required to provide EV capable parking spaces at 10% of the parking spaces in accordance with the 2022 California Green Building Standards Code (or future updated CalGreen Standards), Title 24, Part 11, which would be consistent with this attribute.
VMT Reduction	Is located on infill sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land that is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer).	**Consistent.** The Project Area is located within city limits and is planned and zoned for urbanized uses. Because the Project site is located within city limits, the Area is presently or planned to be served by existing utilities and essential public services. Therefore, the Project is consistent with this attribute.
	Does not result in the loss or conversion of natural and working lands.	**Consistent**. The parcels within the Project Area are currently developed or vacant. As described in Section 4.2 in this document, the Project would not result in the loss or conversion of natural and working lands, forests, wetlands, and agricultural lands, and is thereby consistent with this attribute.
	Consists of transit-supportive densities (minimum of 20 residential dwelling units per acre), or	**Consistent.** The 2022 Kern COG Regional Transportation Plan (RTP)/SCS was adopted by Fresno COG on July 21, 2022. SB 375 increased the link between housing planning and the RTP. The

	Is in proximity to existing transit stops (within a half mile), or Satisfies more detailed and stringent criteria specified in the region's SCS.	proposed Project is consistent with the adopted SCS for the following reasons: • *Increasing the housing supply and mix of housing types.* • *Promoting infill development and socioeconomic equity, protecting environmental and agricultural resources, and encouraging efficient development patterns; and* Therefore, the Project would be consistent with this attribute.
	Reduces parking requirements by: Eliminating parking requirements or including maximum allowable parking ratios (i.e., the ratio of parking spaces to residential units or square feet); or Providing residential parking supply at a ratio of less than one parking space per dwelling unit; or For multifamily residential development, requiring parking costs to be unbundled from costs to rent or own a residential unit.	**Consistent.** Although the proposed text amendment does not propose reducing parking standards, as part of this project, site layouts on R-4 zoned property were prepared to determine if max density could be met with existing parking standards or if parking requirements were limiting density. It was determined that projects could be built at the highest density allowed, even with parking requirements. Thus, this demonstrates that the City's parking requirements are not overly onerous and would meet the goals and intent of this project attribute. Arvin, being a small, rural community, does not have robust public transit options. However, increasing density, like the proposed project does, will make transit more viable in the City.
	At least 20 percent of units included are affordable to lower-income residents	**N/A.** The Project does not consist of an affordable housing development, therefore this attribute is not applicable.
	Results in no net loss of existing affordable units	**Consistent**. The Project site does not propose development that would cause the demolition of existing affordable units. While redevelopment of some parcels of the Project Area could cause demolition of existing dwelling units, the Project allows an increase in the density and number of dwelling units that could be developed on site. Additionally, since there are ample vacant and underutilized land available to locate new dwelling units within the Project area, it is anticipated that most new units would not require demolition of existing housing. Therefore, the Project would not result in a no net loss of existing affordable units and would be consistent with this attribute.
Building Decarbonization	Uses all-electric appliances without any natural gas connections and	**Consistent.** The Project would be required to comply with all mandatory

	does not use propane or other fossil fuels for space heating, water heating, or indoor cooking	requirements for multi-family buildings as outlined in the 2022 Energy Code, which would be verified through the building permit process. Mandatory requirements apply to building ventilation and indoor air quality, space conditioning systems, water heating systems, electric power distribution, and electric ready buildings. Therefore, the Project would be consistent with this attribute.

Consistency with the SJVAPCD Climate Change Action Plan

Maximum annual construction emissions of GHG associated with development of the Project are estimated to be 514.0943 MTCO2e and annual operational GHG emissions associated with buildout of the Project would be 1,768.5853 $MTCO_2e$, which are under the threshold of 25,000 tons of CO_2e per year. Therefore, the Project would have a less than significant impact.

Consistency with the Arvin General Plan Update

In reviewing the General Plan goals and policies on GHG reduction, most policies are to be implemented by the City and do not apply to individual development projects. Future development under the proposed Project would allow an increase of the density of residential development, which is in line with *Policy LU-7.1*. The Project also promotes infill growth identified in *Policy AQ-1.5*. Future development would also be required to comply with the municipal code, CBC standards, and CalGreen to ensure the incorporation of green building practices and pedestrian infrastructure, as set forward in *Policy LU-7.3, Policy AQ-1.7*, and *Policy LU-2.1*.

In conclusion, the Project contains features that would reduce GHG emissions in compliance with the Scoping Plan, SJVAPCD guidance, and Arvin General Plan. As such, the Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and therefore the impact would be less than significant.

4.8.3 Mitigation Measures

None required.

4.9 HAZARDOUS AND HAZARDOUS MATERIAL

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?		X		
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			X	

4.9.1 Environmental Setting

For the purposes of this section, the term “hazardous materials” refers to "injurious substances," which include flammable liquids and gases, poisons, corrosives, explosives, oxidizers, radioactive materials, and medical supplies and waste. These materials are either generated or used in various commercial and

industrial activities. Hazardous wastes are injurious substances that have been or will be disposed of. Potential hazards arise from the transport of hazardous materials, including leakage and accidents involving transporting vehicles. There also are hazards associated with the use and storage of these materials and waste. Hazardous materials are grouped into the following four categories based on their properties:

- Toxic: causes human health effect
- Ignitable: has the ability to burn
- Corrosive: causes severe burns or damage to materials
- Reactive: causes explosions or generates toxic gases

"Hazardous wastes" are defined in California Health and Safety Code Section 25141(b) as wastes that: "…because of their quantity, concentration, or physical, chemical, or infectious characteristics, [may either] cause or significantly contribute to an increase in mortality or an increase in serious illness or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed." Hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. If improperly handled, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. The California Code of Regulations, Title 22, Sections 66261.20-24 contains technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste.

Hazardous waste generators may include industries, businesses, public and private institutions, and households. Federal, state, and local agencies maintain comprehensive databases that identify the location of facilities using large quantities of hazardous materials, as well as facilities generating hazardous waste. Some of these facilities use certain classes of hazardous materials that require risk management plans to protect surrounding land uses. The release of hazardous materials would be subject to existing federal, State, and local regulations and is similar to the transport, use, and disposal of hazard materials.

Record Search

The United States Environmental Protection Agency (EPA) Superfund National Priorities List (NPL)[32], California Department of Toxic Substance Control's EnviroStor database[33], and the State Water Resources Control Board's GeoTracker database[34] include hazardous release and contamination sites. A search of each database was conducted on February 24, 2023. The searches revealed one (1) hazardous material

[32] United States Environmental Protection Agency. Superfund National Priorities List. Accessed February 24, 2023, https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=33cebcdfdd1b4c3a8b51d416956c41f1

[33] California Department of Toxic Substances Control. Envirostor. Accessed February 24, 2023, https://www.envirostor.dtsc.ca.gov/public/

[34] California State Water Resources Control Board. GeoTracker. Accessed February 24, 2023, https://geotracker.waterboards.ca.gov/

release sites on the Project Area, Proposed Kern Community College District (60002872), and five (5) sites adjacent or near the Project Area, of which three (3) are cleaned and closed, as shown in.

Table 4-8 Hazardous Sites

Site Name	Location	Site Type	Cleanup Status
Brown & Bryant, Inc. (CAD052384021)	600 South Derby Road, Arvin, CA 93203	NPL Site	Ongoing, not realizing contamination currently
Proposed Kern Community College District (60002872)	Southwest of Varsity Avenue and Campus Drive, Arvin, CA 93203	Voluntary agreement	Refer other agency as of 9/24/2019 *
South School (15010022)	Meyer Street/El Camino Drive, Arvin, CA 93203	School	Inactive – needs evaluation as of 10/4/2002
Arvin Muffler (T0602900511)	401 Bear Mountain Road, Arvin, CA 93203	LUST Cleanup Site	Completed – case closed as of 6/9/1995
Lamont Winery Inc. (T0602900186)	1 Bear Mountain & Winery Road, Di Giorgo, CA 93203	LUST Cleanup Site	Completed – case closed as of 10/9/1986
Alshaifs Market (T0602900726)	801 Haven Drive, Arvin, CA 93203	LUST Cleanup Site	Completed – case closed as of 10/12/2000

**The project was referred to the Waterboard since the dominant issues are related to petroleum.*

Kern County Emergency Operations Plan

The Kern County Emergency Operations Plan (EOP) provides planned response to emergency situations associated with potential human-caused or natural disasters affecting the County, one or more cities, and/or one or more special districts.[35] The County serves as the lead agency for coordination among jurisdictions.

Arvin General Plan Update

The Arvin General Plan Safety Element include goals and policies relevant to hazards and hazardous materials in its Safety Element:

Goal SAF-4: *A community protected from the harmful effects of hazardous materials, hazardous waste, and environmental contamination.*

> ***Policy SAF-4.1:*** *Ensure that land uses involved in the production, storage, transportation, handling, or disposal of hazardous materials are located and operated to reduce risk to other land uses.*
>
> ***Policy SAF-4.2:*** *When approving new development, ensure that the site:*
>
> - *Is sufficiently surveyed for contamination and remediation, particularly for sensitive uses near existing or former toxic or industrial sites.*
> - *Is adequately remediated to meet all applicable laws and regulations, if necessary.*
> - *Is suitable for human habitation.*
> - *Is protected from known hazardous and toxic materials.*
> - *Does not pose higher than average health risks from exposure to hazardous materials.*

[35] Kern County. (2022). County of Kern Emergency Operations Plan. Accessed on September 12, 2022, https://www.kerncounty.com/community/emergency/emergency-operations-plan

Policy SAF-4.5: Ensure the safe transport of hazardous materials through the City by:

- *Restricting transport of hazardous materials within Arvin to designated routes.*
- *Prohibiting the parking vehicles transporting hazardous materials on City streets.*
- *Requiring new pipelines or other channels carrying hazardous materials avoid residential areas to the greatest extent possible.*

Policy SAF-4.9: Prior to the development of lands where abandoned or activity wells exist, the City will contact the Department of Conservation's Division of Oil, Gas, and Geothermal Resources (Division) for assistance in the development review process. The Department of Conservation's Division of Oil, Gas, and Geothermal Resources (Division) is charged with implementing Section 3208.1 of the Public Resources Code (PRC). As a result, the Division developed the Construction Site Well Review Program to assist local permitting agencies in identifying and reviewing the status of oil or gas wells located near or beneath proposed structures.

Before issuing building or grading permits, local permitting agencies review and implement the Division's preconstruction well requirements. Interaction between local permitting agencies and the Division helps resolve land-use issues and allows for responsible development in oil and gas fields.

California Public Resources Code Section 3208.1 intent is to prevent, as far as possible, damage to life, health, and property. The operator responsible for plugging and abandoning deserted wells under Section 3237 shall be responsible for the re-abandonment as provided in Section 3208.1(a).

The General Plan Safety Element also includes policies that protect the community from geologic, flooding, and fire-related hazards. According to the Safety Element, the City of Arvin has no defined emergency routes; however, Bear Mountain Boulevard, SR-223, would serve as the primary emergency route since it bisects the City and provides east-west regional access to SR-99, I-5, and SR-58.

4.9.2 Impact Assessment

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

Less than Significant Impact. Although no development is proposed, future development of the Project site resulting from Project implementation would include residential uses. Residential uses typically do not include production or services that generate hazardous waste (e.g., automotive services, dry cleaners, medical services). Residential hazardous wastes are typically products that are purchased for use in or around the home (e.g., personal hygiene products, pesticides, herbicides, insecticides, paint, pet care, etc.). Given the small quantities and nature of use, these products are not expected to create a significant hazard to the public or environment through the routine transport, use, or disposal. Additionally, residential hazardous wastes are not accepted at the Kern County landfill. Residents would be required to dispose of residential hazardous waste at one of three Kern County Special Waste facilities. For these reasons, the Project would have a less than significant impact.

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

Less than Significant Impact. As described under criterion a), the Project is not anticipated to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Therefore, the Project would have a less than significant impact.

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

Less than Significant Impact. Schools within one-quarter mile of the Project Area include Arvin High School, Grimmway Academy, Bear Mountain School, Bear Mountain Elementary School, Haven Drive Middle School, Sierra Vista Elementary School, and El Camino Real Elementary School. As described under criteria a) and b) above, the Project is not anticipated to emit hazard emissions or handle hazardous materials, substances, or water that would pose a risk or threat to the school or surrounding area. Therefore, a less than significant impact would occur.

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

Less than Significant with Mitigation Incorporated. According to EnviroStor and GeoTracker, the Project Area includes one (1) site, Proposed Kern Community College District, that is included on a list of hazardous materials sites compiled pursuant to Government Code *Section 65962.5*. The main hazardous material of concern is petroleum on this site. However, this site is under the jurisdiction of Kern Community College District and is not subject to City requirements. If hazardous materials are found, then future development would be required to comply with standard requirements of the California Department of Toxic Substances Control (DTSC), Kern County Public Health Services Department, and California Regional Water Quality Control Board (RWQCB).

In addition, it is acknowledged that historic activities on or near the site could have resulted in the release of hazardous materials and potential contamination (e.g., agricultural uses, gas stations, and dry cleaners) that have not been previously accounted for in databases such as EnviroStor or GeoTracker and could create a hazard to the public or environment. Furthermore, it is acknowledged that future construction activities on or near the site could result in the utilization of contaminated fill material (i.e., fill from a site containing or formerly containing an undesirable use) that could create a hazard to the public or environment. Therefore, to further assure that future development of the Project Area would not utilize hazardous fill material, the Project shall incorporate *Mitigation Measure HAZ-1* requiring soil testing prior to future entitlement approval.

> ***Mitigation Measure HAZ-1:*** *For all projects proposing fill material from a site containing or formerly containing an undesirable use, as identified in the California Department of Toxic Substances Control's 2001 Information Advisory Clean Imported Materials, proper soil testing shall be conducted to ensure soil is free of contamination.*

Lastly, there is also a five (5)-acre NPL site located on Derby Street that is listed as highest priority for remediation under the Superfund Program. This site would cause significant impacts as it contains formulated liquid agricultural chemicals and is currently under operations that impedes the chemicals from being released. However, the NPL site would continue to remain its function since future development of

the Project Area do not include activities on the site, nor would it configure the site in any way. As such, the Project would not create a significant hazard to the public of the environment.

Incorporation of *Mitigation Measures HAZ-1*, in addition to compliance with standard requirements related to hazardous sites, would ensure that the Project would not create a significant hazard to the public or the environment. Therefore, the Project would have a less than significant impact with mitigation incorporated.

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

No Impact. There are no public airports within two (2) miles of the Project Area. The nearest public airport is the Creekside Airport, approximately 7.8 miles southwest, and the Hanford Municipal Airport, approximately 8.1 miles northeast. Since the Project Area not located within an airport land use plan or within two (2) miles of a public airport or public use airport, the Project would not result in a safety hazard for people residing or working in the Project Area and no impact would occur.

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

Less than Significant Impact. The Project would not involve any alteration of existing infrastructure associated with evacuation, emergency response, and emergency access routes within the City or County. Future construction of frontage improvements may require lane closure; however, these activities would be short-term and access to existing public roadways would be maintained through standard traffic control. Furthermore, future development projects would be subject to compliance with applicable standards for on-site emergency access including turn radii and fire access. Furthermore, future development of the Project site would be subject to compliance with applicable standards for on-site emergency access including turn radii and fire access as well as applicable measures identified in the EOP. For these reasons, it can be determined that Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan and impacts would be less than significant.

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

Less than Significant Impact. The City of Arvin, inclusive of the Project Area, is within an "area of local responsibility" and is not identified by Cal Fire to be in a Moderate, High, or Very High Fire Hazard Severity Zone (FHSZ). [36] Further, the Project Area is surrounded primarily by urban development and agricultural uses that are not likely to be at risk of wildland fires. In addition, future development of the Project Area would increase pavement areas, which would decrease wildland fire from occurring and spreading. Future structures would be occupied by humans; thus construction shall be in adherence to the Wildland Urban Interface Codes and Standards of the California Building Code Chapter 7A. Compliance with such

[36] California Department of Forestry and Fire Protection. FHSZ Viewer. Accessed on August 29, 2022, https://egis.fire.ca.gov/FHSZ/.

regulations would ensure that the Project meets standards to help prevent loss, injury, or death involving wildland fires. For these reasons, the Project would have a less than significant impact.

4.9.3 Mitigation Measures

The proposed project shall implement and incorporate, as applicable, the hazards and hazardous material related mitigation measures as identified in the attached Mitigation Monitoring Checklist dated May 2023.

4.10 HYDROLOGY AND WATER QUALITY

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:			X	
	i. Result in a substantial erosion or siltation on- or off-site;			X	
	ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site:			X	
	iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			X	
	iv. Impede or redirect flood flows?			X	
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

4.10.1 Environmental Setting

The Project Area is within city limits and thus, will be required to connect to the Arvin Community Service District's water and the city's stormwater services. The Arvin Community Service District's water and the city's stormwater services are described as follows.

Water

Water is provided by the Arvin Community Service District (ACSD). The ACSD manages the water source for domestic, agriculture, recreational, and industrial uses within the city. ACSD relies wholly on groundwater from the Kern Subbasin. Groundwater recharge and replenishment is managed by the Arvin-Edison Water Storage District (AEWSD). According to the ACSD, water quality in the Arvin area continues to be suitable for domestic use due to groundwater management.

The City's long-term water resource planning for existing and future demand is addressed in the City's 2020 Urban Water Management Plan (UWMP).[37] According to the UWMP, groundwater storage has been relatively stable since 1966 due to the effectiveness of AEWSD's groundwater recharge program. In addition, all wells within the ACSD are relatively new and depths are well below the groundwater levels. To ensure that wells are sufficiently deep, the ACSD and AEWSD entered a Memorandum of Understanding in 2019 to address groundwater allocations and to ensure groundwater supply availability. Projections in the UWMP indicate that water supply would remain relatively constant for current and projected population, especially with implementation of various water conservation measures identified.

Stormwater

The City manages stormwater runoff in Arvin. Existing drainage facilities include curb and gutter, cross gutters, drainage inlets, siphons, storm drain pipelines, and drainage basins. Storm drainage facilities and management are discussed in the City's Storm Drainage Master Plan (2009 Update).[38] The Storm Drainage Master Plan aims to ensure that proper drainage infrastructure is in place to capture and store runoff generated by typical and major storm events. The Storm Drainage Master Plan finds the existing storm drainage collection and retention systems to be adequate apart from three (3) potential problem areas including: 1) siphon crossings along Bear Mountain Boulevard, 2) the lack of basin capacity in Smotherman Park, and 3) periodic flooding along Derby Street. In addition, the Master Plan recommends facilities and infrastructure for future development. Developers would be responsible to provide all necessary improvements as required by the City's Grading and Storm Drainage Standards to connect to regional retention basin and collection facilities.

General Plan

The Arvin General Plan Conservation and Open Space Element includes the following goals and policies related to hydrology and water quality.

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[37] A copy of the 2020 UWMP can be obtained from the ACSD office located at 309 Campus Drive, Arvin, CA 93203. The ACSD's phone number is (661) 854-2127.

[38] A copy of the Storm Drainage Master Plan (2009 Update) can be obtained from the City of Arvin located at 200 Campus Drive, Arvin, CA 93203. The City's phone number is (661) 854-3134.

Goal 3. *Maintain and enhance groundwater levels in order to assure an adequate supply for future City water need.*

> ***Policy CO-3.1.*** *Encourage continued groundwater recharge efforts of the Arvin-Edison Water Storage District.*
>
> ***Policy CO-3.2.*** *Embark on a public education program regarding water conservation practices in residential, commercial, industrial, and public facility development.*
>
> ***Policy CO-3.3.*** *Encourage the use of reclaimed wastewater for appropriate uses such as agricultural irrigation or frost protection.*
>
> ***Policy CO-3.4.*** *Require thorough information in all environmental assessments for projects which may have a substantial effect on groundwater levels.*

Goal 4. *Continue to provide high quality water for domestic use within the City of Arvin.*

> ***Policy CO-4.1.*** *Monitor water quality regularly in all wells in the Arvin Community Services District.*
>
> ***Policy CO-4.2.*** *Investigate means of protecting the groundwater supply from contamination by agricultural chemicals.*
>
> ***Policy CO-4.3.*** *Ensure that all components of the City's infrastructure related to water delivery and consumption, including those on private property, are functioning properly to protect water quality.*

Goal 5. *Protect life and property from damage and destruction due to flooding.*

> ***Policy CO-5.2*** *Implement the measures for drainage improvements as specified in the Master Drainage Plan for Arvin.*
>
> ***Policy CO-5.3*** *Direct the City Engineer and Flood Control District to review all development proposals and ensure adequate protection from flood damage.*

The City of Arvin Water Resources Element, adopted 2019, also includes goals and policies to manage the groundwater system retain its sustainable state for urban and agricultural uses. Five (5) golden goals are established for the Water Resources Element, including:

1. When the status quo is NOT acceptable, this presents an opportunity to implement new innovative strategies,
2. Collaborate on and utilize multi-disciplinary/multi-benefit strategies on public and private projects,
3. Diversity dependence on water sources,
4. Protect safety, health and quality of life during drought/climate change, and
5. Foster sustainable water use behavior by the public.

From these goals, policies that could be applicable to Project implementation include:

> ***Policy 2.1.1*** *For a construction or reconstruction project on a street segment with low to moderate flooding, the City will analyze the storm water infiltration feasibility of the location based upon its soil permeability, groundwater levels, slope, and contamination. Staff will determine if storm water should be captured and kept on site using Best Management Practices (BMP) Tool Box 1 (see below),*

or captured, treated and released, based upon BMP Tool Box 2 (see below). Capture treat and release options will only be utilized if catch-and-keep is infeasible. The performance goal will be to catch and keep, at a minimum, a 10-year/5-day storm runoff event.

Policy 2.2.1 *Use natural systems and work with natural site characteristics to maintain hydrologic functions and process, rather than attempting to mitigate impacts. For example, avoid the disturbance and grading of natural vegetated areas to significantly reduce the need for stormwater control and to increase groundwater recharge.*

Policy 2.2.2 *Minimize clearing and grading by clustering building sites.*

Policy 2.2.3 *Reduce road widths and shared-use driveways.*

Policy 2.2.4 *Use permeable paving and other permeable surface treatments. Amend the zoning code to require 15-20 percent permeable surfaces, depending upon type of use.*

Policy 2.2.6 *Trees should be watered and maintained using grey water. Designs noted in the EPA document "Stormwater to Street Trees", and the Los Angeles Beautification Team document "Trees as Bioswales" should be used as guidelines for developing designs that will provide fit-for-purpose water for trees.*

Policy 2.2.7 *Use, for example, vegetated swales rather than conventional curbs and catch basins to provide better water quality treatment, ground water infiltration, site appearance and urban heat relief. All designs must consider capital and long-term maintenance cost, soil types and slope (See MBRP (Multi-Benefit Road Plan) discussion).*

Policy 2.2.8 *Use rooftop runoff to irrigate vegetated areas thereby lowering water bills and reducing storm water runoff.*

Policy 2.2.9. *Create multi-functional and multi-benefit landscape designs. Multi-function landscape designs might include storm water management components that provide: filtration treatment, ground water infiltration, open space and habitat, storm water for future irrigation use, reduced urban heat island effects, and enhanced aesthetics.*

Policy 2.2.10 *Use native and drought-resistant plants to reduce demand for irrigation water, pesticides and fertilizers.*

Policy 2.2.11 *Consider long-term maintenance and sustainability when designing public and private projects that have a landscaping and irrigation component.*

Policy 3.3.1 *Storm water capture techniques will be utilized to comply with applicable NPDES requirements. The "Storm Water Quality Design Manual for Sacramento and South Placer Region" may be used as a model example as to how to design Low Impact Development (LID) for storm drainage facilities.*

Policy 3.3.2 *Low Impact Development (LID) designs will be used to capture and use stormwater. Collaborative multi-benefit designs will be required.*

4.10.2 Impact Assessment

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less than Significant Impact. Although no development is currently proposed, implementation of the Project would result in future residential development. Development of sites that are greater than one (1) acre are required to file a Notice of Intent (NOI) and prepare a SWPPP or file a waiver, in compliance with the General Permit for Discharges of Storm Water Associated with Construction Activity (i.e., General Permit Order No. 2012-0006-DWQ). The SWPPP estimates the sediment risk associated with construction activities and includes best management practices (BMP) to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from construction activity. BMPs cover erosion, sediment, tracking, and wind erosion control, as well as non-stormwater and waste management controls. Implementation of a SWPPP minimizes the potential for development to result in substantial soil erosion or loss of topsoil. These provisions minimize the potential for developments to violate any waste discharge requirements or otherwise substantially degrade surface or ground water quality. Further, runoff resulting from developments would be managed by the Flood Control District in compliance with the City of Arvin Drainage Master Plan Update in addition to approved grading and drainage plans. Thus, compliance with existing regulations including the General Construction Permit, BMPs, and Sewer System Management Plan would reduce potential impacts related to water quality and waste discharge to less than significant levels.

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

Less than Significant Impact. The Project includes a General Plan and Zoning Ordinance Text Amendment to increase the density of multi-family residential development in R-3 and R-4 zone districts. Although no physical development is proposed, future development of the Project site would still result in residential uses that would be compatible with the existing and planned uses within the Project Area.

At the maximum permitted density, development of the Project Area under the increased density proposed by the Project could yield up to 1,288 multi-family residential units compared to 1,042 multi-family residential units under the existing density. As such, an increase of 246 units would occur because of the Project. However, the Project does not expect a net increase in new dwelling units citywide that exceeds that previously analyzed in the General Plan Update IS/MND. As mentioned in Section 2.8, it is assumed that the units and population would increase in the multi-family zones that have increased in density and decrease in other areas so that there would still be the same total amount of growth in the city. Consequently, based on the information collected from the 2020 UWMP, it can be presumed that the existing and planned water supply should be adequate to serve future development that results from implementation of the Project because a no net increase in potential residential units does not constitute greater water demand.

According to the General Plan Update IS/MND, daily water consumption for all residential units is 220 gallons per unit. At full buildout, the existing and proposed densities would have a water demand of approximately 229,240 and 283,360 gallons per day (GPD), respectively. This means implementation of the Project has the potential to increase water demand by a total of approximately 54,120 GPD. However,

because growth within the city is expected to follow the projected rate that was previously analyzed in the General Plan Update IS/MND and residential densities are assumed to decrease in other areas, the overall city water demand should stay the same.

In addition, adherence to connection requirements and recommendations pursuant to the City's and ACSD's water conservation efforts (e.g., compliance with the South of Kern Groundwater Sustainability Plan (GSP) [39], efficient appliances, efficient landscaping, etc.) should not negatively impact water supply or impede water management. Therefore, it can be concluded that the Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin. For these reasons, a less than significant impact would occur because of the Project.

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

d) *Result in substantial erosion or siltation on- or off-site?*

Less than Significant Impact. Erosion is a natural process in which soil is moved from place to place by wind or from flowing water. The effects of erosion within the Project Area can be accelerated by ground-disturbing activities associated with development. Siltation is the settling of sediment to the bed of a stream or lake which increases the turbidity of water. Turbid water can have harmful effects to aquatic life by clogging fish gills, reducing spawning habitat, and suppressing aquatic vegetation growth.

Implementation of the proposed Project would result in the development of vacant and underutilized lands. These lands include bare soils, which are more susceptible to erosion than an already developed urban land, thus it is expected erosion would occur on-site. Per the SWRCB, development projects that are larger than one (1) acre are required to file a Notice of Intent (NOI), provide a Stormwater Pollution Prevention Plan (SWPPP) of file a waiver. The SWPPP estimates sediment risk associated with construction activities and includes best management practices (BMPs) to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from construction activity. Construction-related erosion controls and BMPs would be implemented to reduce potential impacts related to erosion and siltation. These BMPs would include, but are not limited to, covering and/or binding soil surfaces to prevent soil from being detached and transported by water or wind, and the use of barriers such as straw bales and sandbags to control sediment. Together, the controls and BMPs are intended to limit soil transportation and erosion.

In addition, future development of the Project would increase impervious surfaces by installing paving, concrete pads, and sidewalks. During entitlement review, future development would be reviewed and conditioned for compliance with the Drainage Master Plan. If temporary onsite facilities are required, then the size and capacity of such facilities would be determined through the review and conditioning of the

[39] EKI Environment & Water, Inc. (2022). South of Kern River Groundwater Sustainability Plan for the Kern County Subbasin.

future development. Consequently, review and approval by the City and compliance with standard requirements would mean that the Project would result in a less than significant impact.

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

Less than Significant Impact. As described under criterion c) i, the city would review future development through the entitlement review process. Future development would be reviewed and conditioned for compliance with the Drainage Master Plan. If temporary onsite detention facilities are required, then the size and capacity of such facilities would be determined through the review and conditioning of the future development. Therefore, approval and conditioning by the City would ensure that surface runoff is controlled in a manner which would not result in flooding on- or off-site. For this reason, a less than significant impact would occur because of the Project.

f) Create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less than Significant Impact. As previously described, future development resulting from Project implementation would be reviewed by the city for compliance with the Drainage Master Plan. If temporary onsite detention facilities are required, then the size and capacity of such facilities would be determined through the review and conditioning of the future development. Future development resulting from Project implementation is not expected to significantly increase the amount dwelling units in one specific area and cause enough excess runoff to exceed the capacity of the planned stormwater collection and conveyance system. Further, grading and drainage plans for future development would be subject to review and approval by the City. Therefore, review and approval of such plans would ensure that surface runoff is controlled in a manner which would not result in the creation or contribution of runoff water that would exceed the capacity of existing or planned stormwater drainage services or provide substantial additional sources of polluted runoff. For this reason, a less than significant impact would occur because of the Project.

g) Impede or redirect flood flows?

Less than Significant Impact. Although future development of the Project site would increase impervious surfaces, review and approval of grading and drainage plans by the City would ensure compliance with the Drainage Master Plan as to not impede or redirect flood flows. As a result of compliance with Drainage Master Plan, the Project would not impede or redirect flood flows and a less than significant impact would occur as a result.

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

Less than Significant Impact. There are no oceans, rivers, reservoirs, ponds, or lakes on or within the Project Area and its vicinity. However, most properties in the Project Area are designated as Zone AO on the most recent Flood Insurance Rate Map (FIRM) No. 06029C2775E dated September 26, 2008 (see Figure 4-5). Zone AO is defined as *"a river or stream flood hazard area, and areas with a one percent or greater change of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from one to three feet."* The City participates in the National Flood Insurance Program, which mandates flood insurance

purchase requirements and floodplain management standards in the 100-year flood zone. To minimize impacts from possible flooding, future developments in the floodplain are required to comply with AMC *Section 15.32 Floodplain Management*, which established flood-resistant standards for building anchoring, construction materials and methods, storage of materials, utilities, and land subdivisions. The AMC also requires that the ground floor be raised at least 24 inches above the highest adjacent grade. Compliance with these regulations in addition to the approved grading and drainage plans would ensure that future development that results from Project implementation would not risk release of pollutants due to project inundation and, therefore, a less than significant impact would occur because of the Project.

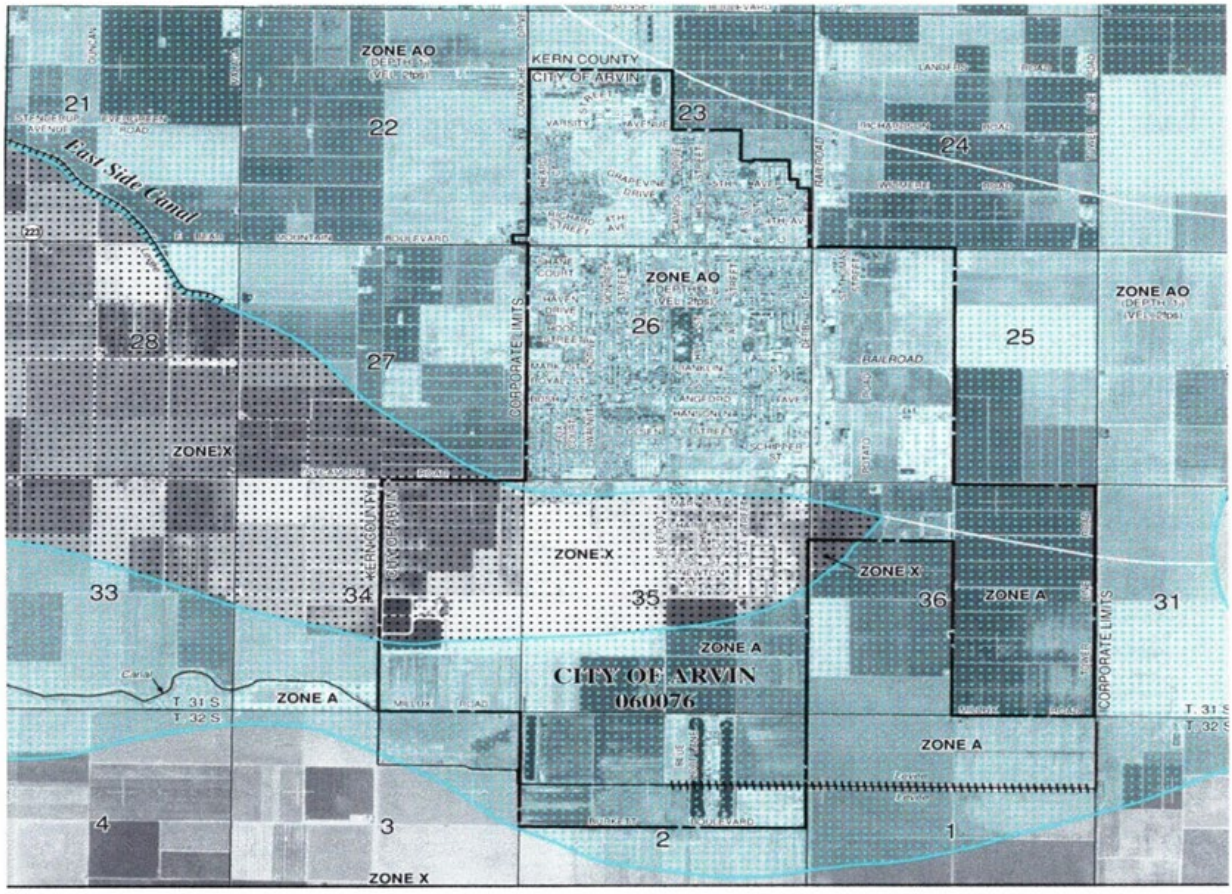

Figure 4-5 FEMA Flooding Map

i) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than Significant Impact. The Arvin Groundwater Sustainability Authority (GSA), which includes the ACSD, is in the process of transitioning its Management Area Plan (MAP) into the South of Kern River (SOKR) Groundwater Sustainability Plan (GSP). The GSP would include sustainability measures for water resource planning. The City of Arvin would be required to comply with the identified measures. Future development that would result from Project implementation would be subject to the adopted and applicable management plan during entitlement review. For these reasons, a less than significant impact would occur because of the Project.

4.10.3 Mitigation Measures

None required.

4.11 LAND USE AND PLANNING

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

4.11.1 Environmental Setting

The Project Area is within the city limits of Arvin and is zoned for residential development. The Project Area is generally adjacent to urban development and cultivated lands. Implementation of the Project is expected to introduce an increase in the density of multi-family residential projects within the R-3 and R-4 zone districts. The Project also proposes ministerial approval of multi-family residential developments. Though the Project does not include physical development, future development projects would be required to provide street frontage, improvements, including pavement, curb, gutter, sidewalks, streetlights, etc., as regulated by the city's municipal code.

4.11.2 Impact Assessment

a) Physically divide an established community?

No Impact. Typically, physical division of an established community would occur if a project introduced new incompatible uses inconsistent with the planned or existing land uses or created a physical barrier that impeded access within the community. Typical examples of physical barriers include the introduction of new, intersecting roadways, roadway closures, and construction of new major utility infrastructure (e.g., transmission lines, storm channels, etc.).

The physical environment that is affected by the Project are height limits, setbacks, density, etc. As such, implementation of the Project would not exceed that analyzed in the General Plan IS/MND. According to the General Plan IS/MND, the policies and goals set forth in the General Plan are intended to *"guide development in an orderly manner that will not disrupt existing communities or adversely impact the environment."* As such, the Project does not represent a significant change in the surrounding area as it will be developed according to standards and regulations. Properties in the Project Area are fragmented, and the Project does not propose long and linear features, such as a freeway, railroad track, etc., that would have the potential to divide a community. In addition, anticipated new roadways are included in the Circulation Element of the General Plan and thus are assessed in the General Plan EIR and General Plan Update IS/MND. For these reasons, the Project would not result in the physical divide of an established community and would thereby have no impact.

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

Less than Significant Impact. The Project includes a General Plan Amendment to increase the densities of Medium and High Density Residential designations, as well as create a Medium Low Density Residential designation. Although the increase of the density of multi-family zone districts are proposed, policy conflicts are environmental impacts only when they would result in direct physical impacts or where those conflicts relate to avoiding or mitigating environmental impacts. As such, associated physical environmental impacts are discussed in this document under specific topical sections, such as Biological Resources, Cultural Resources, and Tribal Cultural Resources. However, a discussion of certain land use plans, policies, and regulations that are applicable to the proposed Project is included below. Table 4-9 provides a comparison of the Project's characteristics with all applicable policies included in the General Plan as they relate to land use issues for Medium and High Density Residential designations. As discussed below, the proposed Project is generally consistent with the General Plan.

Table 4-9 Discussion on Land Use Policies in the General Plan

General Plan Policy	Project Consistency
Policy LU-7.1 *Locate new medium and high density residential developments within walking distance of local retail, services and community facilities.*	**Not Applicable.** The Project does not include amendments to the location of land use designations.

Further, through the entitlement process, the Project is reviewed for compliance with applicable regulations inclusive of those adopted for the purpose of avoiding or mitigating environmental effects. Overall, the entitlement process would ensure that the Project complies with the General Plan, Municipal Code, and any other applicable policies. As such, the Project would have a less than significant impact.

4.11.3 Mitigation Measures

None required.

4.12 MINERAL RESOURCES

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

4.12.1 Environmental Setting

For the purposes of CEQA, mineral resources are land areas or deposits deemed significant by the California Department of Conservation (DOC). Mineral resources include oil, natural gas, and metallic and nonmetallic deposits, including aggregate resources. The California Geological Survey (CGS) classifies and designates areas within California that contain or potentially contain significant mineral resources. Lands are classified into Aggregate and Mineral Resource Zones (MRZs), which identify known or inferred significant mineral resources. According to the California Department of Conservation, CGS's Surface Mining and Reclamation Act (SMARA) Mineral Lands Classification (MLC) data portal, the City of Arvin and surrounding areas have no mapped mineral resources. [40] A record search of the California Geologic Energy Management Division (CalGEM) Well Finder shows that the Project Area is within a CalGEM-recognized oilfield. [41] There are 1 new, 4 active, 2 idle, and 8 plugged oil and gas wells located within the Project Area.

4.12.2 Impact Assessment

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Less than Significant Impact. The Project site is not located in an area designated for mineral resource preservation or recovery. However, the CalGEM search revealed 1 new and 4 active gas and oil wells on-site. While no development is currently proposed with the Project, future development in the Project Area is subject to Arvin Municipal Code *Section 17.46.11*, which establishes procedures and provisions for timely and proper abandonment and removal of oil and gas facilities, reclamation and remediation of host sites, and final disposition of pipelines. While there would be less oil and gas wells in the city, future development in the Project Area would not result in the loss of existing oil and gas resources underground. Therefore,

[40] California Department of Conservation. (2009). Mineral Lands Classification. Accessed on September 1, 2022, https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc

[41] Geologic Energy Management Division (CalGEM). Well Finder. Accessed on April 20, 2023, https://www.conservation.ca.gov/calgem/Pages/WellFinder.aspx

the Project would have a less than significant impact in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

No Impact. The Project Area is not located in an area designated for mineral resource preservation or recovery and as a result, the Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. Further, the site is not delineated on the General Plan or other land use plan as a locally important mineral resource recovery site, thus it would not result in the loss of availability of a locally important mineral resource. Therefore, no impact would occur as a result of the Project.

4.12.3 Mitigation Measures

None required.

4.13 NOISE

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		X		
b)	Generation of excessive groundborne vibration or groundborne noise levels?		X		
c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

4.13.1 Environmental Setting

In general, there are two (2) types of noise sources: 1) mobile source and 2) stationary sounds. Mobile source noises are typically associated with transportation including automobiles, trains, and aircraft. Stationary sounds are sources that do not move such as machinery or construction sites. Two (2) noise generating activities of the Project would include construction (short-term, temporary) and operational (long-term) noise.

The Arvin General Plan Noise Element and AMC outline policies and regulations to mitigate health effects of noise in the community and prevent exposures to excessive noise levels. In particular, policies in the General Plan regarding new development include:

> ***Policy 1.1.1*** *Protect the future residents from adverse and unnecessary noise problems by encouraging the location of new residential subdivisions away from major noise sources.*
>
> ***Policy 1.1.3*** *Encourage in residential areas the planting of trees, hedges, and other types of landscaping to aid in the reduction of noise.*
>
> ***Policy 1.2.2*** *Utilize a variety of buffering techniques (trees, hedges, block walls) to protect noise sensitive uses from the hazards of noise pollution.*

4.13.2 Impact Assessment

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

Less than Significant with Mitigation Incorporated. In general, the Project Area is within city limits and is predominantly developed with a mix of urbanized uses. Because the surrounding area is largely developed, there are existing temporary or permanent ambient noise sources typical of urbanized uses. While no development is currently proposed, implementation of the Project would result in the future development of the Project Area with residential uses. Such uses would have noise generating activities typical of temporary or permanent ambient noise currently generated by surrounding residential uses (e.g., household equipment such as refrigerators and HVAC systems, vehicle movement, etc.).

Development of the Project site would also introduce short-term construction-related ambient noise from construction equipment. These activities would be temporary and would generally take place between 6:00 am and 9:00 pm, as permitted by AMC *Section 9.08 – Noise Disturbance Ordinance*, and not during evening or more noise-sensitive time periods. Ambient noise from construction activities would cease upon completion of project construction. However, to further ensure that potential impacts related to construction noise levels are mitigated to levels that are less than significant, the Project shall incorporate *Mitigation Measure NOI-1*. Compliance with the mitigation measure and applicable policies and regulations would ensure the Project would have a less than significant impact with mitigation incorporated.

> ***Mitigation Measure NOI-1:*** *Prior to ground disturbing activities, the City of Arvin shall ensure the following with the Project proponent:*
>
> - *Construction equipment, fixed of mobile, shall be outfitted with properly operating and maintained mufflers.*
> - *Construction noise reduction methods such as shutting off idling equipment, installing temporary acoustic barriers around stationary construction noise sources, maximizing the distance between construction equipment staging areas and occupied residential areas, and using electric air compressors and similar power tools rather than diesel equipment shall be used.*
> - *During construction, stationary construction equipment shall be located so that emitted noise is directed away from or shielded from sensitive noise receivers.*

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant with Mitigation Incorporated. While no development is currently proposed, implementation of the Project would result in future development that would require construction. Ground borne vibration may result from operations and/or construction, depending on the use of equipment (e.g., pile drivers, bulldozers, jackhammers, etc.), distance to affected structures, and soil type. Depending on the method, equipment-generated vibrations could spread through the ground and affect nearby buildings. It is not anticipated that the Project would generate excessive ground borne vibration or ground borne noise levels, given the type of improvements associated with residential development. Potential vibration impacts from future construction would be short-term, temporary, and subject to compliance with

Mitigation Measure NOI-1 and AMC *Section 9.08 – Noise Disturbance Ordinance*. However, to further ensure that potential vibration impacts related to construction noise levels are mitigated to levels that are less than significant, the Project shall also incorporate *Mitigation Measure NOI-2*. As a result, the Project would have a less than significant impact with mitigation incorporated.

> ***Mitigation Measure NOI-2:*** *The use of heavy construction equipment within 25 feet of existing structures shall be prohibited.*

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

No Impact. There are no public airports within two (2) miles of the Project site. The nearest public airport is the Creekside Airport, approximately 7.8 miles southwest, and the Hanford Municipal Airport, approximately 8.1 miles northeast. The Project site is not located within an airport land use plan or within two (2) miles of a public airport or public use airport and therefore, would not expose people residing or working in the Project area to excessive noise levels. As a result, no impact would occur.

4.13.3 Mitigation Measures

The proposed Project shall implement and incorporate, as applicable, the noise related mitigation measures as identified in the attached Mitigation Monitoring and Reporting Checklist dated May 2023.

4.14 POPULATION AND HOUSING

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

4.14.1 Environmental Setting

CEQA Guidelines *Section 15126.2(d)* requires that a CEQA document discuss the ways in which the proposed Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. The CEQA Guidelines provide an example of a major expansion of a wastewater treatment plant that may allow for more construction within the service area. The CEQA Guidelines also note that the evaluation of growth inducement should consider the characteristics of a project that may encourage or facilitate other activities that could significantly affect the environment. Direct and Indirect Growth Inducement consists of activities that directly facilitate population growth, such as construction of new dwelling units. A key consideration in evaluating growth inducement is whether the activity in question constitutes "planned growth."

4.14.2 Impact Assessment

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

Less than Significant Impact. Under the assumptions as described in Section 2.8 Description of Project, buildout of the Project Area could generate approximately 543 additional housing units, compared to that analyzed in the General Plan Update IS/MND. This anticipated additional development could result in approximately 704 new residents within the Project site. [42] However, these additional units under implementation of the Project are intended to accommodate the citywide population and meet RHNA housing needs. The estimated 246 additional units will provide for some of the 1,168 units allocated through RHNA obligation. As such, the potential population growth is within the population growth

[42] Population estimated by CalEEMod run, April 20, 2023.

contemplated by the Arvin General Plan, which anticipates population growth of up to 34,918 people by full buildout of the city. [43] Accordingly, implementation of the proposed Text Amendment would not exceed the projected citywide population. Therefore, the additional growth anticipated under Project buildout would be consistent with the General Plan population projection, citywide planning objectives, and RHNA housing allocation. As a result, impacts on population growth associated with potential future development under the proposed Project would be less than significant.

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

Less than Significant Impact. Implementation of the Project would result in an increase in the total number of dwelling units within the Project Area. While redevelopment of some parcels of the Project Area could cause demolition of existing dwelling units, the Project allows an increase in the density and number of dwelling units that could be developed on site. Additionally, since there is ample vacant and underutilized land available to locate new dwelling units within the Project area, it is anticipated that most new units would not require demolition of existing housing. As a result, development of the Project site would not result in the displacement of a substantial number of existing people or housing.

4.14.3 Mitigation Measures

None required.

[43] Population growth is calculated using the difference between the estimated population of 54,413 by full buildout of the General Plan Planning Area and the existing population according to the 2020 decennial census, which is 19,495.

4.15 PUBLIC SERVICES

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

4.15.1 Environmental Setting

The Project is located within Arvin city limits and thus, would be subject to fees for the construction, acquisition, and improvements for such services. These services and fees include:

Fire Protection Services

Fire Protection Services in the city are provided by the Kern County Fire Department (KCFD). One fire station, Station 54, is located within the city of Arvin at 301 Campus Drive and as of 2012, has nine (9) staff members and two (2) fire engines. The General Plan Safety Element includes the following goals and policies to ensure reductions in the potential for fire hazards and fire demand:

(1) The Fire Marshall and the City Building Inspector shall ensure that all buildings are designed and equipped for an adequate level of fire protection.

(2) The City should construct and develop new water wells, wherever feasible, to increase water supply and water pressure, thus insuring adequate fire protection in existing and future developments.

(3) The City of Arvin should introduce and support community programs that train the general public to assist the police, fire, and civil defense personnel during periods of fire or flood.

(4) The City of Arvin shall continue coordination and cooperation with the Arvin Community Services District and Arvin-Edison Water Storage District to assure wise management of the natural resources and to discourage unnecessary ground water withdrawal.

In addition, to further address impacts to fire protection services, the General Plan Update IS/MND includes the following mitigation measure, *"In order to meet future water demand on fire flow, the City will adhere to the recommendations of the 2008 Design Report and Master Plan Domestic Water System Improvement Report, which include(1) construction storage reservoir with 500,000 gallons of capacity; (2) construct booster pumping station with two-40 horsepower (hp) and two-40 hp electric powered booster pumps, with combined capacity of 2,500 gpm, and one 150 kilowatt (kw) diesel powered generator with sufficient capacity to power the booster pumps units or the well pump unit; (3) drill a 1,500 gpm capacity well and have it be located in Jewett Square; (4) install additional pipelines."* This mitigation measure is a citywide measure and would not be applicable to future development facilitated by the proposed Project.

Police Protection Services

Police Protection Services in the city are provided by the Arvin Police Department (APD). The APD headquarters is located at 200 Campus Drive. According to the General Plan Update IS/MND, staffing levels, facilities, and level of service are considered adequate for the current population. However, the carrying capacity at buildout of the General Plan would result in the increase in demand for police protection services. The General Plan Update IS/MND indicates that mutual aid agreements with the Kern County Sheriff's Department and California Highway Patrol could supplement police protection services, in addition to demand reductions through Crime Prevention through Environmental Design (CPTED) policies. These policies are included in the General Plan Update. Lastly, the City of Arvin has imposed Development Impact Fee for law enforcement which requires developers to pay the "fair share" of police protection services and facilities. A Police Facilities Fee would be assessed for future development of the Project site based on the number of residential units proposed.

Schools

Educational services within the city of Arvin are primarily served by Arvin Union School District and Kern High School District. Schools under the Arvin Union School District includes Bear Mountain Elementary School, El Camino Real Elementary School, Haven Drive Middle School, and Sierra Vista Elementary School. There is one high school, Arvin High School in the city of Arvin. Additionally, Kern Community College is planned to be located on the southwest corner of Varsity Road and Campus Drive, approximately 500 feet from the Project site. Funding for schools and school facilities impacts is outlined in Education Code Section 17620 and Government Code Section 65995 et. seq., which governs the amount of fees that can be levied against new development. These fees are used to construct new or expanded school facilities. Payment of fees authorized by the statute is deemed "full and complete mitigation." A School Impact Fee would be assessed for future development of the Project site based on the Developer Fee rates in place at the time payment is due. In addition, the Arvin General Plan Land Use Element includes the following goal and policies for educational facilities.

Goal 17. *Develop and expand facilities for a range of educational institutions in Arvin, especially those for higher education and vocational training.*

> ***Policy LU-17.1.*** *Ensure the provision of adequate land for school campuses, according to the level of need identified by the appropriate school districts and private institutions.*

Policy LU-17.2. *Accommodate institutions of higher learning, such as community colleges and trade schools, to the greatest extent feasible by removing regulatory barriers.*

Parks and Recreation

Park and Recreation Facilities are overseen by the Arvin Parks and Recreation Division. There are four (4) parks within the city, totaling 42 acres. The current land-to-resident ratio is 2.7 acres per 1,000 residents, which designates Arvin as a "critically underserved community" per the Statewide Park Development and Community Revitalization Act (AB 31). The Act considers any community with a ratio of three (3) acres per 1,000 residents to be underserved. The City Municipal Code *Section 16.22* establishes a fee on new development as a method to finance the development, improvement, and enhancement of public parks. A Parks Impact Fee will be assessed for future development of the Project site based on the number of residential units proposed. The nearest public parks to the Project site are Las Palmas Park (0.10 miles west) and Garden in the Sun Park (0.18 miles southwest).

In addition, the Arvin General Plan Land Use Element and Conservation and Open Space Element includes the following goals and policies related to park and recreation facilities.

Land Use Goal 16. *Coordinate the location and development of open spaces with other land uses in order to enhance the quality of life in the City and promote a cohesive urban form.*

> ***Policy LU-16.1.*** *Encourage open space development within the City's existing built-up areas.*

Conservation and Open Space Goal 2. *Develop and expand public open spaces and facilities for the enjoyment, health, and well-being of community residents.*

> ***Policy CO-2.1.*** *Determine and continually monitor existing demand for recreational open space within t he various sectors of the community, as well as the community as a whole.*
>
> ***Policy CO-2.2.*** *Pursue a variety of creative financial mechanisms that will ensure adequate recreational open space that meets public demand.*
>
> ***Policy CO-2.3.*** *Maintain parks and public facilities in a way that enhances the appearance of City's public spaces and contributes to the City's identity.*
>
> ***Policy CO-2.4.*** *Ensure existing facilities are maintained in good working order to address the passive and active recreational needs of Arvin residents.*
>
> ***Policy CO-2.5.*** *Encourage the use of areas prone to flooding as open space or limited recreational use, and discourage property improvements that would be subject to damage during floods.*

Policy CO-2.6. *Identify and pursue opportunities to open up school playgrounds and playfields to public recreational use outside of school hours through joint-use agreements with the appropriate school districts.*

4.15.2 Impact Assessment

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain

acceptable service ratios, response times, or other performance objectives for any of the public services:

i. Fire protection?

Less than Significant Impact. The Project site is within the city limits and therefore would be served by the KCFD. The Project Area's proximity to the existing station would support adequate service ratios, response times, and other performance objectives for fire protection services. In addition, future development would be reviewed by the KCFD for requirements related to water supply, fire hydrants, and fire apparatus access. For these reasons, it can be determined that the Project would not result in the need for new or altered facilities and as a result, a less than significant impact would occur.

ii. Police protection?

Less than Significant Impact. The Project site is within the city limits and therefore would be served by the APD. The Project's proximity to the existing station would support adequate service ratios, response times, and other performance objectives for police protection services. In addition, future development of the Project site would be reviewed by the APD for requirements related to crime protection in addition to adherence to the City's CPTED policies. Lastly, future development would be subject to the Development Impact Fee for construction and acquisition costs for improvements to police protection services and facilities. For these reasons, it can be determined that the Project would not result in the need for new or altered facilities and as a result, a less than significant impact would occur.

iii. Schools?

Less than Significant Impact. The development and management of school sites are the responsibility of school districts and elected governing school boards. Funding for schools and school facilities impacts is outlined in Education Code Section 17620 and Government Code *Section 65995 et. seq.*, which governs the amount of fees that can be levied against new development. These fees are used to construct new or expanded school facilities. Payment of fees authorized by the statute is deemed "full and complete mitigation." A School Impact Fee would be assessed for future development of the Project site based on the Developer Fee rates in place at the time payment is due. For these reasons, a less than significant impact would occur.

iv. Parks?

Less than Significant Impact. Park and recreational facilities are typically impacted by an increase in use from proposed residential development. Although no specific development is proposed by the Project, the Project would facilitate future residential development that would introduce residents to the area and therefore increase the demand for and use of local parks. Future development would be subject to the applicable AMC regulations, including payment of the Parks Impact Fee in order to mitigate any potential impacts to the city's park and recreation facilities generated by the incremental population increase. For these reasons, the Project would have a less than significant impact.

v. Other public facilities?

Less than Significant Impact. Although no specific development is currently proposed, future development resulting from Project implementation could increase the demand for other public services, such as courts,

libraries, hospitals, etc. Increased demand as a result of the continued implementation of the Project could result in development or expansion of public facilities. Typical environmental impacts associated with the development of these facilities include air quality, greenhouse gas emissions, noise, traffic, etc. The expansion of these facilities would be subject to CEQA as they are proposed. As a result, the Project would have a less than significant impact resulting from the construction or expansion of other public facilities.

4.15.3 Mitigation Measures

None required.

4.16 RECREATION

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

4.16.1 Environmental Setting

See Section 4.15.

4.16.2 Impact Assessment

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

Less than Significant Impact. Park and recreational facilities are typically impacted by an increase in use from residential development. Although no specific development projects are currently proposed, future development under the Text Amendment would increase residential density in multi-family zones, which would introduce residents to the area and therefore increase the demand for and use of local parks. Future development would be subject to the applicable AMC regulations, including payment of the Parks Impact Fee in order to mitigate any potential impacts to the city's park and recreation facilities generated by the incremental population increase. For these reasons, the Project would have a less than significant impact.

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

Less than Significant Impact. Future residential development resulting from the Project could include the construction of recreational facilities such as neighborhood parks, playgrounds, trails, or open space. In such cases, the development projects are subject to compliance with the AMC and would be reviewed and conditioned by the City to ensure that physical effects on the environment are less than significant. For these reasons, the Project would have a less than significant impact.

4.16.3 Mitigation Measures

None required.

4.17 TRANSPORTATION

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?		X		
b)	Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?			X	
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d)	Result in inadequate emergency access?			X	

4.17.1 Environmental Setting

Kern Region Active Transportation Plan

The Kern Region Active Transportation Plan was adopted in 2018 to develop a suite of project and program recommendations to make walking, bicycling, and transit integral parts of daily life for residents and visitors.[44] The City of Arvin was identified as a "focus area" community with city-specific recommendations.

Complete Streets and Safe Routes to School Plan

The City of Arvin's Complete Streets and Safe Routes to School Plan was adopted by the City in 2020 and builds on the Kern Region Active Transportation Plan to deliver infrastructure projects and design tools to improve safety, encourage the use of non-motorized transportation, public transportation, rideshare, and other emerging modes to ultimately improve the comfort of the street and quality of life for residents and students of Arvin.[45] As identified in *Figure 1: Recommendations Map* of the Plan (see Figure 4-6), there are recommendations within the Project Area along main roadways such as Varsity Avenue, Bear Mountain Boulevard, Haven Drive, Franklin Street, Olson Way, Sycamore Road, South Comanche Drive, Walnut Drive, Meyer Street, A Street, etc., for crossing improvement, signals or beacons, traffic calming, shared use path,

[44] Kern Council of Governments. (2018). Kern Region Active Transportation Plan. Accessed on September 9, 2022, http://www.kerncog.org/wp-content/uploads/2018/04/Kern_ATP_Plan.pdf

[45] City of Arvin. (2020). Complete Streets and Safe Routes to School Plan. Accessed on February 24, 2023, https://www.arvin.org/DocumentCenter/View/188/Complete-Streets-and-Safe-Routes-to-School-Plan-PDF

bicycle lane, and other traffic improvements. Completion of these recommended improvements is dependent on securing funding for detailed design and construction.

CEQA Guidelines

Under Senate Bill 743 (SB743), traffic impacts are related to Vehicle Miles Traveled (VMT). The VMT metric became mandatory on July 1, 2020. Senate Bill (SB) 743 requires that relevant CEQA analysis of transportation impacts be conducted using a metric known as vehicle miles traveled (VMT) instead of Level of Service (LOS). VMT measures how much actual automobile travel (additional miles driven) a proposed Project would create on California roads. If the project adds excessive automobile travel onto roads, then the project may cause a significant transportation impact. Therefore, LOS measures of impacts on traffic facilities are no longer a relevant CEQA criteria for transportation impacts.

To implement SB 743, the CEQA Guidelines were amended by adding *Section 15064.3*. According to *Section 15064.3*, VMT measures the automobile travel generated from a proposed project (i.e., the additional miles driven). Here, 'automobile' refers to on-road passenger vehicles such as cars and light-duty trucks. If a proposed project adds excessive automobile travel on California roads thereby exceeding an applicable threshold of significance, then the project may cause a significant transportation impact.

Among its provisions, *Section 15064.3(b)* establishes criteria for analyzing transportation impacts. Specifically, *Section 15064.3(b) (1)* establishes a less than significant presumption for certain land use projects that are proposed within ½-mile of an existing major transit stop or along a high-quality transit corridor. If this presumption does not apply to a land use project, then the VMT can be qualitatively or quantitatively analyzed.

In the case that quantitative models or methods are not available to the lead agency to estimate the VMT for the project being considered, provisions of CEQA Guidelines Section *15064.3(b)(3)* permits the lead agency to conduct a qualitative analysis. The qualitative analysis may evaluate factors including but not limited to the availability of transit, proximity to other destinations, and construction traffic.

Lastly, Section *15064.3(b)(4)* of the CEQA Guidelines states that *"[a] lead agency has discretion to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revision to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section."*

SB 743 Technical Advisory

In April 2018, the Governor's Office of Planning and Research (OPR) issued the Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory) (revised December 2018) to provide technical recommendations regarding VMT, thresholds of significance, and mitigation measures for a variety of land use project types.

The Technical Advisory includes screening thresholds for agencies to use in order to identify when a project should be expected to cause a less-than-significant impact without conducting a detailed study.

- *Screening Thresholds for Small Project.* Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than significant transportation impact. This threshold is based on a CEQA categorical exemption for existing facilities, including additions to existing structures of up to 10,00 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area.
- *Map-Based Screening Threshold for Residential and Office Projects.* Residential and office projects that locate in areas with low VMT, and that incorporate similar features (i.e., density, mix of uses, transit accessibility), will tend to exhibit similarly low VMT. Maps created with VMT data, for example from a travel survey or a travel demand model, can illustrate areas that are currently below threshold VMT. Because new development in such locations would likely result in a similar level of VMT, such maps can be used to screen out residential and office projects from needing to prepare a detailed VMT analysis.
- *Presumption of Less Than Significant Impact Near Transit Thresholds.* Proposed CEQA Guideline Section 15064.3, subdivision (b)(1), states that lead agencies generally should presume that certain projects (including residential, retail, and office projects, as well as projects that are a mix of these uses) proposed within ½ mile of an existing major transit stop20 or an existing stop along a high quality transit corridor will have a less-than-significant impact on VMT. This presumption would not apply, however, if project-specific or location-specific information indicates that the project will still generate significant levels of VMT.
- *Presumption of Less Than Significant Impact for Affordable Residential Development.* Adding affordable housing to infill locations generally improves jobs-housing match, in turn shortening commutes and reducing VMT. Therefore, a project consisting of a high percentage of affordable housing may be a basis for the lead agency to find a less-than-significant impact on VMT.

According to the Technical Advisory, lead agencies, using more location-specific information, may develop their own more specific thresholds, which may include other land use types. To date, the City of Arvin, County of Kern, nor Kern Council of Governments (COG) have estimated specific, quantitative thresholds. Therefore, for the purposes of this Initial Study, a qualitative analysis will be utilized in accordance with CEQA Guidelines Section *15064.3(b)(3)*.

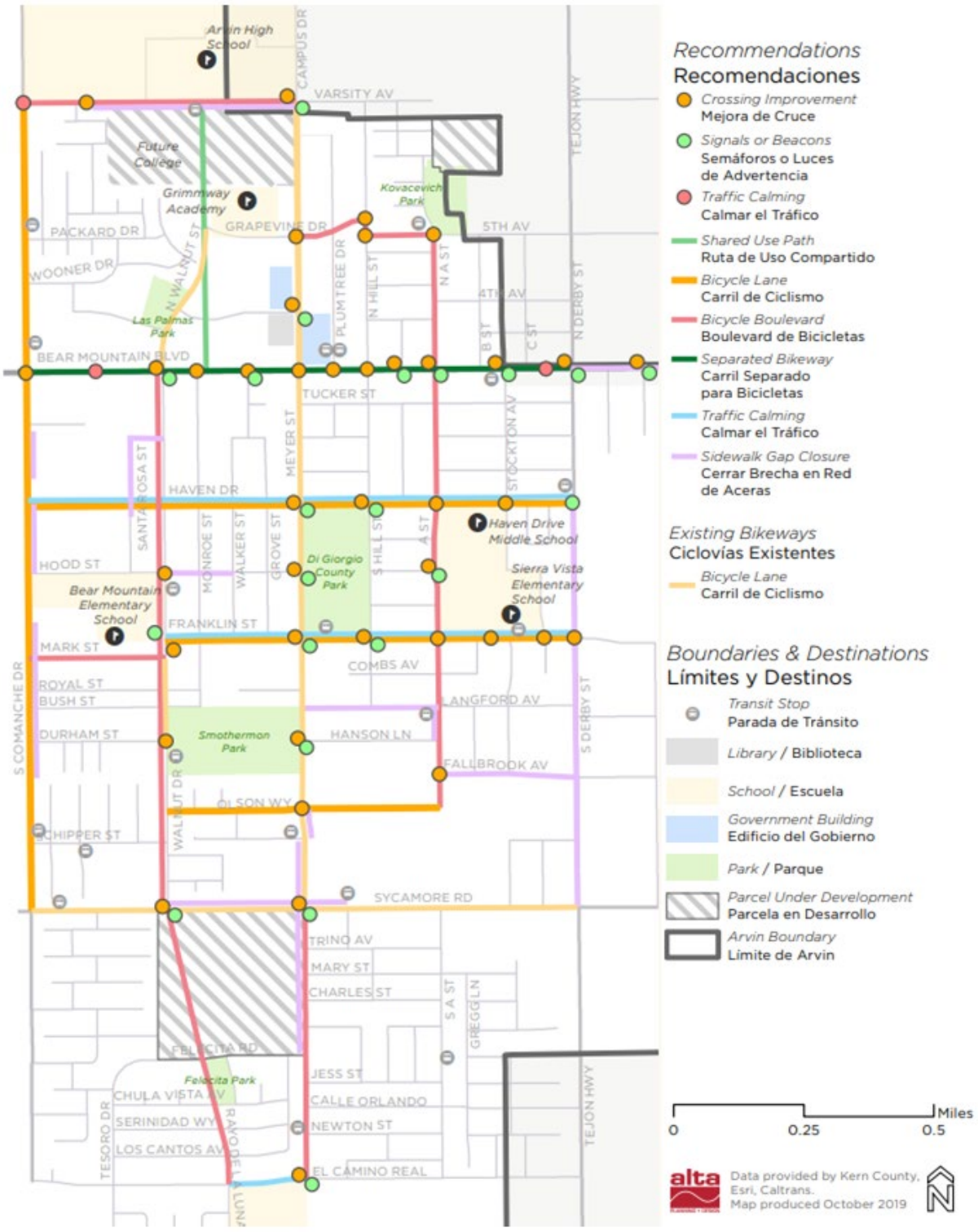

Figure 4-6 Complete Streets and Safe Routs to School Plan Recommendations Map

4.17.2 Impact Assessment

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

Less than Significant with Mitigation Incorporated. Although no development is proposed by the Project, future development of the Project site would be required by the City to comply with all project-level requirements implemented by a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities (See Environmental Setting). Although no development is currently proposed, future development of the Project site would be required to submit improvement plans, including roadway improvements, for review and approval by the City Engineer to ensure improvements will be consistent with City standards.

While the CEQA Guidelines no longer use motorist delay or LOS to measure transportation impacts, if a city has adopted an LOS standard as part of a program, plan, or policy addressing the circulation system, LOS remains relevant with respect to whether or not the project will conflict with that program, plan or policy. If the project may conflict with the program, plan, or policy, mitigation may be imposed to ensure consistency. Here, the City of Arvin has adopted policies relevant to LOS as part of the General Plan, which addresses the circulation system, including an LOS Threshold of D. Per the General Plan Circulation Element Goal 1 Mitigating Policy 3, *"The City shall establish a level of service standard of "D" or better for all roadways and intersections for traffic analysis purposes."*

Thus, the initial study establishes *Mitigation Measure TRANS-1* to revise the threshold for a traffic impact study requirement for future development of the Project site in these areas.

> ***Mitigation Measure TRANS-1:*** *To maintain a peak hour LOS standard of D or better for all intersections and roadway segments, a traffic impact study (TIS) is required for all development projected to generate 100 or more peak hour new vehicle trips within the Project Area (or propose more than 256 units), unless not required by the City Traffic Engineer.*
>
> ***Mitigation Measure TRANS-2:*** *When a proposed residential development consisting of more than 200 units is in close proximity to a school or activity center, is near a transit stop or pedestrian or bicycle route, bicycle and pedestrian facilities such as signalized crossings, traffic signal upgrades, such as left-turn phasing, sidewalks or asphalt paths, and bicycle facilities may be required*.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less than Significant Impact. As stated above (See Environmental Setting), the City of Arvin, Kern County, and Kern COG do not have established VMT thresholds or guidance. Since quantitative models or methods are not available to the City to estimate the VMT for the Project being considered, a qualitative analysis could be conducted pursuant to provisions of CEQA Guidelines *Section 15064.3(b)(3)* for future projects. In particular, the qualitative analysis considers the potential for the Project to result in higher density residential development in infill locations, with the possibility for affordable housing. Overall, the qualitative analysis indicates that future Projects would result in a less than significant VMT impact and is consistent with CEQA Guidelines *Section 15064.3(b)*.

As stated in OPR's technical advisory, adding affordable housing to infill locations generally improves the jobs-housing match, in turn reducing commutes and VMT. In addition, adding affordable housing to infill locations increases the likelihood for low-wage workers to choose a residential location closer to their workplace if available. In turn, locating affordable housing closer to jobs generally results in less VMT than market-rate housing. Therefore, as stated in the technical advisory, a project consisting of a high percentage of affordable housing in infill locations may be a basis for the Lead Agency to find a less-than-significant impact on VMT. Further, as stated in the technical advisory, evidence supports this presumption for a 100 percent affordable residential development, or the residential component of a mixed-use development, in infill locations. Thus, an affordable residential development or residential component of a mixed-use development in an infill location would result in a less than significant impact.

The proposed text amendment is funded by SB 2 for the purpose of providing additional opportunities for housing, in line with the goals contained in the General Plan and Housing Element. The City of Arvin, Lead Agency, considers properties within the project area to have development potential and is proposing this text amendment to help facilitate future higher density residential development in infill locations. Because these sites would be housing developments in infill locations, future development resulting from implementation of the Project would be presumed to have a less than significant impact to VMT.

If a future development does not result in the future development of affordable housing, the proposed land use and zoning designation would still facilitate higher density, residential development in an infill location situated in close proximity to jobs, services, and amenities. Therefore, through facilitating future residential development in infill locations, the Project would improve access to transit, increase access to jobs, services, and amenities, orient future residents toward transit, bicycle, and pedestrian facilities, and improve pedestrian and bicycle networks. In doing so, the Project would shorten trips and reduce VMT, thereby constituting a less than significant impact to VMT.

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

Less than Significant Impact. Although no development is currently proposed, future development of the Project site would be reviewed by the city to ensure that project design does not contain any geometric design features that would create hazards. Future development would also be subject to review by the City Engineer to ensure that improvements are designed pursuant to applicable federal, state, and local design standards. Compliance with such standards would ensure that any traffic hazards are minimized. Further, the Project does not propose an incompatible use as it proposes residential uses are consistent with the existing residential development in the area and is similar in nature to the surrounding uses. As a result, implementation of the Project would result in a less than significant impact related to hazards due to roadway design features or incompatible uses.

d) Result in inadequate emergency access?

Less than Significant Impact. The Project does not involve a change to any emergency response plan. In addition, although no development is currently proposed, future development projects will be reviewed by the city to ensure adequate site access including emergency access. In the case that future construction requires lane closures, access through existing roadways would be maintained through standard traffic

control and therefore, potential lane closures would not affect emergency evacuation plans. Thus, a less than significant impact would occur because of the Project.

4.17.3 Mitigation Measures

The proposed Project shall implement and incorporate, as applicable, the transportation related mitigation measures as identified in the attached Mitigation Monitoring and Reporting Checklist dated May 2023.

4.18 TRIBAL CULTURAL RESOURCES

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

4.18.1 Environmental Setting

See Section 4.5.

4.18.2 Impact Assessment

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

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

Less than Significant with Mitigation Incorporated. Based on the CHRIS Record Search, there are no recorded cultural resources within the Project Area or one-half mile radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, or the California State Historic Landmarks. However, as discussed in Section 4.5, there is some possibility that a non-visible, buried site may exist and may be uncovered during ground disturbing construction activities which could constitute a significant impact. Therefore, the Project shall incorporate *Mitigation Measures CUL-1 and CUL-2* to mitigate potential

subsurface cultural resources. Therefore, if any cultural resources were discovered, implementation of these mitigation measures would reduce the Project's impact to less than significant.

b) *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

Less than Significant with Mitigation Incorporated. Project site has not been determined by the City to be a significant resource pursuant to *PRC Section 5024.1*, and to-date, no substantial information has been provided to the City to indicate otherwise. According to the NAHC SLF, no sacred sites or tribal cultural resources are known in or near the Project site. Further, the Project site inclusive of site features is not listed in the California Register of Historical Sources. However, as discussed in Section 4.5, there is some possibility that a non-visible, buried site may exist and may be uncovered during ground disturbing construction activities which could constitute a significant impact. Therefore, the Project shall incorporate *Mitigation Measures CUL-1 and CUL-2* to mitigate potential subsurface cultural resources. Therefore, if any cultural resources were discovered, implementation of these mitigation measures would reduce the Project's impact to less than significant.

4.18.3 Mitigation Measures

The proposed Project shall implement and incorporate, as applicable, the cultural resources related mitigation measures as identified in the attached Mitigation Monitoring and Reporting Checklist dated May 2023.

4.19 UTILITIES AND SERVICE SYSTEMS

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effect?		X		
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
c)	Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
d)	Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

4.19.1 Environmental Setting

The Project site is within city limits and thus, will be required to connect to water, sewer, stormwater, and wastewater services. Natural gas, electricity, and telecommunications are provided by private companies. Each utility system is described below.

Water

Water supply, usage, and services are described in Section 4.10.

Wastewater

The City of Arvin sanitary sewer system (i.e., wastewater) is overseen by the City and managed by the Veolia North America/Veolia West Operating Services (VWOS). According to the City of Arvin Sewer Master Plan (SMP) (2019 Update), the City's wastewater collection system currently consists of approximately 38 miles of pipeline ranging in diameter from six (6) inches to 18 inches, 763 manholes, and one (1) small pump station serving a small area southeast of the intersection of Sycamore Road and A Street. The wastewater treatment plant (WWTP) is located in the southwest portion of the city on El Camino Real. Most of the treated wastewater is used for irrigation of farmland. The wastewater generated by buildout of the proposed General Plan is estimated at approximately 1.7 million gallons per day (MGPD). The General Plan indicates that the existing system is adequate to meet the needs of its residents and businesses as most of the city has sewer lines that connect to the municipal sewer system. The General Plan further indicates that all future housing developments will be adequately connected to the existing wastewater system using funds collected through development fees currently established by the City. The SSMP outlines the practices, systems, procedures, and data for effective management of the City's wastewater collection system. [46] The City of Arvin was recently issued a Cease-and-Desist directive from the State of California Water Quality Control Board. The WQCB has established an interim program where new projects seeking new sewer connections will be administratively reviewed by the Executive Director. The city staff will work on the creation of and coordination of new development projects that will be submitted for approval by the Executive Director. The capacity to service new development, in the opinion of the City, is adequate to serve the city's growth. Various consultants are completing the appropriate studies and designs and preparation of grant applications that will provide funding for the necessary upgrades to address the temporary cease and desist directive of the WQCB.

Solid Waste

Mountainside Disposal, a private solid waste disposal company, provides solid waste services for the city of Arvin including curbside refuse, green waste, and recycling. Solid waste is collected and transported to the Metropolitan Recycling Corporation facility located at 2601 South Mount Vernon Avenue, Bakersfield, CA 93307. The facility disposes non-recyclable waste at Bakersfield Metropolitan Landfill, or Bena Landfill, located at 2951 Neumarkel Road, Bakersfield, CA 93307 owned and operated by the County of Kern Waste Management Department. According to the General Plan Update IS/MND, the Bena Landfill receives an average of 1,194 tons per day (TPD) of solid waste, compared to the 4,500 TPD maximum permitted disposal. There is currently a remaining capacity of 20.7 million tons (75.9%).

The Arvin General Plan Conservation and Open Space Element contains the following goal and objectives for solid waste collection and disposal.

[46] City of Arvin. (2019). Arvin 2019 Sewer Master Plan. Accessed on August 29, 2022, https://www.arvin.org/DocumentCenter/View/467/Arvin-Sewer-Master-Plan---Volume-1-PDF

Goal 8. *Maintain solid waste collection and disposal services in accordance with California state standards.*

Policy CO-8.1 *Implement diversion programs related to business collection including commercial onsite recycling and commercial onsite green waste pick up.*

Policy CO-8.2 *Promote public education and outreach regarding municipal waste programs, how they work and their benefits.*

Policy CO-8.3 *Continue waste management practices that meet or exceed requirements stipulated by the California Integrated Waste Management Act.*

Specific, enforceable requirements for garbage and solid waste are outlined in AMC *Section 8.08 – Garbage and Solid Waste.*

Stormwater

Stormwater services are described in Section 4.10.

Natural Gas and Electricity

PG&E, the natural gas and electric service provider for the area, incrementally expands and updates its service system as needed to serve its users. PG&E has existing overhead electric distribution facilities currently servicing the Project Area. All overhead utilities on site would be undergrounded.

Telecommunications

Accordingly, telecommunications providers in the area incrementally expand and update their service systems in response to usage and demand. Upon request, future development sites would be connected to existing broadband infrastructure and subject to applicable connection and service fees.

4.19.2 Impact Assessment

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

Less than Significant with Mitigation Incorporated. The Project is within city limits and thus, future development on the Project Area would be required to connect to water, stormwater, solid waste, and wastewater services. Natural gas, electricity, and telecommunications are provided by private companies. In general, the Project is within the city limits and is surrounded by land that is developed with urbanized uses and agricultural uses. Because the surrounding area is largely developed, there is existing offsite utility infrastructure available for the Project Area to tie into, which would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities. In addition, future development resulting from Project implementation is not expected to significantly increase the number of dwelling units in one specific area enough to generate excess wastewater, waste, or stormwater runoff to exceed the capacity of the existing corresponding collection system. Nor will it cause an excess demand for water, natural gas, electricity, or telecommunications.

However, in order to ensure that adequate facilities are provided, for those projects that will be considered ministerial as a result of the proposed municipal code text amendment, the following mitigation measures will be implemented to account for the need for expanded water and sewer pipeline facilities in certain areas.

> ***Mitigation Measure UTL-1****: Any project that results in the existing water system pipelines in the area of the project from not being able to meet maximum day demand plus the project required fire flow of 2500 gallons per minute (gpm) or 3500 gpm, may be required to construct upsized replacement pipelines, per the requirements of the Director or City Engineer, in the project vicinity to increase flow for the maximum day demand plus fire flow condition.*
>
> ***Mitigation Measure UTL-2:*** *Pipelines that are downstream (between the project site and wastewater treatment plant or lift station) from the proposed project shall maintain a sewer flow capacity of 1.15 q/Q ratio. Projects that result in a pipeline exceeding the flow capacity of 1.15q/Q may be required to construct upsized replacement pipelines for those found to be deficient per the requirements of the Director or City Engineer.*

In addition, through the entitlement review process for future development, the city and responsible agencies would review the Project to certify compliance with applicable connection requirements. Compliance would ensure that future development would not cause significant environmental effects related to utilities and service systems. For these reasons, a less than significant impact would occur because of the Project.

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

Less than Significant Impact. As discussed in detail in Section 4.10, the City's long-term water resource planning is addressed in the City's 2020 UWMP. According to the UWMP, the City's per capita water usage is projected to continue to decline through 2040 due to more water efficiency in future construction and passive conservation pursuant to requirements of the GSP (e.g., use of higher efficiency appliances, water efficient landscaping, etc.).

To optimize water supply reliability and resiliency, the city is working with the SOKR GSA to achieve and maintain sustainability of the Kern County Subbasin. Generally, the City's approach is to maximize local supplies and improve the storage of the groundwater basin through recharge, recycled water usage, and conservation.

ACSD is located entirely within Arvin GSA's boundaries and covered by the Arvin-Edison Management Area. The Sustainability goal for the Arvin-Edison Management Area is to maintain an economically viable groundwater resource that supports the current and future beneficial uses of groundwater (including municipal, agricultural, industrial, public supply, domestic, and environmental) by utilizing the area's groundwater resources within the local sustainable yield. Long-term groundwater sustainability was evaluated in the GSP and will be maintained in compliance with locally defined sustainability criteria. The Management Area will remain in compliance through the continued importation of surface water as well as implementation of projects and management actions to both increase water supplies and reduce demands within the Management Area. Historical efforts to achieve a balanced and sustainable water

supply for all lands, including both the Surface Water Service Area and the Groundwater Service Area, in an equitable manner, will continue under SGMA. Based on these efforts, it can be inferred that future development, such as the proposed Project, will not negatively impact the City's ability to provide water assuming adherence to requirements and recommendations from the City's water resources planning efforts. In addition, as previously mentioned, although the proposed project has the potential to increase residential dwelling units within the Project Area, this increase is simply a redistribution of population, as the overall anticipated growth rate described in the Arvin General Plan is not expected to change as a result of the proposed project. Thus, City water usage, overall, will not be substantially impacted by the proposed project.

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

Less than Significant Impact. According to the 2019 Arvin Wastewater Treatment Plant (WWTP) Master Plan, the WWTP is expected to receive sewer flows of approximately 1.7 million gallons per day (MGPD) at buildout of the proposed General Plan. [47] The existing WWTP has adequate capacity to meet the needs of existing and proposed General Plan developments.

The Project includes a General Plan and Zoning Ordinance Text Amendment to increase the density of multi-family residential development in R-3 and R-4 zone districts. Future development resulting from Project implementation is not expected to significantly increase the total sewer generation of the city to exceed the 2.0 MGPD capacity of the WWTP. Therefore, Project implementation would result in a determination by the WWTP that it has adequate capacity to serve the Project's projected demand in addition to its existing commitments. For this reason, a less than significant impact would occur because of the Project.

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

Less than Significant Impact. As previously mentioned, the Bena Landfill currently has a remaining capacity of 20.7 million tons (75.9%). This means that there is more than enough capacity to collect and dispose of any additional solid waste that may be generated by future development resulting from Project implementation. The Project is not likely to significantly increase the number of dwelling units and generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, nor will it otherwise impair the attainment of solid waste reduction goals. For this reason, a less than significant impact would occur because of the Project.

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

Less than Significant Impact. Future development projects that generate solid waste will be required to comply with local management and reduction statutes and regulations to ensure solid waste is handled, transported, and disposed of in accordance with applicable federal, State, and local regulations pertaining

[47] Stantec Consulting Ltd. (2019). Arvin Wastewater Treatment Plant Master Plan – Final Report.

to municipal waste. In addition, the proposed text amendment and general plan amendment would comply with existing statutes and regulations related to solid waste and thus a less than significant impact would result from the proposed project.

4.19.3 Mitigation Measures

The proposed Project shall implement and incorporate, as applicable, the utilities and service systems related mitigation measures as identified in the attached Mitigation Monitoring and Reporting Checklist dated May 2023.

4.20 WILDFIRE

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

4.20.1 Environmental Setting

In general, Arvin is categorized as having little or moderate threat or moderate fire hazard. As the city has developed, wildfire hazards have decreased due to increased impervious surface areas. The city of Arvin, inclusive of the Project site, is not identified by the California Department of Forestry and Fire Protection (Cal Fire) as a Moderate, High, or Very High Fire Hazard Severity Zone (FHSZ). Rather, the city, inclusive of the Project Area, is within an "area of local responsibility" that is an area of low fire risk.[48]

4.20.2 Impact Assessment

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

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

No Impact. To determine adequate vehicular and pedestrian circulation and emergency vehicle access, future development resulting from Project implementation would be reviewed and conditioned by the City

[48] California Department of Forestry and Fire Protection. FHSZ Viewer. Accessed on August 29, 2022, https://egis.fire.ca.gov/FHSZ/.

of Arvin for compliance with applicable code and regulations. Review and approval by the City would ensure that future development does not substantially impair the adopted emergency response plan or emergency evacuation plan. Therefore, the Project would not substantially impair any emergency response plan and no impact would occur as a result of the Project.

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

No Impact. The Project Area is located on a relatively flat property with minimal slope and is not in an area that is subject to strong prevailing winds or other factors that would exacerbate wildfire risks. Further, the Project site is within an "area of local responsibility" and is not identified by Cal Fire to be in a Moderate, High, or Very High FHSZ. In addition, development of the Project Area would reduce wildfire risks due to the increase in pavement area. For these reasons, no impact would occur as a result of this Project.

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

No Impact. The Project Area is located within city limits in areas with existing or planned urban uses. As such, the sites within the Project Area are generally infill sites that are served by existing infrastructure such as roads and utilities. As Project implementation results in future development of these sites, the installation and maintenance of new infrastructure would be reviewed and/or conditioned by the City of Arvin for compliance with applicable standards, specifications, and code. Such infrastructure would be typical for urban uses within urbanized areas and would thereby not exacerbate fire risks or result in temporary or ongoing impacts to the environment. Therefore, no impact would occur as a result of the Project.

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

No Impact. The Project site is located on a relatively flat property with minimal slope and is not subject to downslope, downstream flooding, or landslides. Further, as described above, the Project Area is not located within or near wildlands or within a Very High Fire Hazard Severity Zone. Therefore, the Project would not expose people or structures to significant risks and no impact would occur as a result of the Project.

4.20.3 Mitigation Measures

None required.

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

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

4.21.1 Impact Assessment

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

Less than Significant with Mitigation Incorporated. The analyses of environmental issues contained in this Initial Study indicate that the Project is not expected to have substantial impact on the environment or on any resources identified in the Initial Study. Standard requirements that will be implemented through the entitlement process and the attached mitigation monitoring and reporting program have been incorporated in the project to reduce all potentially significant impacts to less than significant. Therefore, the Project would have a less than significant impact.

b) *Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)*

Less than Significant Impact. CEQA Guidelines *Section 15064(i)* states that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. Due to the nature of the Project and consistency with environmental policies, incremental contributions to impacts are considered less than cumulatively considerable. All Project-related impacts were determined to be less than significant. The Project would not contribute substantially to adverse cumulative conditions, or create any substantial indirect impacts (i.e., increase in population could lead to an increased need for housing, increase in traffic, air pollutants, etc.). As such, Project impacts are not considered to be cumulatively considerable given the insignificance of project induced impacts. The impact is therefore less than significant.

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

Less than Significant Impact. The analyses of environmental issues contained in this Initial Study indicate that the project is not expected to have substantial impact on human beings, either directly or indirectly. Standard requirements and conditions have been incorporated in the project to reduce all potentially significant impacts to less than significant. Therefore, the Project would have a less than significant impact.

5 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Monitoring and Reporting Checklist for City of Arvin Multi-Family Residential Development General Plan Amendment and Development Code Text Amendment MAY 2023				
Mitigation Measures	Timing of Verification	Compliance Verified By	Verification of Completion	
			Date	Initials
Air Quality				
Mitigation Measure AIR-1: *Future development projects that qualify for ministerial approval and exceed 225 residential units (the SJVAPCD's Small Project Analysis Levels (SPAL) threshold exemption for Mid Rise Apartments) or current SPAL thresholds, must prepare a technical assessment in consultation with the District. If the project exceeds significance thresholds, a VERA or on-site design/project changes are required to bring the project under thresholds.*	The Planning Division to review specifications to ensure inclusion of provisions in project-specific mitigation measure.	Planning Division		
Cultural Resources				
Mitigation Measure CUL-1: *In order to avoid the potential for impacts to historic and prehistoric archaeological resources, the following measures shall be implemented, as necessary, in conjunction with the construction of each phase of the Project:* *a. Cultural Resources Alert on Project Plans. The project proponent shall note on any plans that require ground disturbing excavation that there is a potential for exposing buried cultural resources.* *b. Stop Work Near any Discovered Cultural Resources. The project proponent shall retain a professional archaeologist on an "on-call" basis during ground disturbing construction for the project to review, identify and evaluate cultural resources that may be inadvertently exposed during construction. Should previously unidentified cultural resources be discovered during construction of the project, the project proponent shall cease work within 100 feet of the resources, and City of Arvin shall be notified immediately. The archaeologist shall review and evaluate any discoveries to determine if they are historical resource(s) and/or unique archaeological resources under CEQA.*	The Planning Division to review specifications to ensure inclusion of provisions in project-specific mitigation measure. Planning Division also to review construction specifications to ensure inclusion of provisions included in mitigation measure. Following discovery of previously unknown resource, a qualified historical resources specialist shall prepare recommendations and	Planning Division		

c. Mitigation for Discovered Cultural Resources. If the professional archaeologist determines that any cultural resources exposed during construction constitute a historical resource and/or unique archaeological resource, he/she shall notify the project proponent and other appropriate parties of the evaluation and recommended mitigation measures to mitigate the impact to a less-than-significant level. Mitigation measures may include avoidance, preservation in-place, recordation, additional archaeological testing and data recovery, among other options. Treatment of any significant cultural resources shall be undertaken with the approval of the City of Arvin. The archaeologist shall document the resources using DPR 523 forms and file said forms with the California Historical Resources Information System, Southern San Joaquin Valley Information Center. The resources shall be photo documented and collected by the archaeologist for submittal to the City of Arvin. The archaeologist shall be required to submit to the City of Arvin for review and approval a report of the findings and method of curation or protection of the resources. Further grading or site work within the area of discovery shall not be allowed until the preceding steps have been taken. *d. Disposition of Cultural Resources. Upon coordination with the City of Arvin, any pre-historic archaeological artifacts recovered shall be donated to an appropriate Tribal custodian or a qualified scientific institution where they would be afforded applicable cultural resources laws and guidelines.*	submit to the Planning Division. Timing for recommendations shall be established by project-specific mitigation measure.			
Mitigation Measure CUL-2: *In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to Health and Safety Code (HSC) Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98(a). If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage Commission (NAHC). The NAHC shall then contact the most likely descendent of the deceased Native American, who shall then serve as the consultant on how to proceed with*	The Planning Division to review specifications to ensure inclusion of provisions in project-specific mitigation measure.	Planning Division		

the remains. Pursuant to PRC Section 5097.98(b), upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.				
Hazards and Hazardous Material				
Mitigation Measure HAZ-1: *For all projects proposing fill material from a site containing or formerly containing an undesirable use, as identified in the California Department of Toxic Substances Control's 2001 Information Advisory Clean Imported Materials, proper soil testing shall be conducted to ensure soil is free of contamination.*	Prior to issuance of grading permit.	Planning Division		
Noise				
Mitigation Measure NOI-1: *Prior to ground disturbing activities, the City of Arvin shall ensure the following with the Project proponent:* • *Construction equipment, fixed of mobile, shall be outfitted with properly operating and maintained mufflers.* • *Construction noise reduction methods such as shutting off idling equipment, installing temporary acoustic barriers around stationary construction noise sources, maximizing the distance between construction equipment staging areas and occupied residential areas, and using electric air compressors and similar power tools rather than diesel equipment shall be used.* • *During construction, stationary construction equipment shall be located so that emitted noise is directed away from or shielded from sensitive noise receivers.* • *During construction, stockpiling and vehicle staging areas shall be located as far as practical from noise-sensitive receptors.*	Prior to issuance of any grading or construction permits, the Planning Division shall ensure that project construction specifications.	Planning Division		

Mitigation Measure NOI-2: *The use of heavy construction equipment within 25 feet of existing structures shall be prohibited.*	Prior to issuance of any grading or construction permits, the Planning Division shall ensure that project construction specifications.	Planning Division		
Transportation				
Mitigation Measure TRANS-1*: To maintain a peak hour LOS standard of D or better for all intersections and roadway segments, a traffic impact study (TIS) is required for all development projected to generate 100 or more peak hour new vehicle trips within the Project Area (or proposed more than 256 units), unless not required by the City Traffic Engineer.*	To be completed prior to approval of entitlements.	Planning Division		
Mitigation Measure TRANS-2: *When a proposed residential development consisting of more than 200 units is in close proximity to a school or activity center, is near a transit stop or pedestrian or bicycle route, bicycle and pedestrian facilities such as signalized crossings, traffic signal upgrades, such as left-turn phasing, sidewalks or asphalt paths, and bicycle facilities may be required.*	Prior to issuance of any grading or construction permits, the Planning Division shall ensure that project construction specifications.	Planning Division		
Utilities and Service Systems				
Mitigation Measure UTL-1: *Any project that results in the existing water system pipelines in the area of the project from not being able to meet maximum day demand plus the project required fire flow of 2500 gallons per minute (gpm) or 3500 gpm, may be required to construct upsized replacement pipelines, per the requirements of the Director or City Engineer, in the project vicinity to increase flow for the maximum day demand plus fire flow condition.*	Prior to issuance of any grading or construction permits, the Planning Division shall ensure that project construction specifications.	Planning Division		
Mitigation Measure UTL-2: *Pipelines that are downstream (between the project site and wastewater treatment plant or lift station) from the proposed project shall maintain a sewer flow capacity of 1.15 q/Q ratio. Projects that result in a pipeline exceeding the flow capacity of 1.15q/Q may be required to construct upsized replacement pipelines for those found to be deficient per the requirements of the Director or City Engineer.*	Prior to issuance of any grading or construction permits, the Planning Division shall ensure that project construction specifications.	Planning Division		
Tribal Cultural Resources				
See Cultural Resources				

6 REPORT PREPARATION

Names of Persons Who Prepared or Participated in the Initial Study:

Lead Agency		
Lead Agency	City of Arvin, Community Development Department 200 Campus Drive, P.O. Box 548 Arvin, CA 93203	
Initial Study Consultant		
Initial Study	Precision Civil Engineering, Inc. 1234 O Street Fresno, CA 93721 (559) 449-4500	Bonique Emerson, AICP, VP of Planning Jenna Chilingerian, Senior Associate Planner Shin Tu, Associate Planner

7 APPENDICIES

7.1 Appendix A: CalEEMod Output Files

Prepared by Precision Civil Engineering dated April 20, 2023.

City of Arvin Multi-Family Residential Development Text Amendment - San Joaquin Valley Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

City of Arvin Multi-Family Residential Development Text Amendment

San Joaquin Valley Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	246.00	Dwelling Unit	44.30	246,000.00	704

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	7			**Operational Year**	2027
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - The vacant sites of R-3 and R-4 totals 44.3 acres.

Construction Phase - The sites are vacant.

Architectural Coating -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	50.00	0.00
tblConstructionPhase	PhaseEndDate	3/8/2024	12/31/2023
tblLandUse	LotAcreage	6.47	44.30
tblWoodstoves	NumberCatalytic	44.30	0.00
tblWoodstoves	NumberNoncatalytic	44.30	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.2712	2.4220	2.4393	5.3200e-003	0.7331	0.1022	0.8352	0.3135	0.0947	0.4082	0.0000	471.3407	471.3407	0.1137	5.7800e-003	475.9059
2025	0.2440	1.8149	2.6361	5.6800e-003	0.2072	0.0707	0.2779	0.0556	0.0665	0.1221	0.0000	508.2813	508.2813	0.0752	0.0132	514.0943
2026	0.2397	1.8102	2.6057	5.6300e-003	0.2072	0.0707	0.2778	0.0556	0.0665	0.1221	0.0000	503.8618	503.8618	0.0748	0.0128	509.5408
2027	2.4423	1.0374	1.5730	3.1600e-003	0.0991	0.0430	0.1421	0.0266	0.0403	0.0669	0.0000	282.6099	282.6099	0.0501	5.4700e-003	285.4900
Maximum	**2.4423**	**2.4220**	**2.6361**	**5.6800e-003**	**0.7331**	**0.1022**	**0.8352**	**0.3135**	**0.0947**	**0.4082**	**0.0000**	**508.2813**	**508.2813**	**0.1137**	**0.0132**	**514.0943**

City of Arvin Multi-Family Residential Development Text Amendment - San Joaquin Valley Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.2712	2.4220	2.4393	5.3200e-003	0.7331	0.1022	0.8352	0.3135	0.0947	0.4082	0.0000	471.3403	471.3403	0.1137	5.7800e-003	475.9054
2025	0.2440	1.8149	2.6361	5.6800e-003	0.2072	0.0707	0.2779	0.0556	0.0665	0.1221	0.0000	508.2810	508.2810	0.0752	0.0132	514.0939
2026	0.2397	1.8102	2.6057	5.6300e-003	0.2072	0.0707	0.2778	0.0556	0.0665	0.1221	0.0000	503.8615	503.8615	0.0748	0.0128	509.5404
2027	2.4423	1.0374	1.5730	3.1600e-003	0.0991	0.0430	0.1421	0.0266	0.0403	0.0669	0.0000	282.6097	282.6097	0.0501	5.4700e-003	285.4898
Maximum	**2.4423**	**2.4220**	**2.6361**	**5.6800e-003**	**0.7331**	**0.1022**	**0.8352**	**0.3135**	**0.0947**	**0.4082**	**0.0000**	**508.2810**	**508.2810**	**0.1137**	**0.0132**	**514.0939**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2024**	**3-31-2024**	0.2458	0.2458
2	**4-1-2024**	**6-30-2024**	1.1210	1.1210
3	**7-1-2024**	**9-30-2024**	0.7777	0.7777
4	**10-1-2024**	**12-31-2024**	0.5589	0.5589
5	**1-1-2025**	**3-31-2025**	0.5094	0.5094
6	**4-1-2025**	**6-30-2025**	0.5129	0.5129
7	**7-1-2025**	**9-30-2025**	0.5185	0.5185
8	**10-1-2025**	**12-31-2025**	0.5207	0.5207

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

9	**1-1-2026**	**3-31-2026**	0.5071	0.5071
10	**4-1-2026**	**6-30-2026**	0.5105	0.5105
11	**7-1-2026**	**9-30-2026**	0.5161	0.5161
12	**10-1-2026**	**12-31-2026**	0.5184	0.5184
13	**1-1-2027**	**3-31-2027**	0.5050	0.5050
14	**4-1-2027**	**6-30-2027**	0.4519	0.4519
15	**7-1-2027**	**9-30-2027**	1.4248	1.4248
		Highest	1.4248	1.4248

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2572	0.1130	1.8640	6.8000e-004		0.0176	0.0176		0.0176	0.0176	0.0000	109.5527	109.5527	4.9000e-003	1.9500e-003	110.2574
Energy	0.0200	0.1713	0.0729	1.0900e-003		0.0139	0.0139		0.0139	0.0139	0.0000	288.6967	288.6967	0.0184	5.4100e-003	290.7688
Mobile	0.5554	0.9857	5.2717	0.0131	1.3827	0.0115	1.3942	0.3699	0.0108	0.3807	0.0000	1,255.7442	1,255.7442	0.0611	0.0676	1,277.4260
Waste						0.0000	0.0000		0.0000	0.0000	22.9705	0.0000	22.9705	1.3575	0.0000	56.9083
Water						0.0000	0.0000		0.0000	0.0000	5.0849	11.2965	16.3814	0.5241	0.0126	33.2247
Total	**1.8327**	**1.2700**	**7.2086**	**0.0149**	**1.3827**	**0.0429**	**1.4256**	**0.3699**	**0.0422**	**0.4122**	**28.0554**	**1,665.2901**	**1,693.3455**	**1.9661**	**0.0875**	**1,768.5853**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2572	0.1130	1.8640	6.8000e-004		0.0176	0.0176		0.0176	0.0176	0.0000	109.5527	109.5527	4.9000e-003	1.9500e-003	110.2574
Energy	0.0200	0.1713	0.0729	1.0900e-003		0.0139	0.0139		0.0139	0.0139	0.0000	288.6967	288.6967	0.0184	5.4100e-003	290.7688
Mobile	0.5554	0.9857	5.2717	0.0131	1.3827	0.0115	1.3942	0.3699	0.0108	0.3807	0.0000	1,255.7442	1,255.7442	0.0611	0.0676	1,277.4260
Waste						0.0000	0.0000		0.0000	0.0000	22.9705	0.0000	22.9705	1.3575	0.0000	56.9083
Water						0.0000	0.0000		0.0000	0.0000	5.0849	11.2965	16.3814	0.5241	0.0126	33.2247
Total	**1.8327**	**1.2700**	**7.2086**	**0.0149**	**1.3827**	**0.0429**	**1.4256**	**0.3699**	**0.0422**	**0.4122**	**28.0554**	**1,665.2901**	**1,693.3455**	**1.9661**	**0.0875**	**1,768.5853**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2024	12/31/2023	5	0	
2	Site Preparation	Site Preparation	3/9/2024	4/19/2024	5	30	
3	Grading	Grading	4/20/2024	8/2/2024	5	75	

4	Building Construction	Building Construction	8/3/2024	6/4/2027	5	740	
5	Paving	Paving	6/5/2027	8/20/2027	5	55	
6	Architectural Coating	Architectural Coating	8/21/2027	11/5/2027	5	55	

Acres of Grading (Site Preparation Phase): 45

Acres of Grading (Grading Phase): 225

Acres of Paving: 0

Residential Indoor: 498,150; Residential Outdoor: 166,050; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	7.00	231	0.29
Demolition	Excavators	3	8.00	158	0.38
Grading	Excavators	2	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37

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Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	177.00	26.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	35.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.3 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2949	0.0000	0.2949	0.1515	0.0000	0.1515	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0399	0.4076	0.2750	5.7000e-004		0.0184	0.0184		0.0170	0.0170	0.0000	50.1856	50.1856	0.0162	0.0000	50.5914
Total	**0.0399**	**0.4076**	**0.2750**	**5.7000e-004**	**0.2949**	**0.0184**	**0.3133**	**0.1515**	**0.0170**	**0.1685**	**0.0000**	**50.1856**	**50.1856**	**0.0162**	**0.0000**	**50.5914**

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3.3 Site Preparation - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.8000e-004	5.0000e-004	6.2100e-003	2.0000e-005	2.1600e-003	1.0000e-005	2.1700e-003	5.7000e-004	1.0000e-005	5.8000e-004	0.0000	1.7042	1.7042	5.0000e-005	5.0000e-005	1.7194
Total	**7.8000e-004**	**5.0000e-004**	**6.2100e-003**	**2.0000e-005**	**2.1600e-003**	**1.0000e-005**	**2.1700e-003**	**5.7000e-004**	**1.0000e-005**	**5.8000e-004**	**0.0000**	**1.7042**	**1.7042**	**5.0000e-005**	**5.0000e-005**	**1.7194**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2949	0.0000	0.2949	0.1515	0.0000	0.1515	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0399	0.4076	0.2750	5.7000e-004		0.0184	0.0184		0.0170	0.0170	0.0000	50.1855	50.1855	0.0162	0.0000	50.5913
Total	**0.0399**	**0.4076**	**0.2750**	**5.7000e-004**	**0.2949**	**0.0184**	**0.3133**	**0.1515**	**0.0170**	**0.1685**	**0.0000**	**50.1855**	**50.1855**	**0.0162**	**0.0000**	**50.5913**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.8000e-004	5.0000e-004	6.2100e-003	2.0000e-005	2.1600e-003	1.0000e-005	2.1700e-003	5.7000e-004	1.0000e-005	5.8000e-004	0.0000	1.7042	1.7042	5.0000e-005	5.0000e-005	1.7194
Total	**7.8000e-004**	**5.0000e-004**	**6.2100e-003**	**2.0000e-005**	**2.1600e-003**	**1.0000e-005**	**2.1700e-003**	**5.7000e-004**	**1.0000e-005**	**5.8000e-004**	**0.0000**	**1.7042**	**1.7042**	**5.0000e-005**	**5.0000e-005**	**1.7194**

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3451	0.0000	0.3451	0.1370	0.0000	0.1370	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1207	1.2141	1.0396	2.3300e-003		0.0501	0.0501		0.0461	0.0461	0.0000	204.4482	204.4482	0.0661	0.0000	206.1013
Total	**0.1207**	**1.2141**	**1.0396**	**2.3300e-003**	**0.3451**	**0.0501**	**0.3952**	**0.1370**	**0.0461**	**0.1831**	**0.0000**	**204.4482**	**204.4482**	**0.0661**	**0.0000**	**206.1013**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1700e-003	1.3900e-003	0.0173	5.0000e-005	6.0000e-003	3.0000e-005	6.0300e-003	1.5900e-003	3.0000e-005	1.6200e-003	0.0000	4.7338	4.7338	1.4000e-004	1.3000e-004	4.7761
Total	**2.1700e-003**	**1.3900e-003**	**0.0173**	**5.0000e-005**	**6.0000e-003**	**3.0000e-005**	**6.0300e-003**	**1.5900e-003**	**3.0000e-005**	**1.6200e-003**	**0.0000**	**4.7338**	**4.7338**	**1.4000e-004**	**1.3000e-004**	**4.7761**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3451	0.0000	0.3451	0.1370	0.0000	0.1370	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1207	1.2141	1.0396	2.3300e-003		0.0501	0.0501		0.0461	0.0461	0.0000	204.4480	204.4480	0.0661	0.0000	206.1010
Total	**0.1207**	**1.2141**	**1.0396**	**2.3300e-003**	**0.3451**	**0.0501**	**0.3952**	**0.1370**	**0.0461**	**0.1831**	**0.0000**	**204.4480**	**204.4480**	**0.0661**	**0.0000**	**206.1010**

3.4 Grading - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1700e-003	1.3900e-003	0.0173	5.0000e-005	6.0000e-003	3.0000e-005	6.0300e-003	1.5900e-003	3.0000e-005	1.6200e-003	0.0000	4.7338	4.7338	1.4000e-004	1.3000e-004	4.7761
Total	**2.1700e-003**	**1.3900e-003**	**0.0173**	**5.0000e-005**	**6.0000e-003**	**3.0000e-005**	**6.0300e-003**	**1.5900e-003**	**3.0000e-005**	**1.6200e-003**	**0.0000**	**4.7338**	**4.7338**	**1.4000e-004**	**1.3000e-004**	**4.7761**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0787	0.7192	0.8649	1.4400e-003		0.0328	0.0328		0.0309	0.0309	0.0000	124.0393	124.0393	0.0293	0.0000	124.7726
Total	**0.0787**	**0.7192**	**0.8649**	**1.4400e-003**		**0.0328**	**0.0328**		**0.0309**	**0.0309**	**0.0000**	**124.0393**	**124.0393**	**0.0293**	**0.0000**	**124.7726**

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3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4900e-003	0.0615	0.0184	2.8000e-004	9.2200e-003	4.0000e-004	9.6200e-003	2.6600e-003	3.8000e-004	3.0500e-003	0.0000	26.4607	26.4607	1.1000e-004	3.9600e-003	27.6426
Worker	0.0274	0.0176	0.2179	6.4000e-004	0.0757	3.8000e-004	0.0761	0.0201	3.5000e-004	0.0205	0.0000	59.7690	59.7690	1.7200e-003	1.6500e-003	60.3026
Total	**0.0289**	**0.0791**	**0.2362**	**9.2000e-004**	**0.0849**	**7.8000e-004**	**0.0857**	**0.0228**	**7.3000e-004**	**0.0235**	**0.0000**	**86.2297**	**86.2297**	**1.8300e-003**	**5.6100e-003**	**87.9452**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0787	0.7192	0.8649	1.4400e-003		0.0328	0.0328		0.0309	0.0309	0.0000	124.0391	124.0391	0.0293	0.0000	124.7724
Total	**0.0787**	**0.7192**	**0.8649**	**1.4400e-003**		**0.0328**	**0.0328**		**0.0309**	**0.0309**	**0.0000**	**124.0391**	**124.0391**	**0.0293**	**0.0000**	**124.7724**

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3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4900e-003	0.0615	0.0184	2.8000e-004	9.2200e-003	4.0000e-004	9.6200e-003	2.6600e-003	3.8000e-004	3.0500e-003	0.0000	26.4607	26.4607	1.1000e-004	3.9600e-003	27.6426
Worker	0.0274	0.0176	0.2179	6.4000e-004	0.0757	3.8000e-004	0.0761	0.0201	3.5000e-004	0.0205	0.0000	59.7690	59.7690	1.7200e-003	1.6500e-003	60.3026
Total	**0.0289**	**0.0791**	**0.2362**	**9.2000e-004**	**0.0849**	**7.8000e-004**	**0.0857**	**0.0228**	**7.3000e-004**	**0.0235**	**0.0000**	**86.2297**	**86.2297**	**1.8300e-003**	**5.6100e-003**	**87.9452**

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total	**0.1785**	**1.6273**	**2.0991**	**3.5200e-003**		**0.0689**	**0.0689**		**0.0648**	**0.0648**	**0.0000**	**302.6549**	**302.6549**	**0.0711**	**0.0000**	**304.4335**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5600e-003	0.1496	0.0439	6.6000e-004	0.0225	9.8000e-004	0.0235	6.5000e-003	9.3000e-004	7.4400e-003	0.0000	63.3692	63.3692	2.6000e-004	9.4700e-003	66.1972
Worker	0.0620	0.0381	0.4932	1.5100e-003	0.1847	8.8000e-004	0.1856	0.0491	8.1000e-004	0.0499	0.0000	142.2572	142.2572	3.7700e-003	3.7300e-003	143.4636
Total	**0.0655**	**0.1876**	**0.5370**	**2.1700e-003**	**0.2072**	**1.8600e-003**	**0.2090**	**0.0556**	**1.7400e-003**	**0.0573**	**0.0000**	**205.6265**	**205.6265**	**4.0300e-003**	**0.0132**	**209.6608**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	**0.1784**	**1.6273**	**2.0991**	**3.5200e-003**		**0.0689**	**0.0689**		**0.0648**	**0.0648**	**0.0000**	**302.6545**	**302.6545**	**0.0711**	**0.0000**	**304.4331**

3.5 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5600e-003	0.1496	0.0439	6.6000e-004	0.0225	9.8000e-004	0.0235	6.5000e-003	9.3000e-004	7.4400e-003	0.0000	63.3692	63.3692	2.6000e-004	9.4700e-003	66.1972
Worker	0.0620	0.0381	0.4932	1.5100e-003	0.1847	8.8000e-004	0.1856	0.0491	8.1000e-004	0.0499	0.0000	142.2572	142.2572	3.7700e-003	3.7300e-003	143.4636
Total	**0.0655**	**0.1876**	**0.5370**	**2.1700e-003**	**0.2072**	**1.8600e-003**	**0.2090**	**0.0556**	**1.7400e-003**	**0.0573**	**0.0000**	**205.6265**	**205.6265**	**4.0300e-003**	**0.0132**	**209.6608**

3.5 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total	**0.1785**	**1.6273**	**2.0991**	**3.5200e-003**		**0.0689**	**0.0689**		**0.0648**	**0.0648**	**0.0000**	**302.6549**	**302.6549**	**0.0711**	**0.0000**	**304.4335**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.4800e-003	0.1488	0.0431	6.5000e-004	0.0225	9.7000e-004	0.0235	6.5000e-003	9.3000e-004	7.4300e-003	0.0000	62.1781	62.1781	2.5000e-004	9.2800e-003	64.9502
Worker	0.0578	0.0342	0.4635	1.4600e-003	0.1847	8.4000e-004	0.1855	0.0491	7.8000e-004	0.0499	0.0000	139.0289	139.0289	3.4200e-003	3.5000e-003	140.1571
Total	**0.0612**	**0.1829**	**0.5067**	**2.1100e-003**	**0.2072**	**1.8100e-003**	**0.2090**	**0.0556**	**1.7100e-003**	**0.0573**	**0.0000**	**201.2069**	**201.2069**	**3.6700e-003**	**0.0128**	**205.1073**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	**0.1784**	**1.6273**	**2.0991**	**3.5200e-003**		**0.0689**	**0.0689**		**0.0648**	**0.0648**	**0.0000**	**302.6545**	**302.6545**	**0.0711**	**0.0000**	**304.4331**

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3.5 Building Construction - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.4800e-003	0.1488	0.0431	6.5000e-004	0.0225	9.7000e-004	0.0235	6.5000e-003	9.3000e-004	7.4300e-003	0.0000	62.1781	62.1781	2.5000e-004	9.2800e-003	64.9502
Worker	0.0578	0.0342	0.4635	1.4600e-003	0.1847	8.4000e-004	0.1855	0.0491	7.8000e-004	0.0499	0.0000	139.0289	139.0289	3.4200e-003	3.5000e-003	140.1571
Total	**0.0612**	**0.1829**	**0.5067**	**2.1100e-003**	**0.2072**	**1.8100e-003**	**0.2090**	**0.0556**	**1.7100e-003**	**0.0573**	**0.0000**	**201.2069**	**201.2069**	**3.6700e-003**	**0.0128**	**205.1073**

3.5 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0759	0.6921	0.8927	1.5000e-003		0.0293	0.0293		0.0275	0.0275	0.0000	128.7153	128.7153	0.0303	0.0000	129.4717
Total	**0.0759**	**0.6921**	**0.8927**	**1.5000e-003**		**0.0293**	**0.0293**		**0.0275**	**0.0275**	**0.0000**	**128.7153**	**128.7153**	**0.0303**	**0.0000**	**129.4717**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4500e-003	0.0629	0.0181	2.7000e-004	9.5700e-003	4.1000e-004	9.9800e-003	2.7600e-003	3.9000e-004	3.1600e-003	0.0000	25.9024	25.9024	1.0000e-004	3.8600e-003	27.0562
Worker	0.0230	0.0132	0.1856	6.0000e-004	0.0785	3.4000e-004	0.0789	0.0209	3.1000e-004	0.0212	0.0000	57.8242	57.8242	1.3200e-003	1.4100e-003	58.2761
Total	**0.0244**	**0.0760**	**0.2037**	**8.7000e-004**	**0.0881**	**7.5000e-004**	**0.0889**	**0.0236**	**7.0000e-004**	**0.0244**	**0.0000**	**83.7266**	**83.7266**	**1.4200e-003**	**5.2700e-003**	**85.3323**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0759	0.6921	0.8927	1.5000e-003		0.0293	0.0293		0.0275	0.0275	0.0000	128.7151	128.7151	0.0303	0.0000	129.4716
Total	**0.0759**	**0.6921**	**0.8927**	**1.5000e-003**		**0.0293**	**0.0293**		**0.0275**	**0.0275**	**0.0000**	**128.7151**	**128.7151**	**0.0303**	**0.0000**	**129.4716**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4500e-003	0.0629	0.0181	2.7000e-004	9.5700e-003	4.1000e-004	9.9800e-003	2.7600e-003	3.9000e-004	3.1600e-003	0.0000	25.9024	25.9024	1.0000e-004	3.8600e-003	27.0562
Worker	0.0230	0.0132	0.1856	6.0000e-004	0.0785	3.4000e-004	0.0789	0.0209	3.1000e-004	0.0212	0.0000	57.8242	57.8242	1.3200e-003	1.4100e-003	58.2761
Total	**0.0244**	**0.0760**	**0.2037**	**8.7000e-004**	**0.0881**	**7.5000e-004**	**0.0889**	**0.0236**	**7.0000e-004**	**0.0244**	**0.0000**	**83.7266**	**83.7266**	**1.4200e-003**	**5.2700e-003**	**85.3323**

3.6 Paving - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0252	0.2360	0.4009	6.3000e-004		0.0115	0.0115		0.0106	0.0106	0.0000	55.0530	55.0530	0.0178	0.0000	55.4981
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0252**	**0.2360**	**0.4009**	**6.3000e-004**		**0.0115**	**0.0115**		**0.0106**	**0.0106**	**0.0000**	**55.0530**	**55.0530**	**0.0178**	**0.0000**	**55.4981**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.6000e-004	5.5000e-004	7.7900e-003	3.0000e-005	3.3000e-003	1.0000e-005	3.3100e-003	8.8000e-004	1.0000e-005	8.9000e-004	0.0000	2.4281	2.4281	6.0000e-005	6.0000e-005	2.4471
Total	**9.6000e-004**	**5.5000e-004**	**7.7900e-003**	**3.0000e-005**	**3.3000e-003**	**1.0000e-005**	**3.3100e-003**	**8.8000e-004**	**1.0000e-005**	**8.9000e-004**	**0.0000**	**2.4281**	**2.4281**	**6.0000e-005**	**6.0000e-005**	**2.4471**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0252	0.2360	0.4009	6.3000e-004		0.0115	0.0115		0.0106	0.0106	0.0000	55.0529	55.0529	0.0178	0.0000	55.4980
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0252**	**0.2360**	**0.4009**	**6.3000e-004**		**0.0115**	**0.0115**		**0.0106**	**0.0106**	**0.0000**	**55.0529**	**55.0529**	**0.0178**	**0.0000**	**55.4980**

3.6 Paving - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.6000e-004	5.5000e-004	7.7900e-003	3.0000e-005	3.3000e-003	1.0000e-005	3.3100e-003	8.8000e-004	1.0000e-005	8.9000e-004	0.0000	2.4281	2.4281	6.0000e-005	6.0000e-005	2.4471
Total	**9.6000e-004**	**5.5000e-004**	**7.7900e-003**	**3.0000e-005**	**3.3000e-003**	**1.0000e-005**	**3.3100e-003**	**8.8000e-004**	**1.0000e-005**	**8.9000e-004**	**0.0000**	**2.4281**	**2.4281**	**6.0000e-005**	**6.0000e-005**	**2.4471**

3.7 Architectural Coating - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.3089					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.7000e-003	0.0315	0.0498	8.0000e-005		1.4200e-003	1.4200e-003		1.4200e-003	1.4200e-003	0.0000	7.0215	7.0215	3.8000e-004	0.0000	7.0310
Total	**2.3136**	**0.0315**	**0.0498**	**8.0000e-005**		**1.4200e-003**	**1.4200e-003**		**1.4200e-003**	**1.4200e-003**	**0.0000**	**7.0215**	**7.0215**	**3.8000e-004**	**0.0000**	**7.0310**

3.7 Architectural Coating - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2500e-003	1.2900e-003	0.0182	6.0000e-005	7.6900e-003	3.0000e-005	7.7300e-003	2.0500e-003	3.0000e-005	2.0800e-003	0.0000	5.6656	5.6656	1.3000e-004	1.4000e-004	5.7099
Total	**2.2500e-003**	**1.2900e-003**	**0.0182**	**6.0000e-005**	**7.6900e-003**	**3.0000e-005**	**7.7300e-003**	**2.0500e-003**	**3.0000e-005**	**2.0800e-003**	**0.0000**	**5.6656**	**5.6656**	**1.3000e-004**	**1.4000e-004**	**5.7099**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.3089					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.7000e-003	0.0315	0.0498	8.0000e-005		1.4200e-003	1.4200e-003		1.4200e-003	1.4200e-003	0.0000	7.0214	7.0214	3.8000e-004	0.0000	7.0310
Total	**2.3136**	**0.0315**	**0.0498**	**8.0000e-005**		**1.4200e-003**	**1.4200e-003**		**1.4200e-003**	**1.4200e-003**	**0.0000**	**7.0214**	**7.0214**	**3.8000e-004**	**0.0000**	**7.0310**

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3.7 Architectural Coating - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2500e-003	1.2900e-003	0.0182	6.0000e-005	7.6900e-003	3.0000e-005	7.7300e-003	2.0500e-003	3.0000e-005	2.0800e-003	0.0000	5.6656	5.6656	1.3000e-004	1.4000e-004	5.7099
Total	**2.2500e-003**	**1.2900e-003**	**0.0182**	**6.0000e-005**	**7.6900e-003**	**3.0000e-005**	**7.7300e-003**	**2.0500e-003**	**3.0000e-005**	**2.0800e-003**	**0.0000**	**5.6656**	**5.6656**	**1.3000e-004**	**1.4000e-004**	**5.7099**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5554	0.9857	5.2717	0.0131	1.3827	0.0115	1.3942	0.3699	0.0108	0.3807	0.0000	1,255.7442	1,255.7442	0.0611	0.0676	1,277.4260
Unmitigated	0.5554	0.9857	5.2717	0.0131	1.3827	0.0115	1.3942	0.3699	0.0108	0.3807	0.0000	1,255.7442	1,255.7442	0.0611	0.0676	1,277.4260

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,338.24	1,207.86	1006.14	3,686,520	3,686,520
Total	1,338.24	1,207.86	1,006.14	3,686,520	3,686,520

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	45.60	19.00	35.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.527584	0.052861	0.171901	0.146917	0.025722	0.006994	0.013595	0.026310	0.000640	0.000310	0.022677	0.001379	0.003111

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	90.3528	90.3528	0.0146	1.7700e-003	91.2463
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	90.3528	90.3528	0.0146	1.7700e-003	91.2463
NaturalGas Mitigated	0.0200	0.1713	0.0729	1.0900e-003		0.0139	0.0139		0.0139	0.0139	0.0000	198.3439	198.3439	3.8000e-003	3.6400e-003	199.5225
NaturalGas Unmitigated	0.0200	0.1713	0.0729	1.0900e-003		0.0139	0.0139		0.0139	0.0139	0.0000	198.3439	198.3439	3.8000e-003	3.6400e-003	199.5225

City of Arvin Multi-Family Residential Development Text Amendment - San Joaquin Valley Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.71682e+006	0.0200	0.1713	0.0729	1.0900e-003		0.0139	0.0139		0.0139	0.0139	0.0000	198.3439	198.3439	3.8000e-003	3.6400e-003	199.5225
Total		**0.0200**	**0.1713**	**0.0729**	**1.0900e-003**		**0.0139**	**0.0139**		**0.0139**	**0.0139**	**0.0000**	**198.3439**	**198.3439**	**3.8000e-003**	**3.6400e-003**	**199.5225**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.71682e+006	0.0200	0.1713	0.0729	1.0900e-003		0.0139	0.0139		0.0139	0.0139	0.0000	198.3439	198.3439	3.8000e-003	3.6400e-003	199.5225
Total		**0.0200**	**0.1713**	**0.0729**	**1.0900e-003**		**0.0139**	**0.0139**		**0.0139**	**0.0139**	**0.0000**	**198.3439**	**198.3439**	**3.8000e-003**	**3.6400e-003**	**199.5225**

City of Arvin Multi-Family Residential Development Text Amendment - San Joaquin Valley Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	976536	90.3528	0.0146	1.7700e-003	91.2463
Total		**90.3528**	**0.0146**	**1.7700e-003**	**91.2463**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	976536	90.3528	0.0146	1.7700e-003	91.2463
Total		**90.3528**	**0.0146**	**1.7700e-003**	**91.2463**

6.0 Area Detail

6.1 Mitigation Measures Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.2572	0.1130	1.8640	6.8000e-004		0.0176	0.0176		0.0176	0.0176	0.0000	109.5527	109.5527	4.9000e-003	1.9500e-003	110.2574
Unmitigated	1.2572	0.1130	1.8640	6.8000e-004		0.0176	0.0176		0.0176	0.0176	0.0000	109.5527	109.5527	4.9000e-003	1.9500e-003	110.2574

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2309					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9608					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0108	0.0920	0.0392	5.9000e-004		7.4400e-003	7.4400e-003		7.4400e-003	7.4400e-003	0.0000	106.5690	106.5690	2.0400e-003	1.9500e-003	107.2023
Landscaping	0.0548	0.0210	1.8249	1.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	2.9837	2.9837	2.8600e-003	0.0000	3.0551
Total	**1.2572**	**0.1130**	**1.8640**	**6.9000e-004**		**0.0176**	**0.0176**		**0.0176**	**0.0176**	**0.0000**	**109.5527**	**109.5527**	**4.9000e-003**	**1.9500e-003**	**110.2574**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2309					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9608					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0108	0.0920	0.0392	5.9000e-004		7.4400e-003	7.4400e-003		7.4400e-003	7.4400e-003	0.0000	106.5690	106.5690	2.0400e-003	1.9500e-003	107.2023
Landscaping	0.0548	0.0210	1.8249	1.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	2.9837	2.9837	2.8600e-003	0.0000	3.0551
Total	**1.2572**	**0.1130**	**1.8640**	**6.9000e-004**		**0.0176**	**0.0176**		**0.0176**	**0.0176**	**0.0000**	**109.5527**	**109.5527**	**4.9000e-003**	**1.9500e-003**	**110.2574**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	16.3814	0.5241	0.0126	33.2247
Unmitigated	16.3814	0.5241	0.0126	33.2247

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	16.0279 / 10.1045	16.3814	0.5241	0.0126	33.2247
Total		**16.3814**	**0.5241**	**0.0126**	**33.2247**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	16.0279 / 10.1045	16.3814	0.5241	0.0126	33.2247
Total		**16.3814**	**0.5241**	**0.0126**	**33.2247**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	22.9705	1.3575	0.0000	56.9083
Unmitigated	22.9705	1.3575	0.0000	56.9083

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	113.16	22.9705	1.3575	0.0000	56.9083
Total		**22.9705**	**1.3575**	**0.0000**	**56.9083**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	113.16	22.9705	1.3575	0.0000	56.9083
Total		**22.9705**	**1.3575**	**0.0000**	**56.9083**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

7.2 Appendix B: CNDDB List

Downloaded from California Department of Fish and Wildlife Rarefind on August 16, 2022.

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE **RareFind**

Query Summary:
Quad IS (Arvin (3511827))

Print Close

CNDDB Element Query Results

Scientific Name	Common Name	Taxonomic Group	Element Code	Total Occs	Returned Occs	Federal Status	State Status	Global Rank	State Rank	CA Rare Plant Rank	Other Status	Habitats
Asio otus	long-eared owl	Birds	ABNSB13010	56	1	None	None	G5	S3?	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	Cismontane woodland, Great Basin scrub, Riparian forest, Riparian woodland, Upper montane coniferous forest
Astragalus hornii var. hornii	Horn's milk-vetch	Dicots	PDFAB0F421	28	1	None	None	GUT1	S1	1B.1	BLM_S-Sensitive	Alkali playa, Meadow & seep, Wetland
Athene cunicularia	burrowing owl	Birds	ABNSB10010	2011	4	None	None	G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	Coastal prairie, Coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, Valley & foothill grassland
Bombus crotchii	Crotch bumble bee	Insects	IIHYM24480	437	2	None	None	G2	S1S2	null	null	null
Buteo swainsoni	Swainson's hawk	Birds	ABNKC19070	2548	1	None	Threatened	G5	S3	null	BLM_S-Sensitive, IUCN_LC-Least Concern	Great Basin grassland, Riparian forest, Riparian woodland, Valley & foothill grassland
Calochortus palmeri var. palmeri	Palmer's mariposa-lily	Monocots	PMLIL0D122	111	1	None	None	G3T2	S2	1B.2	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden, USFS_S-Sensitive	Chaparral, Lower montane coniferous forest, Meadow & seep
Calochortus striatus	alkali mariposa-lily	Monocots	PMLIL0D190	113	1	None	None	G3	S2S3	1B.2	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive	Chaparral, Chenopod scrub, Meadow & seep, Mojavean desert scrub, Wetland
Caulanthus californicus	California jewelflower	Dicots	PDBRA31010	67	1	Endangered	Endangered	G1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden, SB_UCBG-UC	Chenopod scrub, Pinon & juniper woodlands, Valley & foothill grassland

											Botanical Garden at Berkeley	
Diplacus pictus	calico monkeyflower	Dicots	PDSCR1B240	73	1	None	None	G2	S2	1B.2	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Broadleaved upland forest, Cismontane woodland
Eremalche parryi ssp. kernensis	Kern mallow	Dicots	PDMAL0C031	202	4	Endangered	None	G3G4T3	S3	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden	Chenopod scrub, Pinon & juniper woodlands, Valley & foothill grassland
Eschscholzia lemmonii ssp. kernensis	Tejon poppy	Dicots	PDPAP0A071	86	3	None	None	G5T2	S2	1B.1	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden, SB_USDA-US Dept of Agriculture	Chenopod scrub, Valley & foothill grassland
Gambelia sila	blunt-nosed leopard lizard	Reptiles	ARACF07010	418	5	Endangered	Endangered	G1	S1	null	CDFW_FP-Fully Protected, IUCN_EN-Endangered	Chenopod scrub
Layia leucopappa	Comanche Point layia	Dicots	PDAST5N0A0	10	2	None	None	G1	S1	1B.1	SB_SBBG-Santa Barbara Botanic Garden	Chenopod scrub, Valley & foothill grassland
Layia munzii	Munz's tidy-tips	Dicots	PDAST5N0B0	68	1	None	None	G2	S2	1B.2	BLM_S-Sensitive	Chenopod scrub, Valley & foothill grassland
Lytta moesta	moestan blister beetle	Insects	IICOL4C020	12	1	None	None	G2	S2	null	null	Valley & foothill grassland
Monolopia congdonii	San Joaquin woollythreads	Dicots	PDASTA8010	111	1	Endangered	None	G2	S2	1B.2	SB_UCBG-UC Botanical Garden at Berkeley	Chenopod scrub, Valley & foothill grassland
Navarretia setiloba	Piute Mountains navarretia	Dicots	PDPLM0C0S0	56	1	None	None	G2	S2	1B.1	BLM_S-Sensitive, USFS_S-Sensitive	Cismontane woodland, Pinon & juniper woodlands, Valley & foothill grassland
Opuntia basilaris var. treleasei	Bakersfield cactus	Dicots	PDCAC0D055	62	4	Endangered	Endangered	G5T1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chenopod scrub, Cismontane woodland, Valley & foothill grassland
Spea hammondii	western spadefoot	Amphibians	AAABF02020	1422	1	None	None	G2G3	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened	Cismontane woodland, Coastal scrub, Valley & foothill grassland, Vernal pool, Wetland
Taxidea taxus	American badger	Mammals	AMAJF04010	594	2	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Alkali marsh, Alkali playa, Alpine, Alpine dwarf scrub, Bog & fen, Brackish marsh, Broadleaved upland forest, Chaparral, Chenopod scrub, Cismontane woodland, Closed-cone coniferous

												forest, Coastal bluff scrub, Coastal dunes, Coastal prairie, Coastal scrub, Desert dunes, Desert wash, Freshwater marsh, Great Basin grassland, Great Basin scrub, Interior dunes, lone formation, Joshua tree woodland, Limestone, Lower montane coniferous forest, Marsh & swamp, Meadow & seep, Mojavean desert scrub, Montane dwarf scrub, North coast coniferous forest, Oldgrowth, Pavement plain, Redwood, Riparian forest, Riparian scrub, Riparian woodland, Salt marsh, Sonoran desert scrub, Sonoran thorn woodland, Ultramafic, Upper montane coniferous forest, Upper Sonoran scrub, Valley & foothill grassland
Vireo bellii pusillus	least Bell's vireo	Birds	ABPBW01114	504	1	Endangered	Endangered	G5T2	S2	null	IUCN_NT-Near Threatened, NABCI_YWL-Yellow Watch List	Riparian forest, Riparian scrub, Riparian woodland
Vulpes macrotis mutica	San Joaquin kit fox	Mammals	AMAJA03041	1020	3	Endangered	Threatened	G4T2	S2	null	null	Chenopod scrub, Valley & foothill grassland

7.3 Appendix C: CHRIS Record Search Result

Prepared by San Joaquin Valley Information Center on August 29, 2022.

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Shin Tu
Precision Civil Engineering, Inc.
1234 O Street
Fresno, CA 93721

Record Search 22-326

Date: August 29, 2022

Re: Proposed Development Code Text Amendment

County: Kern

Map(s): Arvin 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area.

PRIOR CULTURAL RESOURCE STUDIES CONDUCTED WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there have been 11 previous cultural resource studies conducted within the project area: See attached list. There have been 13 additional cultural resource studies conducted within the one-half mile radius: See attached list.

Record Search 22-326

KNOWN/RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there are two recorded resources within the project area: See attached list. There are 14 known resources within the one-half mile radius: See attached list. These resources consist of historic landscaping, trash scatters, roads, a historical landmark, single family properties, and multi-family properties, as well as a prehistoric lithic scatter.

There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand the proposed project proposes a Development Code Text Amendment that would modify the Arvin Municipal Code to allow ministerial approval of multi-family residential uses within four (4) zone districts. Additionally, we understand the proposed text amendment would also modify property development standards and possibly increase permitted residential densities, in order to increase development opportunities for multi-family residential uses. We also understand that no development is proposed at this time. As such, no further cultural resource investigations are needed at this time. Because this project area is too large to provide site specific recommendations, prior to any future development, a new site specific record search should be submitted so proper recommendations can be made.

We also recommend that you contact the Native American Heritage Commission in Sacramento. They will provide you with a current list of Native American individuals/organizations that can assist you with information regarding cultural resources that may not be included in the CHRIS Inventory and that may be of concern to the Native groups in the area. The Commission can consult their "Sacred Lands Inventory" file to determine what sacred resources, if any, exist within this project area and the way in which these resources might be managed. Finally, please consult with the lead agency on this project to determine if any other cultural resource investigation is required. If you need any additional information or have any questions or concerns, please contact our office at (661) 654-2289.

By:

Jeremy E David, Assistant Coordinator **Date**: August 29, 2022

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

SSJVIC Record Search 22-326

Reports in PA:	Reports in 0.5 mile:	Resources in PA:	Resources in 0.5 mile:
KE-00285	KE-00411	P-15-007944	P-15-003545
KE-00297	KE-00633	P-15-012765	P-15-007744
KE-00690	KE-01072		P-15-007942
KE-01817	KE-01416		P-15-007943
KE-02022	KE-02161		P-15-007945
KE-03101	KE-02454		P-15-007946
KE-03658	KE-03687		P-15-007947
KE-04013	KE-03777		P-15-009042
KE-04489	KE-04079		P-15-011698
KE-04543	KE-04104		P-15-018878
KE-05040	KE-04646		P-15-020546
	KE-04793		P-15-020563
	KE-04959		P-15-020575
			P-15-020586

7.4 Appendix D: Project Parcels

The table below shows the APN, size, land use designation, and zone district of the 389 parcels that are within the four (4) zone districts that allow multi-family residential development including the Two-Family Dwelling Zone (R-2), Limited Multiple-Family Dwelling Zone (R-3), Multiple-Family Zone (R-4) Zone Districts.

Table 7-1 Project Parcels

APN	Square Footage	Acreage	General Plan Land Use Designation	Zone District	Zone District Description
189-351-36	372,543	8.6	General Commercial	C-2	Commercial
189-351-37	465,892	10.7	Medium Density Residential	R-4	Multiple Family Dwelling
189-351-58	928,749	21.3	Medium Density Residential	R-3	Limited Multiple Family Dwelling
189-351-67	147,982	3.4	Medium Density Residential	R-3	Limited Multiple Family Dwelling
190-286-12	5,494	0.1	Low Density Residential	R-3	Limited Multiple Family Dwelling
192-340-01	336,290	7.7	Medium Density Residential	R-4	Multiple Family Dwelling
191-222-26	6,416	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
192-340-02	117,063	2.7	Medium Density Residential	R-4	Multiple Family Dwelling
190-286-13	5,349	0.1	Low Density Residential	R-3	Limited Multiple Family Dwelling
190-286-14	5,471	0.1	Low Density Residential	R-3	Limited Multiple Family Dwelling
191-010-12	30,978	0.7	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-010-13	95,284	2.2	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-010-15	70,176	1.6	Medium Density Residential	R-4	Multiple Family Dwelling
191-010-18	11,137	0.3	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-010-19	54,017	1.2	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-040-05	7,172	0.2	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-040-23	7,724	0.2	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-040-24	8,424	0.2	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-040-33	49,265	1.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-040-35	8,418	0.2	Medium Density Residential	R-2	Two Family Dwelling
191-040-36	8,418	0.2	Medium Density Residential	R-2	Two Family Dwelling
191-040-37	8,416	0.2	Medium Density Residential	R-2	Two Family Dwelling
191-040-40	61,667	1.2	Medium Density Residential	R-3	Limited Multiple Family Dwelling

191-040-41	11,773	0.3	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-040-42	66,920	1.5	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-040-45	75,785	1.7	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-040-46	160,103	3.7	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-040-47	88,143	2.0	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-040-48	20,270	0.5	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-060-15	106,309	2.4	Medium Density Residential	R-4	Multiple Family Dwelling
191-060-16	24,463	0.6	Medium Density Residential	R-4	Multiple Family Dwelling
191-070-08	8,640	0.2	Medium Density Residential	R-4	Multiple Family Dwelling
191-070-31	42,859	1.0	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-070-32	42,865	1.0	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-070-33	43,035	1.0	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-070-40	110,018	2.5	Medium Density Residential	R-4	Multiple Family Dwelling
191-093-07	6,458	0.1	Low Density Residential	R-2	Two Family Dwelling
191-093-08	11,645	0.3	Low Density Residential	R-2	Two Family Dwelling
191-093-09	5,764	0.1	Low Density Residential	R-2	Two Family Dwelling
191-093-10	5,807	0.1	Low Density Residential	R-2	Two Family Dwelling
191-093-11	5,807	0.1	Low Density Residential	R-2	Two Family Dwelling
191-093-12	5,807	0.1	Low Density Residential	R-2	Two Family Dwelling
191-093-14	6,461	0.1	Low Density Residential	R-2	Two Family Dwelling
191-093-23	9,174	0.2	Low Density Residential	R-4	Multiple Family Dwelling
191-093-29	9,175	0.2	Low Density Residential	R-4	Multiple Family Dwelling
191-093-30	9,176	0.2	Low Density Residential	R-4	Multiple Family Dwelling
191-112-04	8,326	0.2	Low Density Residential	R-2	Two Family Dwelling
191-133-24	6,662	0.2	Low Density Residential	R-4	Multiple Family Dwelling
191-140-03	12,497	0.3	General Commercial	R-4	Multiple Family Dwelling
191-151-09	11,925	0.3	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-151-10	6,006	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-151-11	6,006	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-151-12	6,006	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling

191-151-14	6,006	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-151-19	6,006	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-151-20	6,006	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-151-21	7,104	0.2	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-151-22	6,006	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-151-23	6,006	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-151-24	6,006	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-152-01	6,411	0.1	Low Density Residential	R-2	Two Family Dwelling
191-152-02	3,487	0.1	Low Density Residential	R-2	Two Family Dwelling
191-152-03	20,932	0.5	Low Density Residential	R-2	Two Family Dwelling
191-152-04	6,890	0.2	Low Density Residential	R-2	Two Family Dwelling
191-152-05	9,562	0.2	Low Density Residential	R-2	Two Family Dwelling
191-152-06	6,793	0.2	Low Density Residential	R-2	Two Family Dwelling
191-152-07	6,879	0.2	Low Density Residential	R-2	Two Family Dwelling
191-152-08	6,874	0.2	Low Density Residential	R-2	Two Family Dwelling
191-152-09	6,884	0.2	Low Density Residential	R-2	Two Family Dwelling
191-153-01	14,021	0.3	Low Density Residential	R-2	Two Family Dwelling
191-153-02	7,143	0.2	Low Density Residential	R-2	Two Family Dwelling
191-153-03	6,879	0.2	Low Density Residential	R-2	Two Family Dwelling
191-153-04	9,631	0.2	Low Density Residential	R-2	Two Family Dwelling
191-153-05	8,768	0.2	Low Density Residential	R-2	Two Family Dwelling
191-153-06	4,905	0.1	Low Density Residential	R-2	Two Family Dwelling
191-153-07	6,793	0.2	Low Density Residential	R-2	Two Family Dwelling
191-153-08	6,879	0.2	Low Density Residential	R-2	Two Family Dwelling
191-153-12	9,631	0.2	Low Density Residential	R-2	Two Family Dwelling
191-161-01	5,185	0.1	Low Density Residential	R-2	Two Family Dwelling
191-161-02	4,374	0.1	Low Density Residential	R-2	Two Family Dwelling
191-161-03	4,479	0.1	Low Density Residential	R-2	Two Family Dwelling
191-161-04	11,400	0.3	Low Density Residential	R-2	Two Family Dwelling
191-161-05	6,786	0.2	Low Density Residential	R-2	Two Family Dwelling

191-161-06	9,093	0.2	Low Density Residential	R-2	Two Family Dwelling
191-161-07	9,093	0.2	Low Density Residential	R-2	Two Family Dwelling
191-161-10	7,911	0.2	Low Density Residential	R-2	Two Family Dwelling
191-161-11	8,018	0.2	Low Density Residential	R-2	Two Family Dwelling
191-161-12	9,093	0.2	Low Density Residential	R-2	Two Family Dwelling
191-161-13	9,093	0.2	Low Density Residential	R-2	Two Family Dwelling
191-161-14	6,786	0.2	Low Density Residential	R-2	Two Family Dwelling
191-161-15	11,400	0.3	Low Density Residential	R-2	Two Family Dwelling
191-161-21	9,150	0.2	Low Density Residential	R-2	Two Family Dwelling
191-161-22	9,093	0.2	Low Density Residential	R-2	Two Family Dwelling
191-161-23	9,093	0.2	Low Density Residential	R-2	Two Family Dwelling
191-161-24	9,093	0.2	Low Density Residential	R-2	Two Family Dwelling
191-161-25	7,193	0.2	Low Density Residential	R-2	Two Family Dwelling
191-161-26	7,682	0.2	Low Density Residential	R-2	Two Family Dwelling
191-161-27	6,348	0.1	Low Density Residential	R-2	Two Family Dwelling
191-161-28	4,896	0.1	Low Density Residential	R-2	Two Family Dwelling
191-162-01	14,057	0.3	Low Density Residential	R-2	Two Family Dwelling
191-162-02	18,185	0.4	Low Density Residential	R-2	Two Family Dwelling
191-162-03	11,399	0.3	Low Density Residential	R-2	Two Family Dwelling
191-162-04	6,785	0.2	Low Density Residential	R-2	Two Family Dwelling
191-162-05	9,092	0.2	Low Density Residential	R-2	Two Family Dwelling
191-162-06	9,092	0.2	Low Density Residential	R-2	Two Family Dwelling
191-162-08	18,185	0.4	Low Density Residential	R-2	Two Family Dwelling
191-162-09	18,185	0.4	Low Density Residential	R-2	Two Family Dwelling
191-162-13	8,592	0.2	Low Density Residential	R-2	Two Family Dwelling
191-162-14	19,462	0.4	Low Density Residential	R-2	Two Family Dwelling
191-181-14	5,971	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-181-15	6,025	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-181-16	6,026	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-181-17	6,027	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling

191-181-18	6,028	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-181-19	6,631	0.2	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-181-20	6,632	0.2	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-181-21	6,029	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-181-22	6,029	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-181-23	17,994	0.4	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-182-01	6,859	0.2	Low Density Residential	R-3	Limited Multiple Family Dwelling
191-182-10	6,910	0.2	Low Density Residential	R-3	Limited Multiple Family Dwelling
191-212-01	6,243	0.1	Low Density Residential	R-2	Two Family Dwelling
191-212-02	6,264	0.1	Low Density Residential	R-2	Two Family Dwelling
191-212-03	6,238	0.1	Low Density Residential	R-2	Two Family Dwelling
191-212-04	6,226	0.1	Low Density Residential	R-2	Two Family Dwelling
191-212-05	6,219	0.1	Low Density Residential	R-2	Two Family Dwelling
191-212-06	6,217	0.1	Low Density Residential	R-2	Two Family Dwelling
191-212-07	6,224	0.1	Low Density Residential	R-2	Two Family Dwelling
191-212-08	6,241	0.1	Low Density Residential	R-2	Two Family Dwelling
191-212-09	6,256	0.1	Low Density Residential	R-2	Two Family Dwelling
191-212-10	6,273	0.1	Low Density Residential	R-2	Two Family Dwelling
191-212-11	6,294	0.1	Low Density Residential	R-2	Two Family Dwelling
191-212-12	7,602	0.2	Low Density Residential	R-2	Two Family Dwelling
191-212-13	7,600	0.2	Low Density Residential	R-2	Two Family Dwelling
191-212-14	6,331	0.1	Low Density Residential	R-2	Two Family Dwelling
191-212-15	6,333	0.1	Low Density Residential	R-2	Two Family Dwelling
191-212-16	6,336	0.1	Low Density Residential	R-2	Two Family Dwelling
191-212-17	6,338	0.1	Low Density Residential	R-2	Two Family Dwelling
191-212-18	6,339	0.1	Low Density Residential	R-2	Two Family Dwelling
191-212-19	6,338	0.1	Low Density Residential	R-2	Two Family Dwelling
191-212-20	6,337	0.1	Low Density Residential	R-2	Two Family Dwelling
191-212-21	6,335	0.1	Low Density Residential	R-2	Two Family Dwelling
191-212-22	6,332	0.1	Low Density Residential	R-2	Two Family Dwelling

191-212-23	6,330	0.1	Low Density Residential	R-2	Two Family Dwelling
191-212-24	6,249	0.1	Low Density Residential	R-2	Two Family Dwelling
191-221-14	6,408	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-221-15	10,252	0.2	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-221-16	8,968	0.2	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-221-17	6,405	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-221-18	6,404	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-221-19	6,404	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-221-20	4,695	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-221-21	6,400	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-221-22	6,400	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-221-23	6,398	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-221-24	4,273	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-221-26	1,707	0.0	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-221-29	4,775	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-222-15	12,844	0.3	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-222-17	6,415	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-222-18	6,414	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-222-19	6,413	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-222-20	6,412	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-222-21	6,411	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-222-22	6,410	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-222-23	6,419	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-222-25	6,418	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
190-020-14	161,779	3.7	General Commercial	C-O	Professional Office
190-020-22	168,269	3.9	General Commercial	C-O	Professional Office
190-020-46	214,104	4.9	Medium Density Residential	R-3	Limited Multiple Family Dwelling
190-020-48	1,225,517	28.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
190-030-20	30,463	0.7	Parks	R-3	Limited Multiple Family Dwelling
190-030-32	17,408	0.4	Parks	R-3	Limited Multiple Family Dwelling

190-030-33	401,310	9.2	Medium Density Residential	R-3	Limited Multiple Family Dwelling
190-071-01	14,176	0.3	Low Density Residential	R-3	Limited Multiple Family Dwelling
190-071-02	6,682	0.2	Low Density Residential	R-2	Two Family Dwelling
190-071-03	6,933	0.2	Low Density Residential	R-2	Two Family Dwelling
190-071-04	6,950	0.2	Low Density Residential	R-2	Two Family Dwelling
190-071-05	6,855	0.2	Low Density Residential	R-2	Two Family Dwelling
190-071-06	6,865	0.2	Low Density Residential	R-2	Two Family Dwelling
190-071-07	6,857	0.2	Low Density Residential	R-2	Two Family Dwelling
190-071-08	3,505	0.1	Low Density Residential	R-2	Two Family Dwelling
190-071-09	17,155	0.4	Low Density Residential	R-2	Two Family Dwelling
190-071-10	6,847	0.2	Low Density Residential	R-2	Two Family Dwelling
190-073-01	7,594	0.2	General Commercial	R-2	Two Family Dwelling
190-073-02	6,233	0.1	General Commercial	R-2	Two Family Dwelling
190-073-03	6,244	0.1	General Commercial	R-2	Two Family Dwelling
190-073-05	7,013	0.2	General Commercial	R-2	Two Family Dwelling
190-073-14	6,228	0.1	General Commercial	R-2	Two Family Dwelling
190-082-01	8,232	0.2	Low Density Residential	R-2	Two Family Dwelling
190-082-02	6,773	0.2	Low Density Residential	R-2	Two Family Dwelling
190-082-03	6,563	0.2	Low Density Residential	R-2	Two Family Dwelling
190-082-04	6,767	0.2	Low Density Residential	R-2	Two Family Dwelling
190-082-05	6,988	0.2	Low Density Residential	R-2	Two Family Dwelling
190-082-06	6,777	0.2	Low Density Residential	R-2	Two Family Dwelling
190-082-07	6,769	0.2	Low Density Residential	R-2	Two Family Dwelling
190-082-08	6,778	0.2	Low Density Residential	R-2	Two Family Dwelling
190-082-09	6,769	0.2	Low Density Residential	R-2	Two Family Dwelling
190-082-13	7,070	0.2	Low Density Residential	R-2	Two Family Dwelling
190-082-14	6,693	0.2	Low Density Residential	R-2	Two Family Dwelling
190-082-15	6,797	0.2	Low Density Residential	R-2	Two Family Dwelling
190-082-16	6,842	0.2	Low Density Residential	R-2	Two Family Dwelling
190-082-17	6,867	0.2	Low Density Residential	R-2	Two Family Dwelling

190-082-18	6,851	0.2	Low Density Residential	R-2	Two Family Dwelling
190-082-19	6,854	0.2	Low Density Residential	R-2	Two Family Dwelling
190-082-20	7,085	0.2	Low Density Residential	R-2	Two Family Dwelling
190-082-21	6,855	0.2	Low Density Residential	R-2	Two Family Dwelling
190-082-22	6,641	0.2	Low Density Residential	R-2	Two Family Dwelling
190-082-23	6,863	0.2	Low Density Residential	R-2	Two Family Dwelling
190-082-24	8,303	0.2	Low Density Residential	R-2	Two Family Dwelling
190-082-26	20,352	0.5	Low Density Residential	R-2	Two Family Dwelling
190-083-01	5,039	0.1	Low Density Residential	R-2	Two Family Dwelling
190-083-02	3,095	0.1	Low Density Residential	R-2	Two Family Dwelling
190-083-03	6,778	0.2	Low Density Residential	R-2	Two Family Dwelling
190-083-04	6,552	0.2	Low Density Residential	R-2	Two Family Dwelling
190-083-05	6,775	0.2	Low Density Residential	R-2	Two Family Dwelling
190-083-06	7,010	0.2	Low Density Residential	R-2	Two Family Dwelling
190-083-07	6,786	0.2	Low Density Residential	R-2	Two Family Dwelling
190-083-08	6,788	0.2	Low Density Residential	R-2	Two Family Dwelling
190-083-10	6,800	0.2	Low Density Residential	R-2	Two Family Dwelling
190-083-11	6,699	0.2	Low Density Residential	R-2	Two Family Dwelling
190-083-12	6,653	0.2	Low Density Residential	R-2	Two Family Dwelling
190-083-13	7,040	0.2	Low Density Residential	R-2	Two Family Dwelling
190-083-14	3,662	0.1	Low Density Residential	R-2	Two Family Dwelling
190-083-15	3,135	0.1	Low Density Residential	R-2	Two Family Dwelling
190-100-01	8,898	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-100-02	4,944	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-100-03	3,954	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-100-04	8,898	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-100-05	8,897	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-100-06	8,897	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-100-09	8,896	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-100-10	8,896	0.2	Medium Density Residential	R-2	Two Family Dwelling

190-100-11	8,895	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-100-12	8,895	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-100-13	8,895	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-100-14	8,894	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-100-15	8,912	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-100-16	8,912	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-100-17	8,912	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-100-18	8,913	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-100-19	8,913	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-100-20	8,913	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-100-21	8,914	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-100-22	17,829	0.4	Medium Density Residential	R-2	Two Family Dwelling
190-100-23	8,915	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-100-24	8,915	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-100-25	8,916	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-100-26	8,896	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-110-01	17,579	0.4	Medium Density Residential	R-4	Multiple Family Dwelling
190-110-03	4,521	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-110-04	8,790	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-110-07	8,790	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-110-08	8,791	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-110-09	8,791	0.2	Medium Density Residential	R-3	Limited Multiple Family Dwelling
190-110-10	8,791	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-110-11	8,791	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-110-12	4,018	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-110-13	4,773	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-110-14	8,808	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-110-15	4,402	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-110-16	4,406	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-110-17	8,808	0.2	Medium Density Residential	R-2	Two Family Dwelling

190-110-18	8,808	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-110-19	8,808	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-110-20	8,808	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-110-21	8,807	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-110-22	8,807	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-110-23	8,807	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-110-24	8,807	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-110-25	8,807	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-110-26	6,290	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-110-27	2,516	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-110-28	4,269	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-110-29	8,790	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-110-30	8,790	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-120-01	18,002	0.4	Medium Density Residential	R-2	Two Family Dwelling
190-120-02	9,001	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-120-03	9,001	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-120-04	9,001	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-120-05	9,002	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-120-06	9,002	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-120-07	9,002	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-120-08	9,002	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-120-09	9,002	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-120-10	9,003	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-120-11	6,002	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-120-12	3,001	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-120-13	9,021	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-120-14	9,021	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-120-15	9,020	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-120-16	9,020	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-120-17	9,020	0.2	Medium Density Residential	R-2	Two Family Dwelling

190-120-18	9,020	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-120-20	9,019	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-120-21	2,505	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-120-22	6,514	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-120-23	9,019	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-120-24	9,019	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-120-25	9,019	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-120-27	4,508	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-120-28	4,512	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-130-01	4,265	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-130-02	4,259	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-130-03	8,524	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-130-06	8,524	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-130-07	8,524	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-130-08	8,524	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-130-09	8,524	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-130-10	8,524	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-130-28	8,524	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-141-01	5,041	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-141-02	5,041	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-141-03	2,521	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-141-04	2,521	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-141-05	2,521	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-141-06	5,041	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-141-16	6,275	0.1	General Commercial	R-2	Two Family Dwelling
190-141-17	5,597	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-141-20	2,521	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-141-21	8,885	0.2	General Commercial	R-2	Two Family Dwelling
190-141-22	8,923	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-151-01	3,468	0.1	General Commercial	R-2	Two Family Dwelling

190-151-02	3,554	0.1	General Commercial	R-2	Two Family Dwelling
190-151-10	6,904	0.2	Medium Density Residential	R-2	Two Family Dwelling
190-151-11	5,660	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-151-12	5,674	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-151-13	5,688	0.1	Medium Density Residential	R-2	Two Family Dwelling
190-151-14	5,702	0.1	General Commercial	R-2	Two Family Dwelling
190-151-15	5,716	0.1	General Commercial	R-2	Two Family Dwelling
190-222-01	161,197	3.7	Medium Density Residential	R-3	Limited Multiple Family Dwelling
190-222-02	4,772	0.1	Low Density Residential	R-3	Limited Multiple Family Dwelling
190-222-03	4,534	0.1	Low Density Residential	R-3	Limited Multiple Family Dwelling
190-222-04	4,338	0.1	Low Density Residential	R-3	Limited Multiple Family Dwelling
190-222-05	4,462	0.1	Low Density Residential	R-3	Limited Multiple Family Dwelling
190-222-06	4,362	0.1	Low Density Residential	R-3	Limited Multiple Family Dwelling
190-222-07	4,992	0.1	Low Density Residential	R-3	Limited Multiple Family Dwelling
190-222-08	5,376	0.1	Low Density Residential	R-3	Limited Multiple Family Dwelling
190-222-09	4,365	0.1	Low Density Residential	R-3	Limited Multiple Family Dwelling
190-222-10	4,398	0.1	Low Density Residential	R-3	Limited Multiple Family Dwelling
190-222-11	4,308	0.1	Low Density Residential	R-3	Limited Multiple Family Dwelling
190-222-12	4,477	0.1	Low Density Residential	R-3	Limited Multiple Family Dwelling
190-222-13	4,517	0.1	Low Density Residential	R-3	Limited Multiple Family Dwelling
190-240-04	108,268	1.6	Medium Density Residential	R-3	Limited Multiple Family Dwelling
190-260-01	37,284	0.9	Public Facilities	C-O	Professional Office
190-260-02	99,433	2.3	Public Facilities	C-O	Professional Office
190-260-07	18,834	0.4	Public Facilities	C-O	Professional Office
190-260-08	60,963	1.4	Public Facilities	C-O	Professional Office
190-260-06	241,166	3.6	Public Facilities	C-O	Professional Office
190-286-01	4,975	0.1	Low Density Residential	R-3	Limited Multiple Family Dwelling
190-286-02	5,321	0.1	Low Density Residential	R-3	Limited Multiple Family Dwelling
190-286-03	4,898	0.1	Low Density Residential	R-3	Limited Multiple Family Dwelling
190-286-04	4,837	0.1	Low Density Residential	R-3	Limited Multiple Family Dwelling

190-286-05	4,758	0.1	Low Density Residential	R-3	Limited Multiple Family Dwelling
190-286-06	4,848	0.1	Low Density Residential	R-3	Limited Multiple Family Dwelling
190-286-07	4,935	0.1	Low Density Residential	R-3	Limited Multiple Family Dwelling
190-286-08	5,229	0.1	Low Density Residential	R-3	Limited Multiple Family Dwelling
190-286-09	5,460	0.1	Low Density Residential	R-3	Limited Multiple Family Dwelling
190-286-10	5,788	0.1	Low Density Residential	R-3	Limited Multiple Family Dwelling
190-286-11	5,374	0.1	Low Density Residential	R-3	Limited Multiple Family Dwelling
191-222-27	6,417	0.1	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-243-06	6,489	0.1	Low Density Residential	R-2	Two Family Dwelling
191-243-07	6,490	0.1	Low Density Residential	R-2	Two Family Dwelling
191-250-02	258,379	5.9	Medium Density Residential	R-2	Two Family Dwelling
191-310-01	7,803	0.2	Medium Density Residential	R-2	Two Family Dwelling
191-310-02	7,803	0.2	Medium Density Residential	R-2	Two Family Dwelling
191-320-17	8,505	0.2	General Commercial	R-4	Multiple Family Dwelling
191-320-18	25,667	0.4	General Commercial	R-4	Multiple Family Dwelling
191-320-19	4,903	0.1	General Commercial	R-4	Multiple Family Dwelling
191-320-20	4,903	0.1	General Commercial	R-4	Multiple Family Dwelling
192-070-04	243,648	5.6	Medium Density Residential	R-3	Limited Multiple Family Dwelling
192-100-05	198,080	4.5	Medium Density Residential	R-3	Limited Multiple Family Dwelling
192-121-02	129,776	3.0	Medium Density Residential	R-4	Multiple Family Dwelling
192-130-24	25,825	0.6	Medium Density Residential	R-4	Multiple Family Dwelling
192-130-51	7,895	0.2	Medium Density Residential	R-4	Multiple Family Dwelling
192-130-52	17,422	0.4	Medium Density Residential	R-4	Multiple Family Dwelling
192-130-70	7,474	0.2	Medium Density Residential	R-2	Two Family Dwelling
192-130-71	8,562	0.2	Medium Density Residential	R-2	Two Family Dwelling
192-130-72	6,569	0.2	Medium Density Residential	R-2	Two Family Dwelling
192-130-73	7,419	0.2	Medium Density Residential	R-2	Two Family Dwelling
192-130-74	9,000	0.2	Medium Density Residential	R-2	Two Family Dwelling
192-170-01	22,470	0.5	Medium Density Residential	R-4	Multiple Family Dwelling

192-170-06 (portion)	655,578	15.05	Medium Density Residential	R-4	Multiple Family Dwelling
192-170-07	217,859	5.0	Medium Density Residential	R-4	Multiple Family Dwelling
192-170-08	224,000	5.1	Medium Density Residential	R-4	Multiple Family Dwelling
192-190-16	105,490	2.4	Medium Density Residential	R-3	Limited Multiple Family Dwelling
192-190-17	105,506	2.4	Medium Density Residential	R-3	Limited Multiple Family Dwelling
191-040-40	61,667	0.2	Medium Density Residential	R-2	Two Family Dwelling
191-320-18	25,667	0.2	General Commercial	R-4	Multiple Family Dwelling
190-360-03	6,032	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-04	6,032	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-05	6,032	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-06	6,033	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-07	6,033	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-08	6,066	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-09	6,579	0.2	Multiple Family Dwelling	R-4	High Density Residential
190-360-10	6,734	0.2	Multiple Family Dwelling	R-4	High Density Residential
190-360-11	6,052	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-12	6,001	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-13	6,001	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-14	6,001	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-15	6,001	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-16	6,001	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-21	6,001	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-22	6,001	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-23	6,001	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-24	6,001	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-25	6,001	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-26	6,031	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-27	6,718	0.2	Multiple Family Dwelling	R-4	High Density Residential
190-360-28	6,684	0.2	Multiple Family Dwelling	R-4	High Density Residential

190-360-29	6,063	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-30	6,031	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-31	6,031	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-32	6,031	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-33	6,031	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-34	6,031	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-39	6,031	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-40	6,031	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-41	6,031	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-42	6,031	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-43	6,031	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-44	6,444	0.1	Multiple Family Dwelling	R-4	High Density Residential
190-360-45	6,656	0.2	Multiple Family Dwelling	R-4	High Density Residential
189-352-08 (portion)	891,238	20.46	Two Family Dwelling, Multiple Family Dwelling	R-2, R-4	Medium Density Residential, High Density Residential