City of Arvin General Plan Amendment No. 2023-01 and Rezone No. 2023-01 for 4th Street and Campus Drive (Arvin, CA)

INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

PUBLIC REVIEW DRAFT

MARCH 2023

Prepared for

City of Arvin
200 Campus Drive
Arvin, CA 93203

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1 INTRODUCTION

Precision Civil Engineering, Inc. (PCE) has prepared this Initial Study/Mitigated Negative Declaration (IS/MND) on behalf of the City of Arvin (City) to address the environmental effects of the proposed City of Arvin General Plan Amendment No. 2023-01 and Rezone No. 2023-01 for 4th Street and Campus Drive (Project). This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et. seq. 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

This Project is funded by SB 2 grant funding 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 the Project site to have development potential and proposes to change the land use designation and zone district to facilitate future higher density residential development.

Although no physical development is proposed by the Project, this Initial Study analyzes the potential buildout of the Project site at a programmatic level, using reasonable assumptions so that future

development of the site can tier from this Initial Study pursuant to CEQA Guidelines Section 15168(c)(1) and 15168(d) for evaluations of environmental issues associated with later activities/subsequent projects. However, depending on the final design of future physical development, additional project specific CEQA review may be required as determined by the City through the entitlement review and approval process.

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 File, Biological Resources Assessment, and CHRIS Record Search Result are provided as Appendix A, Appendix B, and Appendix C 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

General Plan Amendment No. 2023-01 and Rezone No. 2023-01 for property at 4th Street and Campus Drive

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
City of Arvin
Community Development Department, Planning Division
Attn. Chris Soriano, City Planner
(661) 606-6047
csoriano@arvin.org

2.4 Study Prepared By

Precision Civil Engineering
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). The site is located on the east side of North Walnut Street between Grapevine Drive and Bear Mountain Boulevard approximately 215 feet west of the intersection of 4th Street and Campus Drive (see Figure 2-2). The site consists of four (4) parcels identified by the Kern County Assessor as Assessor's Parcel Numbers (APNs) 190-260-08 (1.43 acres), 190-260-02 (2.29 acres), 190-260-06 (4.53 acres; portion), and 190-260-01 (0.61 acres) totaling approximately 8.86 acres (gross).[1] The site is a portion of Section 23, Township 31 South, Range 29 East, Mount Diablo Base and Meridian. No site address has been assigned to date.

2.6 Latitude and Longitude

The centroid of the Project site is 35.21118497812168, -118.83491667124494.

[1] APN 190-260-06 is approximately 5.67 total acres (gross). The Project would affect approximately 4.53 acres.

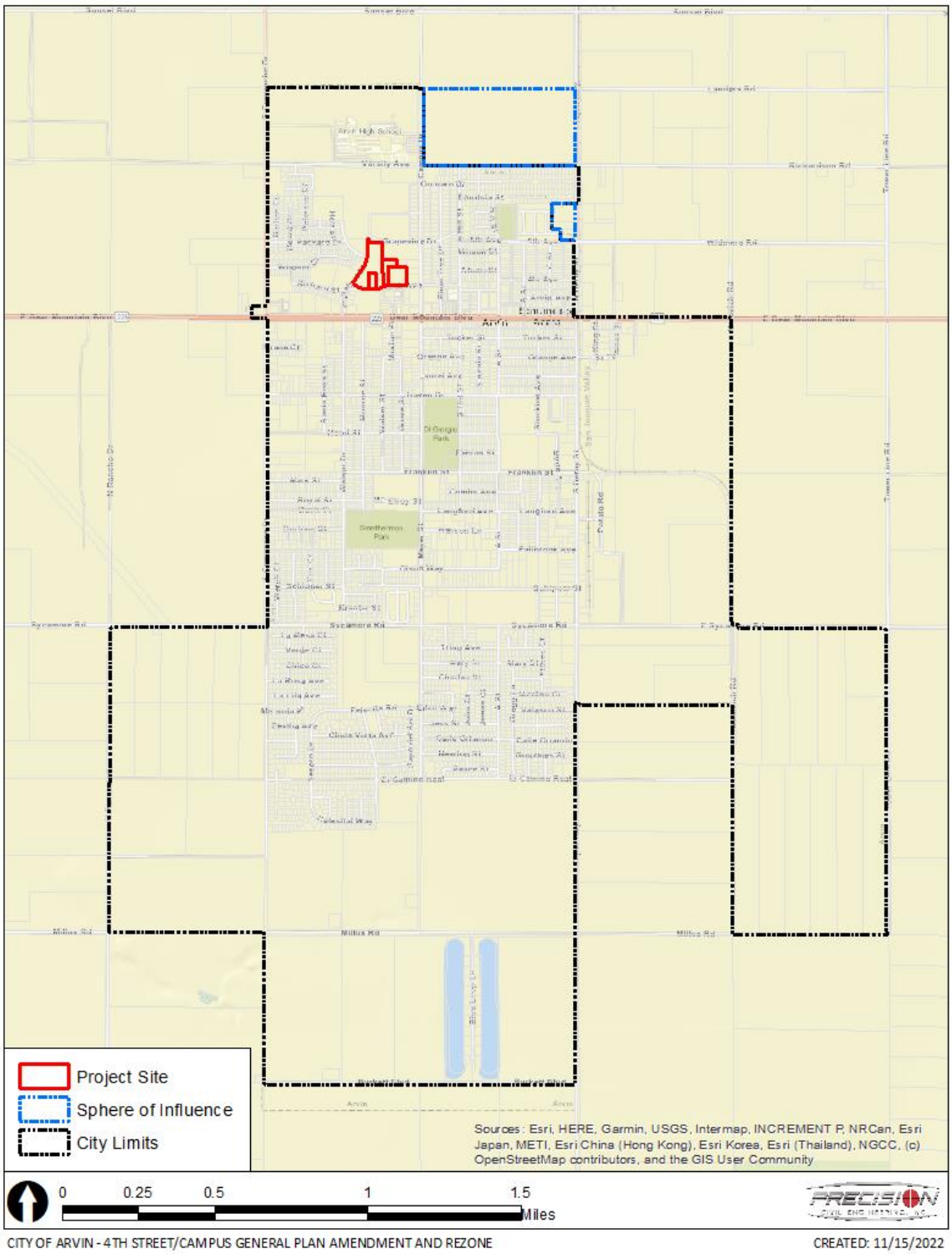

Figure 2-1 Regional Location Map of Project Site

Figure 2-2 Assessor's Parcel Number Map of Project Site

2.7 General Plan Designation

The Project site has an Arvin General Plan land use designation of Public Facilities(Figure 2-3).[2] According to the Arvin General Plan (General Plan), the Public Facilities designation allows *"public and semi-public facilities other than parks, including but not limited to, city halls, public libraries, police and fire departments. The designation also includes quasi-public facilities such as public utility facilities, hospitals, water wells, and similar uses."* The maximum floor area ratio (FAR) for the land use designation is 0.5.

The City of Arvin and private property owner (Applicant/Property Owner) propose a General Plan Amendment to change the land use designation from Public Facilities to Medium Density Residential in order to facilitate higher density, multi-family residential development (Figure 2-4). According to the General Plan, the Medium Density Residential land use designation is established to allow for quality multifamily living environments. 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. The residential density for the Medium Density Residential land use designation is 16 to 21 dwelling units per acre. The typical corresponding zone district is R-3 – Limited Multiple-Family Dwelling zone district.

2.8 Zoning

The Project site is within the C-O – Professional Office and Mixed Use Overlay (MUO) zone districts (Figure 2-5).[3] The City of Arvin and private property owner (Applicant/Property Owner) propose a Rezone to change the zone district from C-O/MUO to R-3 – Limited Multiple-Family Dwelling Zone and remove the MUO zone district to allow for higher density, multi-family residential development (Figure 2-6). The R-3 zone district permits a minimum residential density of 16units per acre. The proposed zone district would be consistent with the proposed land use designation, Medium Density Residential.

[2] APN 190-260-06 has a dual designation of Public Facilities and Parks. The Parks designation accounts for approximately 1.14 acres of the parcel. The General Plan Amendment does not apply to the portion of the Project site with a planned land use designation of Parks. The Parks land use designation would remain on the 1.14 acres.
[3] APN 190-260-06 is zoned C-O – Professional Office, O-S – Open Space, and MUO. Approximately 1.14 acres of the parcel is zoned O-S. This portion of the parcel is not within the C-O or MUO zone districts. The Rezone does not apply to the portion of the Project site in the O-S zone district. The O-S zone district would remain on 1.14 acres.

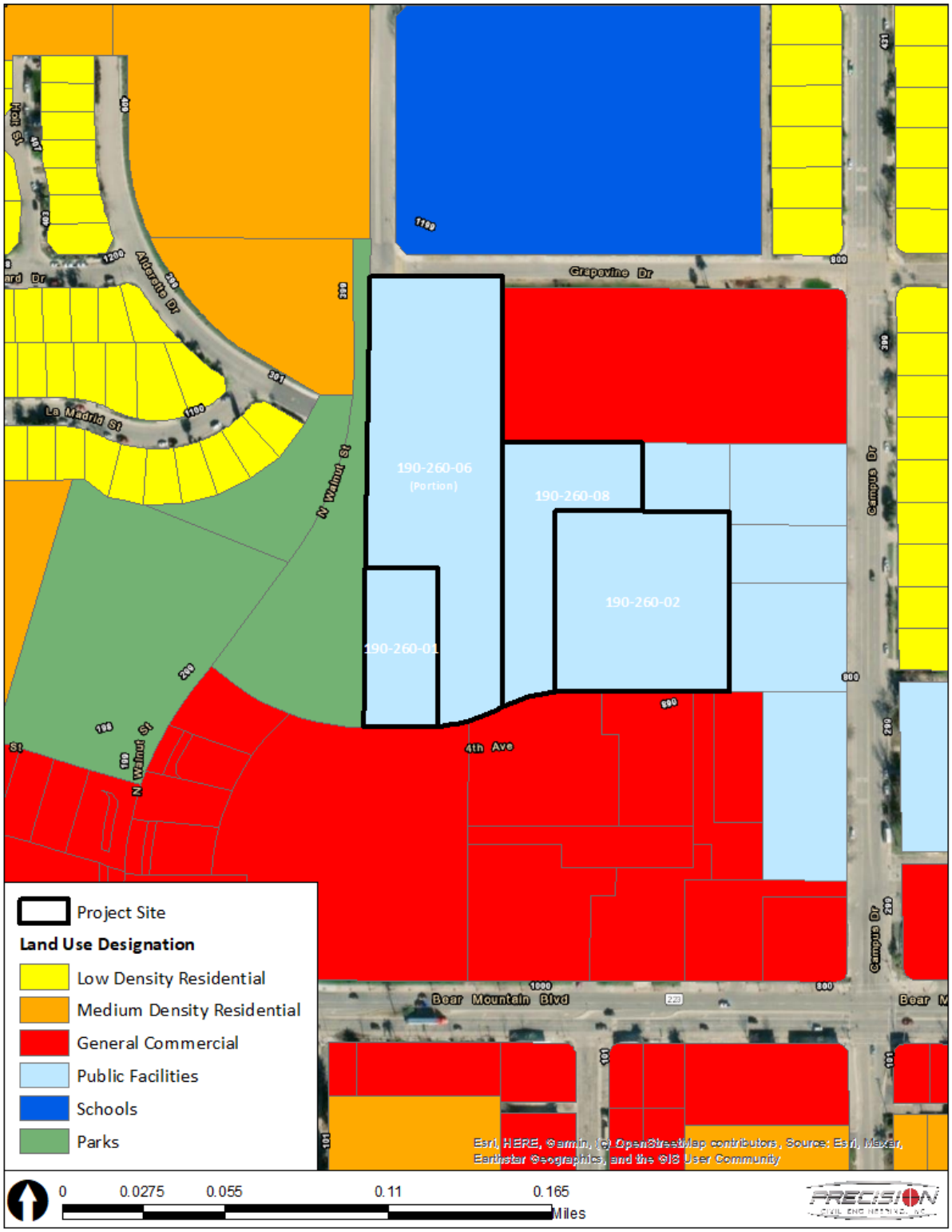

Figure 2-3 City of Arvin General Plan Land Use Designation Map (Existing)

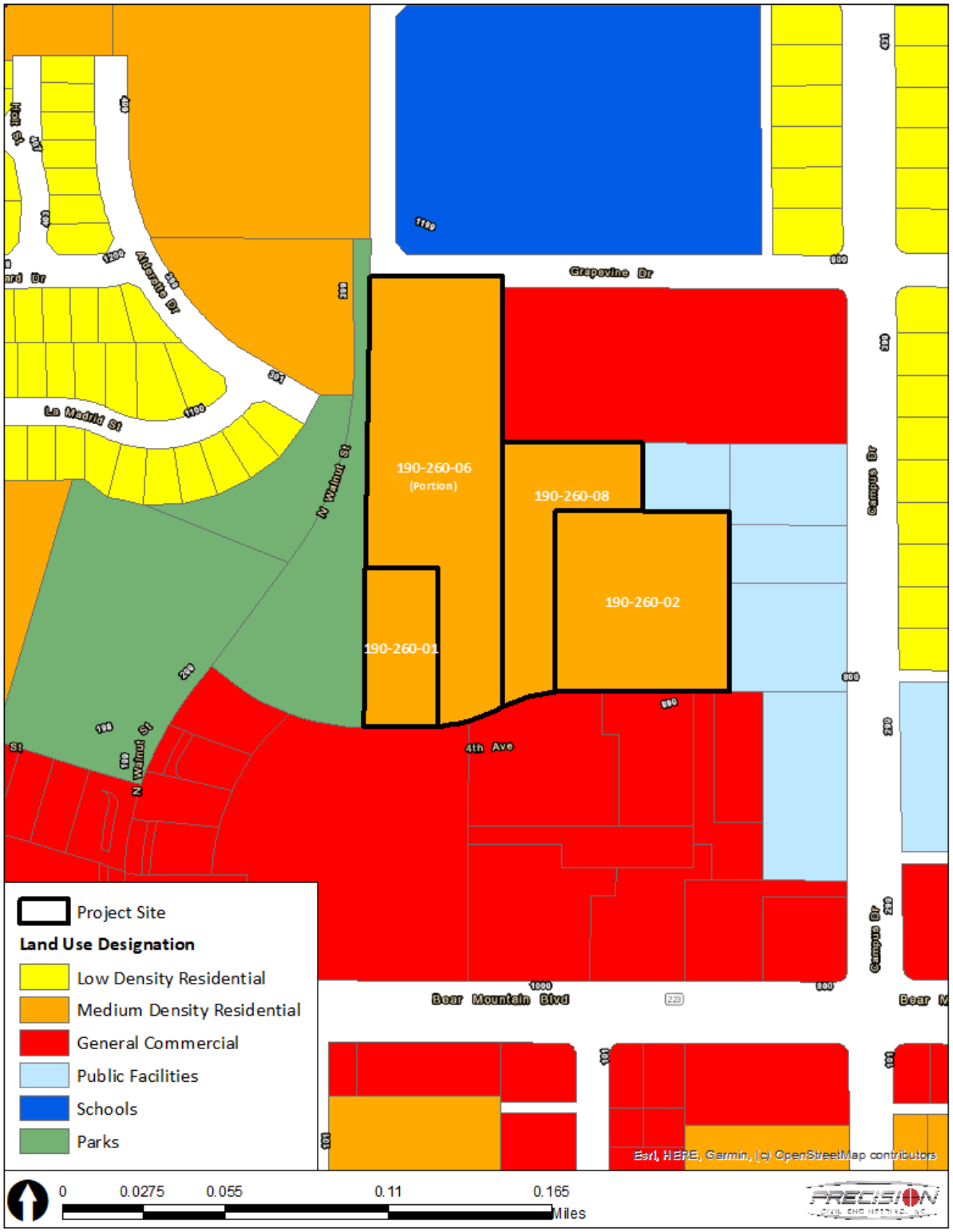

Figure 2-4 City of Arvin General Plan Land Use Designation Map (Proposed)

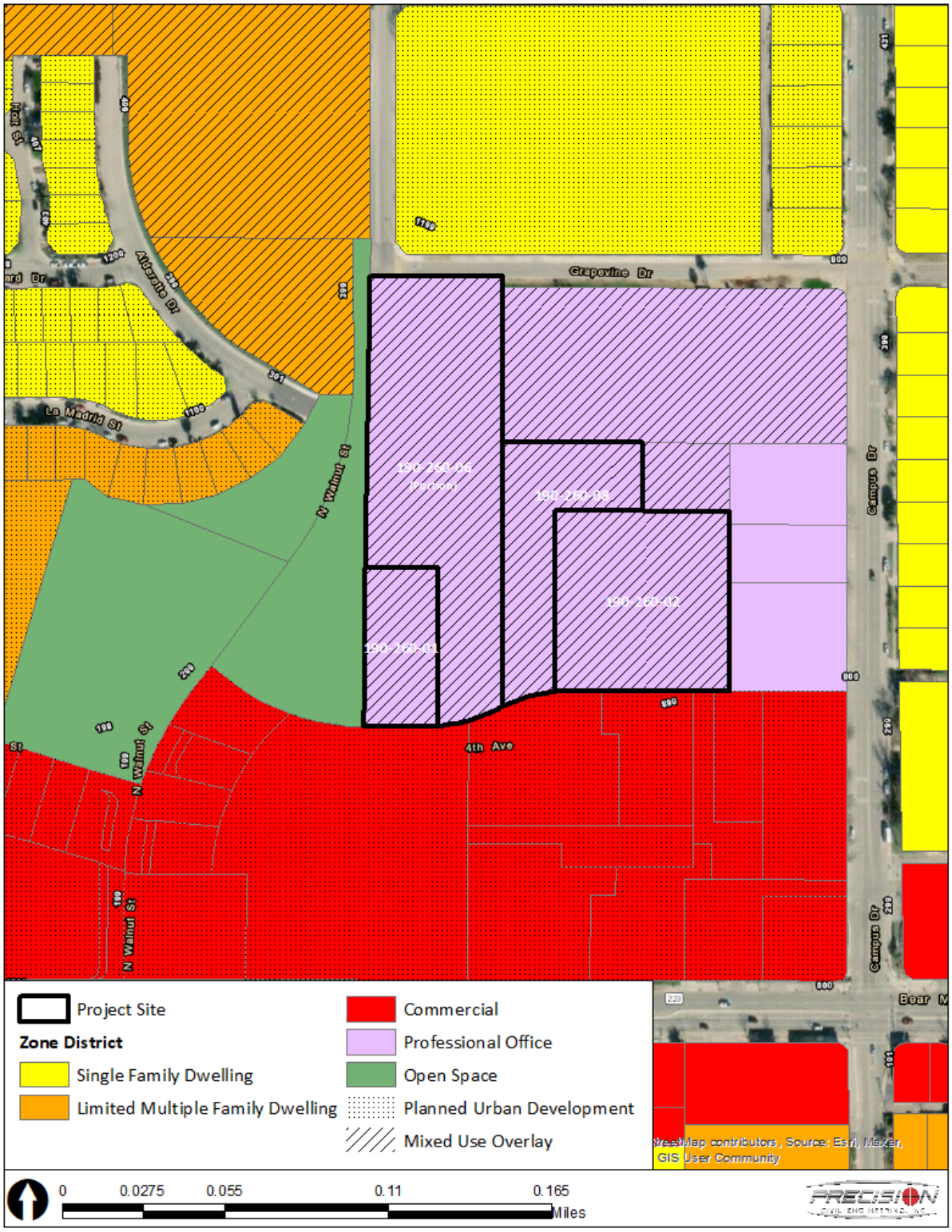

Figure 2-5 City of Arvin Zone District Map (Existing)

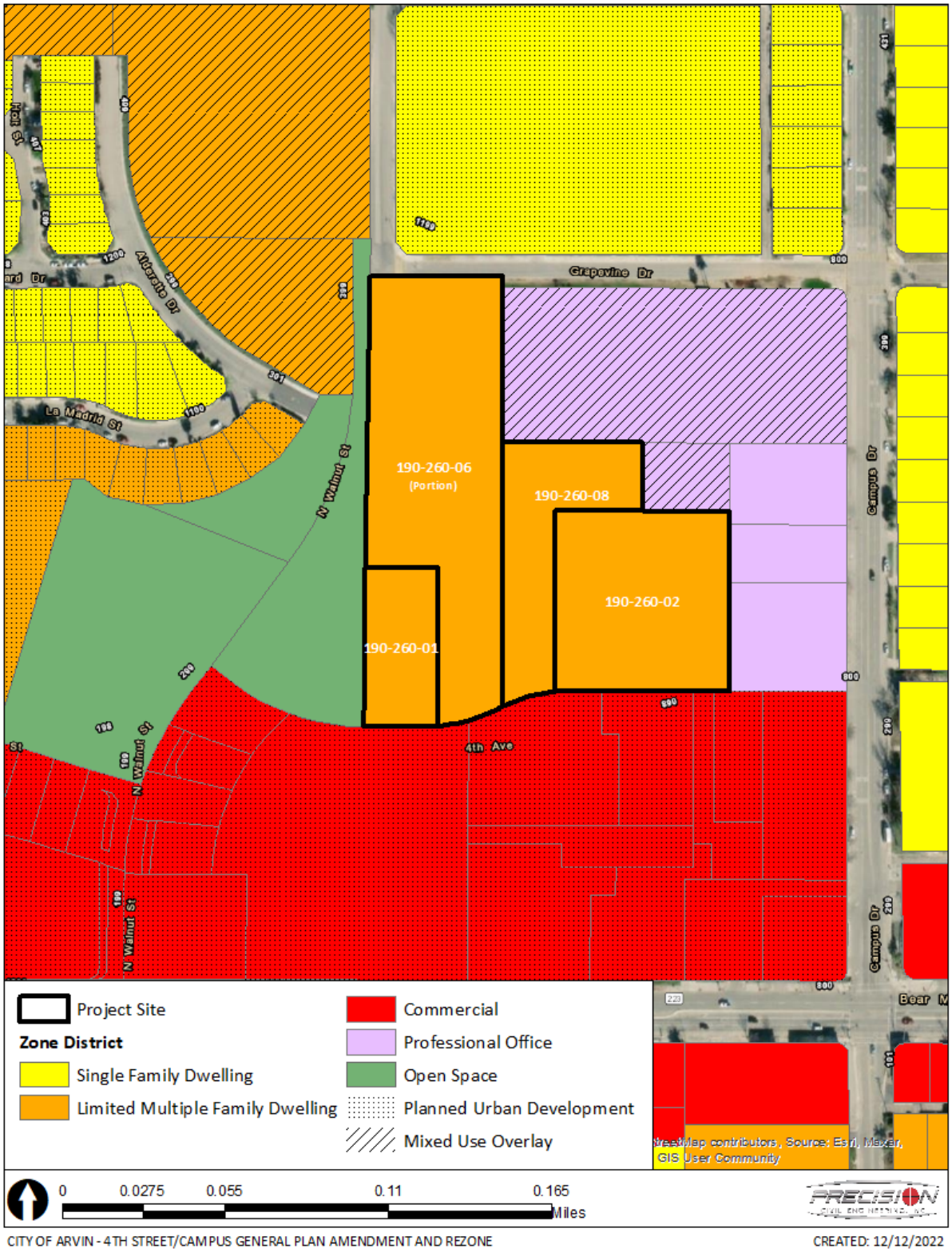

Figure 2-6 City of Arvin Zone District Map (Proposed)

2.9 Description of Project

General Plan Amendment (GPA) No. 2023-01 and Rezone No. 2023-01 are filed by the City of Arvin and private property owner and pertain to four (4) parcels that are generally located on the east side of North Walnut Street between Grapevine Drive and Bear Mountain Boulevard, approximately 215 feet west of the intersection of 4th Street and Campus Drive ("Project site"). The site is identified by the Kern County Assessor as Assessor's Parcel Numbers (APNs) 190-260-01, 190-260-02, 190-260-06 (portion), and 190-260-08, totaling approximately 8.86 acres. GPA No. 2023-01 requests a land use change from Public Facilities to Medium Density Residential. Rezone No. 2023-01 requests a rezone from C-O – Professional Office/MUO – Mixed Use Overlay to R-3 – Limited Multiple-Family Dwelling Zone District. No physical development is proposed by the Project.

Project Assumptions

This Project is funded by SB 2 grant funding for the purpose of providing additional opportunities for housing, in line with the goals contained in the Arvin General Plan and 2021-2023 Housing Element. The General Plan estimates a population increase of more than 20,000, which is double the existing population. In addition, the 2013-2023 Housing Element indicates a need for 1,168 residential units. The City of Arvin, Lead Agency, considers the Project site to have development potential and proposes to change the land use designation and zone district to facilitate future higher density residential development.

The City is simultaneously proposing a General Plan Amendment and Development Code Text Amendment to modify the General Plan and Arvin Municipal Code (AMC) to 1) increase the maximum density range for the Medium Density Residential land use designation from 16 to 21 (current) to 16 to 24 (proposed) dwelling units per acre, (2) set the maximum density range for the R-3 –Limited Multiple Family Dwelling Zone District to 24 dwelling units per acre for a permitted density range of 16 to 24 dwelling units per acre, and to allow ministerial approval, based upon development standards and criteria, of multi-family residential development within specific zone districts. The proposed General Plan Amendment and Development Code Text Amendment are undergoing a separate CEQA analysis.

Although no physical development is proposed by the Project, the Initial Study analyzes the potential buildout of the Project site at a programmatic level, using reasonable assumptions so that future development of the site can tier from this Initial Study pursuant to CEQA Guidelines Section 15168(c)(1) and 15168(d) for evaluations of environmental issues associated with later activities/subsequent projects. However, depending on the final design of future physical development, additional project specific CEQA review may be required as determined by the City through the entitlement review and approval process.

For the purposes of the analysis contained in the Initial Study, the vision for the Project site is high density residential development containing multiple-family dwellings, whereby "multiple-family dwelling" is defined as "a building or portion thereof, designed for or occupied by three (3) or more families living independently of each other" pursuant to AMC Section 17.02.210. Therefore, the assumed "project" to be analyzed in this Initial Study is a multiple-family dwelling that is developed in accordance with the General Plan and AMC. Specifically, the assumed maximum density of the proposed Project is 24 dwelling units per acre, which is consistent with the modifications to the Medium Density Residential land use

designation under the proposed General Plan Amendment and the modifications to the R-3 zone district under the proposed Development Code Text Amendment. With this assumed maximum density, buildout of the Project site could yield a maximum of 212 multi-family residential units (calculation: 24 dwelling units per acre multiplied by 8.86 acres equals 212.64).

2.10 Project Setting and Surrounding Land Uses

Project Setting

The Project site as it currently exists is vacant with no onsite improvements or structures. Street frontage is limited to 4th Street; the southeastern portion of the site abuts 4th Street, a two (2)-lane local street that dead ends into the Project site. Street improvements on the developed portion of 4th Street include curb, gutter, and sidewalks. There are overhead utilities along the eastern portion of the Project site, in addition to an improved alleyway that provides access to adjoining properties. The topography of the site is generally flat. The existing biotic conditions of the Project site can be defined as fallow agricultural land that has undergone significant disturbance. There are no trees, shrubs, or water features present. The existing ground cover can be defined primarily as herbaceous, ruderal vegetation. Lastly, as shown in Table 2-1 there are three plugged oil and gas wells and one (1) active oil and gas well located onsite. [4] The active oil and gas well has been declared abandoned and is required to be capped.

Table 2-1 Well Sites Located on Project Site

Well Name	Well Number/Identifier	Well Operator	Status
H.S. Jewett	Well Number 2/API 0402914597	Woodward Petroleum	Plugged
H.S. Jewett	Well Number 3/API 0402914598	Sun Mountain Oil & Gas	Plugged
H.S. Jewett	Well Number 4/API 0402914599	Sequoia Exploration, Inc.	Plugged
H.S. Jewett	Well Number 3/API 0402914431	Sequoia Exploration, Inc.	Active

Surrounding Land Uses

The Project site is generally surrounded by a mix of commercial uses and public facilities. As referenced in Table 2-2, there are existing commercial and public facilities to the north, south, and east of the site. North Walnut Street abuts the site to the west. The properties to the north and south are planned for commercial uses, and the properties to the east are planned for public facilities, and properties to the west beyond North Walnut Street are planned for parks. Properties to the north and east are zoned for professional office uses; properties to the west beyond North Walnut Street are zoned for open space; and the property to the south is zoned for commercial uses with a Planned Unit Development zone district overlay.

[4] Geologic Energy Management Division (CalGEM). Well Finder. Accessed on September 12, 2022, https://www.conservation.ca.gov/calgem/Pages/WellFinder.aspx

Table 2-2 Existing Uses, General Plan Designations, and Zone Districts of Surrounding Properties

Direction from the Project site	Existing Land Use	Planned Land Use	Zone District
North	Water Reservoir Tank, Rehabilitation center (Windsor Post-Acute Center of Arvin)	General Commercial	C-O – Professional Office; MUO – Mixed Use Overlay
South	Commercial (Dollar Tree, DaVita Arvin Dialysis)	General Commercial	C-2 – Commercial; PUD – Planned Unit Development
East	Public Facilities (Arvin DMV, Arvin Community Services District, Kern County Fire Station 54)	Public Facilities	C-O – Professional Office
West	North Walnut Street; Park	Parks	O-S – Open Space

2.11 Required Project Approvals

In addition to the General Plan Amendment and Rezone, the City of Arvin requires the following review, permits, and/or approvals for future development of the Project site.

- Site Development Permit
- Conditional Use Permit
- Building Permit
- Grading Permit
- Construction Permit and Encroachment Permit
- Site Utilities Permit
- Oil and Gas Site Abandonment and Redevelopment (Demolition and Restoration Permit)

Other approvals not listed below may be required as identified through the entitlement process. In addition, other agencies may have the authority to issue permits prior to implementation.

- San Joaquin Valley Air Pollution Control District
- Kern County Public Health Services Department
- California Regional Water Quality Control Board

2.12 Technical Studies

The analysis of the Project throughout this Initial Study relied in part on the technical analyses listed below prepared for the Project, as well as other sources, including, but not limited to, City of Arvin General Plan updated as of 2019; Master Environmental Impact Report (MEIR) SCH No. 1987100504 (1988), the General Plan 2019 Update Initial Study/ Negative Declaration SCH No. 2012071044 (2012), City of Arvin Initial Study for Sphere of Influence Amendment (2018), Municipal Services Review, and Williamson Act Ordinance Negative Declaration SCH No. 2019011017 (2019). [5]

[5] A copy of each of these documents 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.

- Appendix A: CalEEMod Output Files
- Appendix B: Biological Resources Assessment
- Appendix C: CHRIS Record Search Result

2.13 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 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.

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.

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.

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:

Jeff Jones
Jeff Jones (Mar 29, 2023 17:14 PDT)

Jeffrey Jones, City Manager — Date
City of Arvin

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 traveler's enjoyment of the view. There are no officially designated State Scenic Highways in the city of Arvin, inclusive of the Project site. [6]

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 or Sphere of Influence. 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 site is an infill site within an area of the city that is predominately developed with commercial uses and public facilities. Although no specific project is currently proposed, future development of the Project site may 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

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

Plan, Arvin Municipal Code (AMC), and the most recently adopted California Codes. Compliance would ensure that future development of the Project site would not substantially degrade the existing visual character or quality of public views of the site and its surrounding, 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 project is currently proposed, future development of the Project site 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, Building Energy Efficiency Standards, 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 Monito-ring 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 site is located within the Arvin city limits and is proposed for urban uses. The Project site as it currently exists is vacant with no onsite improvements or structures. Topography of the site is generally flat. The existing biotic conditions of the Project site can be defined as fallow agricultural land that has undergone significant disturbance. There are no trees, shrubs, or water features present. The existing ground cover can be defined primarily as herbaceous, ruderal vegetation. The Project site 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."* [7] Maps are updated every two years. According to the FMMP, California Important Farmland Finder, the Project site and properties immediately adjacent to the west are classified as being "Vacant or Disturbed Land" and the properties to the north, east, and south of the site are classified as "Urban and Built-Up Land"[8]

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 site is not subject to the Williamson Act.

4.2.2 Impact Assessment

Would the project:

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

No Impact. According to the FMMP, the Project site is designated as "Vacant or Disturbed Land." As such, the Project site is not located on lands designated as "Prime Farmland," "Unique Farmland," or "Farmland of Statewide Importance." Therefore, the Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use and no impact would occur.

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

No Impact. The Project site 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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[7] California Department of Conservation. Important Farmland Categories. Accessed on September 12, 2022, https://www.conservation.ca.gov/dlrp/fmmp/Pages/Important-Farmland-Categories.aspx

[8] California Department of Conservation. (2018). California Important Farmland Finder. Accessed on September 12, 2022, https://maps.conservation.ca.gov/DLRP/CIFF/

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 site does is not planned or zoned for forest land or timberland. Further, the Project site 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 site 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?

No Impact. The Project site is planned for commercial uses and zoned for office uses and does not contain agricultural or forestry uses or resources. The Project is to amend the general plan land use diagram and rezone the project site for future higher density residential development. The properties immediately adjacent to the south and east of the Project site are planned and zoned for parks, and/or public facilities and do not contain agricultural or forestry uses or resources. According to the FMMP, California Important Farmland Finder, the Project site and properties immediately adjacent to the west are classified as being "Vacant or Disturbed Land" and the properties to the north, east, and south of the site are classified as "Urban and Built-Up Land" Therefore, future development of the Project site with urbanized uses would be generally compatible with the existing urban environment of the surrounding uses. 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, no 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. The 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 to human health and welfare. The thresholds of significance are summarized, as follows:

(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[9]

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

(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.[10] These project types are as follows:

[9] 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

[10] 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

- *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 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 circumstance, 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 the 8.86-acre project site that is developed to the maximum density of 24 dwelling units per acre, totaling 212 dwelling units.*

- *CalEEMod default factors with the exception of construction factors. Because the Project site is vacant with no improvements or structures, "demolition" was removed as a construction phase as demolition of existing structures would not be required.*

4.3.2 Impact Assessment

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. CalEEMod was used to determine the potential criterion pollutants for future development projects resulting from implementation of the Project (See CalEEMod Assumptions above). 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 2023	1.2832	1.1194	0.1372	0.2916	0.1513
Construction Year 2024	1.4544	1.0520	2.1269	0.1371	0.0672
Maximum Emissions	**1.4544**	**1.1194**	**2.1269**	**0.2916**	**0.1513**
Significant Threshold	100	10	10	15	15
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**

Source: *CalEEMod, Version 2020.4.0, ran on January 6, 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	1.6064	0.0974	1.0834	0.0151	0.0151
Energy	0.0628	0.1476	0.0173	0.0119	0.0119
Mobile	4.9569	0.9395	0.5260	1.2028	0.3291
Waste	-	-	-	0.0000	0.0000
Water	-	-	-	0.0000	0.0000
Total Operational Emissions	**6.6260**	**1.1845**	**1.6267**	**1.2299**	**0.3562**
Significant Threshold	100	10	10	15	15
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**

Source: *CalEEMod, Version 2020.4.0, ran on January 6, 2023*

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 includes a General Plan Amendment and Rezone to change the site's land use designation and zoning to Medium Density Residential and R-3 – Limited Multiple Family Dwelling Zone, respectively. The Medium Density Residential use designation and R-3 zone district 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 a 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 site. Thus, future development resulting from the implementation of the

Project that propose 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 resulting from Project implementation would be reviewed and conditioned 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.

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 individual's 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). The nearest receptors are single-family residences located immediately east and south of the site. As stated under criterion a) above, emissions during construction or operation would not reach the significance thresholds and would not be 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 any known sensitive receptor.

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. 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

None required.

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

A Biological Assessment was conducted for the Project by Argonaut Ecological, Inc., dated January 19, 2023, to provide a technical basis for this Initial Study. Findings are summarized and incorporated herein. The full Biological Assessment is provided in Appendix B.

- *The Study Area is historically non-native grassland and periodically disturbed.*
- *There are no wetlands or waters of the US/State within or adjacent to the Study Area.*
- *There are no sensitive biological resources present, or potentially present.*
- *There is no habitat suitable for special status species. There is also no nesting habitat for raptors.*
- *Development of the site for the proposed use will not result in any adverse biological impacts.*
- *No further biological studies are recommended.*

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.[11] The Project site is owned by the City of Arvin. A PG&E overhead line abuts the Project site to the north. Any development that impacts the PG&E overhead line 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.[12] 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.*

[11] 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
[12] 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

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.

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 site as it currently exists is vacant with no onsite improvements or structures. Street frontage is limited to 4th Street; the southeastern portion of the site abuts 4th Street, a two (2)-lane local street that dead ends into the Project site. Street improvements on the developed portion of 4th Street include curb, gutter, and sidewalks. There are overhead utilities along the eastern portion of the Project site, in addition to an improved alleyway that provides access to adjoining properties. Topography of the site is generally flat. The existing biotic conditions of the Project site can be defined as fallow agricultural land that has undergone significant disturbance and is not suitable to support habitat of special status species. There are no trees, shrubs, or water features present. The existing ground cover can be defined primarily as herbaceous, ruderal vegetation. Further, based on the analysis in the Biological Resources Assessment dated January 19, 2023, the site conditions provide low suitability for habitat for any candidate, sensitive, or special-status species that may occur on the Project site or within the Project Area. Therefore, the Project would not result in a substantial adverse effect on any candidate, sensitive, or special-status species. As a result, a less than significant impact would occur.

b) 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, and verified by the Biological Resources Assessment dated January 19, 2023, there are no known riparian habitats or other sensitive natural communities identified on the Project site or within the immediate vicinity of the Project. Further, the site consists of scant vegetation that is heavily impacted and 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. 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?

No 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.

As previously mentioned, the Project site does not contain habitat that could support wildlife species in nesting, foraging, or escaping from predators due to the site's heavy alteration and lack of cover, vegetation, or water features. Therefore, the Project would not interfere with wildlife movement and no impact would occur.

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 site and surrounding "Project Area" (i.e., 1/2-mile radius from perimeter of Project site). Results of the CHRIS Record Search were provided on August 29, 2022 (Record Search File Number 22-321) and November 28, 2022 (Record Search File Number 22-438). 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 no previous cultural resource studies conducted within the Project Area. There have been ten (10) additional cultural resource studies conducted within the one-half mile radius: KE-00285, 00297, 00411, 00690, 03101, 04013, 04079, 04489, 04959, 05040.

(2) There are no recorded resources within the Project Area, and it is not known if any exist there. There are seven (7) known resources within the one-half mile radius. These resources consist of historic single-family properties, trash scatters, trees, and roads, in addition to a row of palm trees and Highway 223.

(3) 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.

Further, the SJJIC provided the following comments and recommendations:

(1) Prior to any future development and ground disturbance activities, a qualified, professional consultant should conduct a field survey to determine if cultural resources are present.

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

California Native American Heritage Commission (NAHC)

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 and November 28, 2022, there are no local, state, or federal designated historical resources on the Project site. While there is no evidence that historical resources exist on the Project site, there is some possibility that hidden and buried resources may exist in the area with no surface evidence. As such, the Project would not cause a change to a historical resource pursuant to *Section 15064.5*. In the event of the accidental discovery and recognition of previously unknown resources before or during grading activities, the Project shall incorporate *Mitigation Measure CUL-1* to further assure construction activities do not result in significant impacts to any potential cultural resources discovered below ground surface. 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 would 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 and November 28, 2022, there is no evidence that archaeological resource of any type exists on the Project 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 cultural resources, the Project shall incorporate *Mitigation Measure CUL-1* as described in criterion a). As a result, the Project would have a less than significant impact with mitigation incorporated.

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

Less than Significant Impact with Mitigation Incorporated. There is no evidence that human remains exist on the Project 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. 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 for the impacts. To further assure 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 Checklist dated January 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.[13] 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.[14] 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.

[13] California Energy Commission. 2019 Building Energy Efficiency Standards. Accessed on September 12, 2022, https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency

[14] California Department of General Services. (2020). 2019 California Green Building Standards Code. Accessed on September 12, 2022, https://codes.iccsafe.org/content/CGBC2019P3

Lastly, the Energy Action Plan (EAP) for California was 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.[15]

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 identities 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.*

[15] State of California. (2008). Energy Action Plan 2008 Update. Accessed on September 14, 2022, https://docs.cpuc.ca.gov/word_pdf/REPORT/28715.pdf

4.6.2 Impact Assessment

Would the project:

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 through future construction and operations. Construction activities typically include site preparation, grading, paving, architectural coating, and trenching. Demolition would not be required because there are no existing structures. The primary source 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.

All construction equipment and operational activities 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 that include a broad set of energy conservation requirements (e.g., Lighting Power Density requirements). Compliance with such regulations would ensure that the short-term, temporary construction activities and long-term operational activities do not result in wasteful, inefficient, or unnecessary consumption of energy resources.

Energy outputs for short-term construction and long-term operations were estimated using CalEEMod (Appendix A) and Project assumptions. Traffic impacts related to vehicle trips were considered through a Vehicle Miles Traveled (VMT) analysis contained in Section 4.17. Results are summarized as follows.

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)[16]

Table 4-4 shows the estimated electricity and natural gas consumption for the Project based on output from CalEEMod. Development of the Project would consume less than one (1) percent of the total electricity use 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 rise a level of significance.

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

Table 4-4 Project Energy Consumption

Energy Consumption	Electricity (GWh per year)	Natural Gas (MMBtu per year)
Project	0.84157	3,203.12
Kern County	14,966.00000	65,163,441,106.00
Project Percentage (%)	**0.00562**	**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. 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 sediment layer in the Arvin area is approximately 4,800 ft. thick and consists of stratified sandstone, conglomerates, and shale.[17] 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. [18]A brief discussion of the likelihood of seismic activities to occur in or affect 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 site, has low seismic hazard potential. The nearest Alquist-Priolo Faults to the city of Arvin include the White Wolf Fault and Edison Fault, which are respectively located three (3) miles south and eight (8) miles north of Arvin. [19] With the proximity to these faults, the city is likely to experience hazards associating with faulting such as ground shaking.

Ground Shaking

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.[20] The HMP identified that the city has exposure to strong, very strong, and severe Modified Mercalli Intensity (MMI) classes. The Project site 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, and 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.[21]

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[17] City of Arvin. (2019) City of Arvin General Plan Update Safety Element. Accessed on August 23, 2022, https://arvin.org/DocumentCenter/View/180/February-2019-General-Plan-Part-1-of-3-PDF

[18] United States Department of Agriculture Natural Resources Conservation Service. Web Soil Survey. Accessed on November 15, 2022, https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

[19] California Department of Conservation. Alquist-Priolo Site Investigation Reports. Accessed on September 7, 2022, https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html

[20] Kern County Fire Department Office of Emergency Services. (2020). County of Kern Multi-Jurisdictional Hazard Mitigation Plan. Accessed on September 12, 2022, https://mitigatehazards.com/county-of-kern/kern-hmp-docs/

[21] California Geological Survey. Earthquake Hazards Zone Application. Accessed on September 7, 2022, 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 Arvin General Plan 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

Would the project:

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 site), 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 Project site is located in an area categorized with exposure to strong ground shaking per the Modified Mercalli Intensity (MMI) scale, which could cause slight damage in buildings such as fallen plaster.[22] 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 Project site is not within or near a liquefaction zone identified by the California Geological Survey. There are also no geologic hazards or unstable soil conditions known to exist on the Project site. The site is relatively flat with stable soils and no apparent unique or significant landforms. 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. Lastly, 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?*

No Impact. The topography of the Project site is relatively flat with stable, native soils, and the site is not in the immediate vicinity of rivers or creeks that would be more susceptible to landslides. In addition, the Project does not have any aspect that could result in landslides. Therefore, no impact would occur because 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 in the city 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 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.

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

[22] U.S. Geological Survey. The Modified Mercalli Intensity Scale. Accessed on September 8, 2022, https://www.usgs.gov/programs/earthquake-hazards/modified-mercalli-intensity-scale

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 three (3) existing oil/gas well (well numbers 2, 3, and 4) that are plugged, meaning that the well is filled with cement and abandoned and thus, all oil or natural gas extraction has ceased. There is also one (1) existing active well (API 0402914431) that has been abandoned and is required to be capped. [23]

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?*

[23] California Department of Conservation Geologic Energy Management Division. Well Finder. Accessed on September 8, 2022, https://maps.conservation.ca.gov/doggr/wellfinder/#openModal/-118.94276/37.10257/6

No Impact. The Project site is within city limits and thus, will be required to connect to City wastewater services. Thus, no septic tanks or alternative wastewater disposal systems would be installed, and no impact would occur because of the Project.

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. In addition, the Project site is previously disturbed with construction. 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 Error! Reference source not found.. Therefore, if any paleontological resources or g eologic 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

Various gases in the Earth's atmosphere, classified as atmospheric greenhouse gases (GHGs), play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere from space, and a portion of the radiation is absorbed by the Earth's surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation.

Naturally occurring greenhouse gases include water vapor (H_2O), carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3). Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also GHGs, but they are, for the most part, solely a product of industrial activities. Although the direct greenhouse gases CO_2, CH_4, and N_2O occur naturally in the atmosphere, human activities have changed their atmospheric concentrations. From the pre-industrial era (i.e., ending about 1750) to 2011, concentrations of these three GHGs have increased globally by 40, 150, and 20 percent, respectively (Intergovernmental Panel on Climate Change [IPCC], 2013).

GHGs, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), ozone (O_3), water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs).

The emissions from a single project will not cause global climate change, however, GHG emissions from multiple projects throughout the world could result in a cumulative impact with respect to global climate change. Therefore, the analysis of GHGs and climate change presented in this section is presented in terms of the proposed project's contribution to cumulative impacts and potential to result in cumulatively considerable impacts related to GHGs and climate change.

Cumulative impacts are the collective impacts of one or more past, present, and future projects that, when combined, result in adverse changes to the environment. In determining the significance of a proposed project's contribution to anticipated adverse future conditions, a lead agency should generally undertake a two-step analysis. The first question is whether the combined effects from both the

proposed project and other projects would be cumulatively significant. If the agency answers this inquiry in the affirmative, the second question is whether "the proposed project's incremental effects are cumulatively considerable" and thus significant in and of themselves.

The cumulative project list for this issue (climate change) comprises anthropogenic (i.e., human made) GHG emissions sources across the globe and no project alone would reasonably be expected to contribute to a noticeable incremental change to the global climate. However, legislation and executive orders on the subject of climate change in California have established a statewide context and process for developing an enforceable statewide cap on GHG emissions. Given the nature of environmental consequences from GHGs and global climate change, CEQA requires that lead agencies consider evaluating the cumulative impacts of GHGs. Small contributions to this cumulative impact (from which significant effects are occurring and are expected to worsen over time) may be potentially considerable and, therefore, significant.

Executive Order S-3-05

California adopted EO B-3-05 on June 1, 2005, which established an emissions reduction to 80 percent below 1990 levels by 2030.

Executive Order B-30-15

California adopted EO B-30-15 on April 29, 2015, which established an emissions reduction to 40 percent below 1990 levels by 2030.

Thresholds of Significance

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.*

The California Air Resources Board (CARB) 2017 Climate Change Scoping Plan, guidance from the SJVAPCD, and SJVAPCD Climate Change Action Plan are discussed below and are utilized as thresholds of significance.

2017 Climate Change Scoping Plan

The CARB 2017 Scoping Plan is the adopted statewide plan for reduction or mitigation of GHGs to implement State Bill (SB) 32. SB 32 was issued in 2016 to lay emission reduction goals beyond AB 32's goal by 2020. It sets a statewide goal to reduce emissions 40% below 1990 levels by 2030. Consequently, the Scoping Plan involves several measures to reduce pollution and GHG emissions, indicating a decrease of GHG emissions to 389 million metric tons (MMT) of $CO2_e$ by 2030.

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. [24,25] 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 4-1, 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.

(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 the 8.25-acre project site that is developed to the maximum density of 24 dwelling units per acre, totaling 212 dwelling units.*
- *CalEEMod default factors with the exception of construction factors. Because the Project site is vacant with no improvements or structures, "demolition" was removed as a construction phase as demolition of existing structures would not be required.*

[24] 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 September 12, 2022, http://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf

[25] San Joaquin Valley Air Pollution Control District. (2000). Environmental Review Guidelines: Procedures for Implementing the California Environmental Quality Act. Accessed September 12, 2022, http://www.valleyair.org/transportation/CEQA%20Rules/ERG%20Adopted%20_August%202000_.pdf

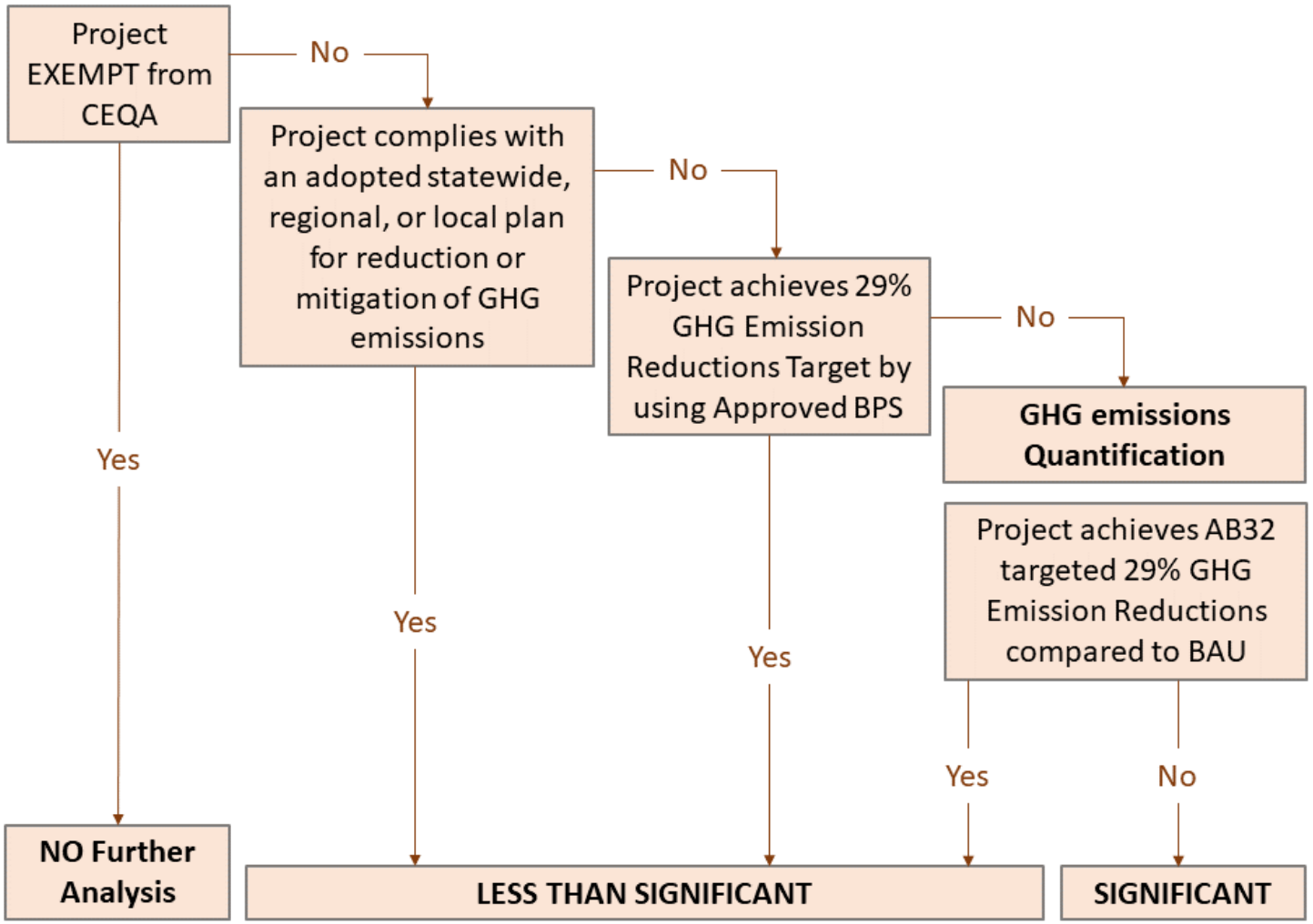

Figure 4-1 SJVAPCD's GHG Thresholds of Significance

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 Arvin General Plan Land Use Element and Air Quality Element 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 Arvin'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 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

Would the project:

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 4-1). 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 is used to determine whether the Project would 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 266.5439 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 the 10,000 MTCO2e would have a less than significant cumulative impact on GHGs. As shown in Table 4-5, the annual operational GHG emissions associated with buildout of the Project would be 1,582.6197 $MTCO_2e$. This is less than the 10,000 $MTCO_2e$ threshold of the SCAQMD.

Table 4-5 Project Greenhouse Gas Emissions (Metric Tons Per Year)

	Total CO_2	CH_4	N_2O	CO_2e
Construction				
Construction, Unmitigated (max)	263.6727	0.0437	0.00597	266.5439
Operational				
Operational, Unmitigated (total)	1,516.3180	1.6995	0.0799	1,582.6197

Source: *CalEEMod, Version 2020.4.0, ran on January 6, 2023*

Further, the Project would not exceed the thresholds of significance for construction or operation emissions as discussed in Section 4.3. 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 2017 Scoping Plan and the SJVAPCD's CCAP is evaluated below.

Consistency with the 2017 Climate Change Scoping Plan

Based on the evaluation shown in Table 4-6, the Project is consistent with the reduction measures identified in the 2017 Scoping Plan.

Table 4-6 Scoping Plan Reduction Measures Consistency Analysis

Reduction Measure	Measure Description	Consistency/Applicability Determination
SB 350 Renewable Portfolio Standard	Statewide requirement to increase the renewable energy mix from 33% in 2020 to 50% in 2030. Renewable energy sources include (but are not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and	**Consistent.** Future development resulting from the Project will receive electricity from PG&E, which is subject to the SB 350 Renewable Portfolio Standard. Additionally, future development would be required to meet the State Building Energy Efficiency Standards (Title 24,

	landfill gas.	Parts 6 and 11).
Low Carbon Fuel Standard	Requires fuel providers to meet an 18 percent reduction in carbon content by 2030.	**Not Applicable.** This measure is a statewide measure that is not implemented by a project applicant or lead agency. Therefore, the measure is not applicable to the proposed project. However, when the measure is initiated, it would be applicable to vehicles that would access the Project site.
Mobile Source Strategy (Cleaner Technology and Fuels [CTF] Scenario)	Vehicle manufacturers will be required to meet existing regulations mandated by the LEV III and Heavy-Duty Vehicle programs. The strategy includes a goal of having 4.2 million ZEVs on the road by 2030 and increasing numbers of ZEV trucks and buses.	**Not Applicable.** This measure does not have requirements that directly apply to development projects. Therefore, the measure is not applicable to the proposed project. However, the Project would not conflict or obstruct this reduction measure.
SB 1383 Short-Lived Climate Pollutant (SLCP) Reduction Strategy	The strategy requires the reduction of methane and hydrofluorocarbon (HFC) emissions by 40 percent from 2013 levels by 2030 and the reduction of black carbon by 50 percent from 2013 levels by 2030.	**Not Applicable.** Black carbon is created from the burning of fuels such as coal, diesel, and biomass. Although no specific development project is currently proposed, heavy industrial uses are not allowed in the proposed land use designation or zone district and thus, future uses are not anticipated to emit black carbon from diesel heavy duty truck trips. Therefore, the measure is not applicable to the proposed project.
SB 375 Sustainable Communities Strategies	The strategy requires Regional Transportation Plans (RTPs) to include a sustainable communities' strategy for reduction of per capita vehicle miles traveled.	**Not Applicable.** This measure is implemented at the regional level. KCOG RTP/SCS include policies to reduce VMT per capita per SB 32, SB 375, and AB 32. The Project would not conflict or obstruct reduction measures identified in the plan.
Post-2020 Cap-and-Trade Program	This Program is to continue the existing Cap-and-Trade Program. The Program applies to large industrial sources such as power plants, refineries, and cement manufacturers.	**Not Applicable.** Although no specific development project is currently proposed, heavy industrial uses are not allowed in the proposed land use designation or zone district. Therefore, the measure is not applicable to the proposed project.

Consistency with the SJVAPCD Climate Change Action Plan

Maximum annual construction emissions of GHG associated with development of the Project are estimated to be 266.5439 $MTCO_2e$ and annual operational GHG emissions associated with buildout of the Project would be 1,582.6197 $MTCO_2e$, 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

In reviewing the General Plan goals and policies on GHG reduction, most policies are to be implemented by the City and does not apply to individual development projects. Future development under the proposed Project would allow 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 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 HAZARDS 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 by various commercial and

industrial activities. Hazardous wastes are injurious substances that have been or will be disposed. 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 wastes. 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." A 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)[26], California Department of Toxic Substance Control's EnviroStor database[27], and the State Water Resources Control Board's GeoTracker database[28] include hazardous release and contamination sites. A

[26] United States Environmental Protection Agency. Superfund National Priorities List. Accessed August 23, 2022 https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=33cebcdfdd1b4c3a8b51d416956c41f1
[27] California Department of Toxic Substances Control. Envirostor. Accessed August 23, 2022, https://www.envirostor.dtsc.ca.gov/public/
[28] California State Water Resources Control Board. GeoTracker. Accessed August 23, 2022, https://geotracker.waterboards.ca.gov/

search of each database was conducted on September 8, 2022. The searches identified no hazardous material release sites on the Project site. The closest hazardous sites are as shown in Table 4-7.

Table 4-7 Hazardous Sites

Site Name	Site Type	Cleanup Status	Distance from Project site
Arvin Muffler (T0602900511)	LUST Cleanup Site	Completed – case closed as of 6/9/2022	1,770 feet southeast
Proposed Kern Community College District (60002872)	Voluntary Agreement	Refer other agency as of 9/24/2019 *	1,190 feet north

**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.[29] The County serves as the lead agency for coordination among jurisdictions.

General Plan

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.*
>
> ***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.*

[29] 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-4.9: 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 reabandonment 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

Would the project:

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, and 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 site include one (1) existing school, Grimmway Academy (0.13 miles southeast), and one (1) proposed community college (0.19 miles north). As described under criteria a) and b) above, the Project is not anticipated to emit hazard emissions or handle hazardous materials, substances, or waste 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 Impact with Mitigation Incorporated. According to EnviroStor and GeoTracker, the Project site is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code *Section 65962.5*. However, 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 site would not be located on a hazardous materials site, the Project shall incorporate *Mitigation Measure HAZ-1* and *HAZ-2*, requiring a Phase I Environmental Site Assessment (ESA) and soil testing prior to future entitlement approval. 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). Incorporation of *Mitigation Measures HAZ-1 and HAZ-2*, 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.

> ***Mitigation Measure HAZ-1:*** *For all projects proposing residential development, a Phase I Environmental Site Assessment (ESA) is required prior to project approval.*
>
> ***Mitigation Measure HAZ-2:*** *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.*

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 site. The nearest public airport is the Creekside Airport, approximately 5.5 miles southwest. Since the Project site 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 new or altered infrastructure associated with evacuation, emergency response, and emergency access routes within the City or County. Although no development is currently proposed, future development resulting from Project implementation would involve construction. Construction may require lane closures on 4th Street or North Walnut Street. However, construction would be short-term and access through both roadways would be maintained through standard traffic control as required by an encroachment permit. 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 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 Fire Hazard Severity Zone (FHSZ). As Project implementation results in future development of the site, the construction of structures and installation of new infrastructure would be reviewed and conditioned by the City for compliance with applicable standards, specifications, and code. In addition, construction of structures that would be occupied by humans would be required to be constructed in adherence to the Wildland Urban Interface Codes and Standards of the California Building Code Chapter 7A. Compliance with such 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 January 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 site is within city limits and thus, will be required to connect to the city's water and stormwater services. The city's water and 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 from the Tulare Lake groundwater basin as a retailer. ACSD relies wholly on groundwater. 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 the management of the groundwater recharge basin.

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).[30] 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 new and depths are well below the groundwater levels. To ensure that wells are sufficiently deep, the ACSD and AEWSD entered into 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 of Arvin 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).[31] The Storm Drainage Master Plan ensures that proper drainage infrastructure is in place to accommodate atypical storm periods. The Storm Drainage Master Plan finds the existing storm drainage collection and retention systems to be adequate with the exception of 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 provides recommended master planned facilities for future development whereby developers would be responsible to provide all necessary collection 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.

[30] 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.
[31] 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

Would the project:

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. Because the Project site is greater than one (1) acre in size, the future developer would be required to prepare a SWPPP (Section 4.7) 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 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. These provisions minimize the potential for the Project to violate any waste discharge requirements or otherwise substantially degrade surface or ground water quality. Further, runoff resulting from the Project would be managed in compliance with approved grading and drainage plans. Thus, compliance with regulations including the General Construction Permit, BMPs, and approved grading and drainage plans 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 Amendment and Rezone in order to increase opportunities for higher density, multi-family residential development. The Project site is currently designated for public facilities but is within the MUO Zone District, which allows for up to 24 dwelling units per acre. Although no physical development is proposed, future development of the Project site would still result in residential uses that would generally be compatible with the existing and planned uses within the Project area.

At the maximum permitted density, development of the Project site under the proposed land use and zoning designation could yield up to 212 multi-family residential units compared to 212 multi-family residential units which would otherwise be permitted under the current MUO Zone District. Therefore, no change in intensity would occur because of the Project. Based on the information collected from the 2020 UWMP, it can be presumed that the existing and planned water distribution system and supplies 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.

In addition, adherence to connection requirements and recommendations pursuant to the City's and ACSD's water conservation efforts (e.g., compliance with California Plumbing Code, efficient appliances, efficient landscaping, etc.) should not negatively impact water supply or impede water management. For these reasons, 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:

i. 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 suppress aquatic vegetation growth.

Although no development is currently proposed, implementation of the Project would result in the future development of the Project site. Future development would develop fallow agricultural land that has undergone significant disturbance. Bare soils, common within agricultural land, are more susceptible to erosion than an already developed urban land, thus it is expected erosion could occur on-site. During construction activities, and in compliance with the Project's SWPPP, 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 site would increase impervious surfaces through grading and surfacing. 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 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.

ii. 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 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.

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?

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 facilities are required, then the size and capacity of such facilities would be determined

through the review and conditioning of the future development. Further, grading and drainage plans for the 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.

iv. 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.

d) 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 site and its vicinity. However, the Project site is designated as Zone AO on the most recent Flood Insurance Rate Map (FIRM) No. 06029C2775E dated September 26, 2008. 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 development in the floodplain is required to comply with AMC *Section 15.32 Floodplain Management*, which establishes 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 a less than significant impact would occur because of the Project.

e) 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).[32] 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

[32] Arvin Community Services District (2022). Arvin Community Services District Board of Directors Special Meeting Agenda. Accessed on August 31, 2022, https://www.arvincsd.com/files/609a67f8a/Draft+SOKR+GSP+for+Public+Comment_06.13.2022.pdf

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 site is within the city limits of Arvin and is proposed for High Density Residential Development.

4.11.2 Impact Assessment

Would the project:

a) Physically divide an established community?

Less than Significant 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.).

Surrounding Land Uses

The properties to the north and east are zoned for professional office uses; and the property to the south is zoned for commercial uses. The properties to the north are also within the MUO Zone District, which permits a mix of residential and commercial uses. The Project includes a General Plan Amendment that proposes a change to the site's land use designation from Public Facilities to High Density Residential and a Rezone that proposes the site to be rezoned from C-O Professional Office/MUO – Mixed Use Overlay to R-3 Limited Multiple-Family Dwelling Zone District consistent with the proposed land use designation. Although no physical development is proposed, future development of the Project site would still result in uses that would generally be compatible with the existing and planned uses within the Project area.

Circulation System

The southeastern portion of the Project site abuts 4th Street, a two (2)-lane local street that dead ends into the Project site. Street improvements on the developed portion of 4th Street include curb, gutter, and sidewalks. There is an improved alleyway along the eastern portion of the site that provides access to adjoining properties. While no development is proposed, implementation of the Project would result in future development of the Project site with residential uses. Future development would be accessible by

4th Street and may be subject to additional frontage improvements as required for accessibility and connectivity to the existing circulation system. Development of the Project site would likely require extension of 4th Street to connect to North Walnut Drive, thereby connecting Campus Drive and North Walnut Drive. The roadway extension would not constitute a physical barrier as it would result in an improvement to the circulation system for the surrounding area. Overall, future development of the site would continue to be served by the existing circulation system and related infrastructure; and, the Project would not result in the introduction of new, intersecting roadways or permanent roadway closures.

Utility Infrastructure

Since the Project site is within the city limits, future development resulting from Project implementation would be required to connect to the city's water, sewer, stormwater, and wastewater services. Natural gas, electricity, and telecommunications are provided by private companies. Utility systems are described and analyzed in Section 4.10 and Section 4.15. Based on the analysis, implementation of the Project would not result in the construction of new, major utility infrastructure.

As such, the Project does not represent a significant change in the surrounding area as it would facilitate the future development a vacant and undeveloped site with residential uses that are consistent and compatible with existing uses surrounding the Project site. In addition, the Project does not include new, intersecting roadways or permanent roadway closure, or major utility infrastructure. For these reasons, the Project would not result in the physical divide of an established community and would thereby have a less than significant 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 and Rezone in order to increase opportunities for higher density, multi-family residential development. The Project site is currently designated for public facilities as well as mixed uses and although no physical development is proposed, future development of the Project site would still result in residential uses that would generally be compatible with the existing and planned uses within the Project area. A discussion of land use policies that are applicable to the Project are included in Table 4-8. As discussed below, the Project is generally consistent with the proposed General Plan land use designation of High Density Residential.

Table 4-8 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.*	**Consistent.** The Project site is an infill site that is located in the targeted area identified as "Jewitt Square," which is an approximately 58-acre area bounded generally by Bear Mountain Boulevard, Campus Drive, and Varsity Road. By integrating commercial, residential and educational uses, the City intends for this area to function as an attractive, walkable neighborhood that will be conveniently located near the Arvin High School and Grimmway Charter Academy, Kern Community College, as well as the existing commercial corridor on Bear

	Mountain Boulevard and public facilities. Development of the site with residential uses that would be consistent with the land use policy.

Further, through the entitlement process, future development of the Project site would be 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, AMC, and any other applicable policies and regulations. 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.[33] A record search of the California Geologic Energy Management Division (CalGEM) Well Finder shows that the Project Area is within a CalGEM-recognized oilfield.[34] As shown in Table 2-1 there are three plugged oil and gas wells and one (1) active oil and gas well located onsite. The active oil and gas well was declared abandoned and is required to be capped.

4.12.2 Impact Assessment

Would the project:

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 three (3) plugged and one (1) active gas and oil well on-site that has been abandoned and is required to be capped. While no development is currently proposed with the Project, future development of the Project site would be subject to AMC

[33] California Department of Conservation. (2009). Mineral Lands Classification. Accessed on September 1, 2022, https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc
[34] Geologic Energy Management Division (CalGEM). Well Finder. Accessed on September 12, 2022, https://www.conservation.ca.gov/calgem/Pages/WellFinder.aspx

Section 17.46.11 Facility closure, site abandonment, and site restoration procedures, 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. Because the well is currently plugged and does not produce oil or gas, development of the Project site would not result in the loss of availability of known oil and gas resources. Therefore, 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 site 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 General Plan Noise Element and Arvin Municipal Code (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

Would the project:

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 Impact with Mitigation Incorporated. In general, the Project site is an infill site within an area of the city that is predominantly developed with commercial and public facilities uses. Because the surrounding area is largely developed, there are existing temporary or permanent ambient noise sources typical of commercial and public facilities uses. While no development is currently proposed, implementation of the Project would result in the future development of the Project site 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.*
- *During construction, stockpiling and vehicle staging areas shall be located as far as practical from noise-sensitive receptors.*

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

Less than Significant Impact with Mitigation Incorporated. While no development is currently proposed, implementation of the Project would result in future development that would require construction. Groundborne vibration or groundborne noise levels may result from certain construction activities depending on the use of equipment (e.g., pile drivers, bulldozers, jackhammers, etc.), distance to affected

structures, and soil type. There are seven (7) single-family residences adjacent to the Project site. Future operations are not expected to generate groundborne vibration or groundborne noise levels due to the nature of the use (i.e., residential). 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 5.5 miles southwest. The Project site 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 Program dated January 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 the 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

Would the project:

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. The Project includes a General Plan Amendment and Rezone in order to increase opportunities for higher density, multi-family residential development in response to the estimated population growth and projected housing needs documented in the Arvin General Plan and 2021-2023 Housing Element. The General Plan estimates a population increase of more than 20,000, which is double the existing population. In addition, the 2013-2023 Housing Element indicates a need for 1,168 residential units. The Project site is currently designated for public facilities and mixed uses and although no physical development is proposed, future development of the Project site would still result in residential and/or mixed uses that would generally be consistent with the existing and planned uses

within the Project area. In addition, the Project site is an infill site within an area of the city that is predominately developed and would not require the extension of roads or other infrastructure.

At the maximum permitted density, development of the Project site under the proposed land use and zoning designation could yield up to 212 multi-family residential units compared to 212 multi-family units which would otherwise be permitted under the current MUO Zone District which would otherwise be permitted under the current MUO Zone District. Therefore, no change in intensity would occur because of the Project. As such, it can be determined that the proposed Project would not induce substantial unplanned population growth in an area, either directly or indirectly, and a less than significant impact would occur because of the Project.

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

No Impact. The Project site is currently vacant with no improvements or structures. Since the site does not currently provide housing, development of the Project site would not result in the physical displacement of people or housing. No impact would occur because of the Project.

4.14.3 Mitigation Measures

None required.

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 provided 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

Would the project:

a) *Would the 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'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 managing 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 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

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).

General Plan

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.

4.16.2 Impact Assessment

Would the project:

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 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.

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. In such cases, development would be 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

The southeastern portion of the site abuts 4th Street, a two (2)-lane local street that dead ends into the Project site. Street improvements on the developed portion of 4th Street include curb, gutter, and sidewalks. There is an improved alleyway along the eastern portion of the site that provides access to adjoining properties.

General Plan

No other roadway improvements for 4th Street are identified by the General Plan Circulation Element.

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.[35] The City of Arvin was identified as a "focus area" community with city-specific recommendations. No specific recommendations for 4th Street are identified in the Active Transportation Plan.

[35] 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

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.[36] As identified in Figure 1: Recommendations Map of the Plan, there are recommendations specific to 4th Street in the vicinity of the Project site: 1) crossing improvement and 2) signal or beacon. 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*

[36] City of Arvin. (2020). Complete Streets and Safe Routes to School Plan. Accessed on September 9, 2022, https://www.arvin.org/DocumentCenter/View/188/Complete-Streets-and-Safe-Routes-to-School-Plan-PDF

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).

4.17.2 Impact Assessment

Would the project:

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

Less than Significant Impact. 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. And, while CEQA Guidelines no longer use motorist delays or level of service to measure transportation impacts, future development of the Project site would be subject to the LOS-related General Plan Policy, "the City shall establish a level of service standard of "D" or better for all roadways and intersections for traffic analysis purposes." Therefore, through compliance with the programs, plans, ordinances, and policies addressing the circulation system (inclusive of transit, roadway, bicycle, and pedestrian facilities), a less than significant impact would occur because of the Project.

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. Therefore, since quantitative models or methods are not available to the City to estimate the VMT for the Project being considered, a qualitative analysis was conducted pursuant to provisions of CEQA Guidelines Section 15064.3(b)(3). In particular, the qualitative analysis considers the potential for the Project to result in higher density residential development in an infill location, with the possibility for affordable housing. Overall, the qualitative analysis indicates that the Project 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 Project 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 and property owner, considers the Project site to have development potential and proposes to change the land use designation and zone district to facilitate future higher density residential development in an infill location. In particular, the Project site is within the proposed "Arvin Town Center Master Plan" area which integrates a variety of land uses including but not limited to educational, commercial, open space, and residential uses. In the Master Plan, the Project site is identified for future affordable housing development. Furthermore, the City has received approximately $5.6 million through the Regional Early Action Planning (REAP) 2.0 program for the purposes of pre-development activities, studies, land acquisition, and entitlements for the Master Plan thereby demonstrating the City's commitment and high likelihood for the site to be developed with affordable housing. As an affordable housing development in an infill location, future development resulting from implementation of the Project would be presumed to have a less than significant impact to VMT.

If the Project 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 as identified in the proposed Arvin Town Center Master Plan. As shown in the proposed Master Plan, the Project site would be within 300 feet of a proposed shopping center, community park, and Bakersfield College Campus. In addition, approximately 0.5 miles of new bicycle and pedestrian facilities, a zero-emission transportation hub and City of Arvin bus stop, and solar covered community parking lot with van pooling and electric vehicle charging hub are also proposed within 300 feet of the Project site. Therefore, through facilitating future residential development in an infill location, 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

None required.

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 Impact 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 for 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 Impact with Mitigation Incorporated. The 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 for 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 Project shall implement and incorporate the Tribal Cultural Resources related mitigation measures as identified in the Mitigation Monitoring and Reporting Program dated January 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, wastewater, and stormwater 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 Error! Reference source not found..

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 Arvin General Plan Update IS/MND, 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 purposes. 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 City of Atwater Sewer System Master Plan (SSMP) (2019 Update) outlines the practices, systems, procedures, and data for effective management of the City's wastewater collection system. [37]

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 933707 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.

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.*

[37] 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

> ***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 Error! Reference source not found..

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 are. 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, the site would be connected to existing broadband infrastructure and subject to applicable connection and service fees.

4.19.2 Impact Assessment

Would the project:

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 Impact. The Project site is within city limits and thus, future development of the Project site would be required to connect to water, stormwater, solid waste, and wastewater services. Natural gas, electricity, and telecommunications would be provided by private companies. In general, the Project site is an infill site within an area of the city that is predominately developed with residential and agricultural uses. Because the surrounding area is largely developed, there is existing utility infrastructure available to serve the site 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. Through the entitlement review process for future development, the City and responsible agencies would review the Project to ensure 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. The Project includes a General Plan Amendment and Rezone in order to increase opportunities for higher density, multi-family residential development. The Project site is currently designated for public facilities but is within the MUO Zone District, which allows for up to 24 dwelling units per acre. Although no physical development is proposed, future development of the

Project site would still result in residential uses that would generally be compatible with the existing and planned uses within the Project area.

At the maximum permitted density, development of the Project site under the proposed land use and zoning designation could yield up to 212 multi-family residential units compared to 212 multi-family units which would otherwise be permitted under the current MUO Zone District. Based on the information collected from the 2020 UWMP, it can be presumed that the existing and planned water distribution system and supplies should be adequate to serve future development that results from implementation of the Project and reasonably foreseeable future development during normal, dry, and multiple dry years because a no net increase in potential residential units does not constitute greater water demand.

In addition, adherence to connection requirements and recommendations pursuant to the City's and ACSD's water conservation efforts (e.g., compliance with California Plumbing Code, efficient appliances, efficient landscaping, etc.) should not negatively impact water supply or impede water management. For these reasons, it can be concluded that the Project would not affect water supplies and therefore, the City would continue to have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years. For these reasons, a less than significant impact would occur because of the 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. Although no development is currently proposed, future development that results from the implementation of the Project would generate wastewater. As stated in the General Plan, the City's existing wastewater system has adequate capacity for built out of the General Plan, and the city is largely developed with sewer lines that connect to the wastewater system. The General Plan further indicates that all future housing developments could be adequately connected to the existing wastewater system using funds collected through development fees currently established by the City. As such, future residential development that results from the implementation of the Project would be reviewed and conditioned by the City during the entitlement review process to ensure adequate connections. For these reasons, it can be determined that the City has adequate capacity to serve the Project's projected demand in addition to the city's existing commitments, and 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. Although no development is currently proposed, future development that results from the implementation of the Project would generate solid waste and recycling. The future development would be served by Mountainside Disposal. Waste would be disposed at the Bakersfield Metropolitan Landfill, or Bena Landfill, which has a current capacity of 20.7 million tons. Through the entitlement review process, future development would be required to comply with requirements outlined in AMC *Section 8.08 – Garbage and Solid Waste*. Compliance with these requirements would ensure regular collection and recycling of materials based on the capacity of local infrastructure. Through

compliance, future development would not 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. For these reasons, the Project would have a less than significant impact.

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

Less than Significant Impact. As described under criterion e), future development would be required to comply with state and local standards which include management and reduction statutes and regulations to ensure that solid waste is handled, transported, and disposed of accordingly. Through compliance with local and state standards, it can be determined that future development would also comply with federal, state, and local management and reduction statutes and regulations related to solid waste. As a result, a less than significant impact would occur because of the Project.

4.19.3 Mitigation Measures

None required.

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 site, is within an "area of local responsibility" that is an area of low fire risk.[38]

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?

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

No Impact. To determine adequate vehicular and pedestrian circulation and emergency vehicle access, future development of the Project site would be reviewed and conditioned by the City 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 site 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 site would reduce fire risk due to increase paved 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 site is located within city limits. As such, surrounding sites are served by existing infrastructure such as roads and utilities. As Project implementation results in future development of the site, 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.

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 site 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

Would the project:

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 General Plan Amendment No. 2023-01 and Rezone No. 2023-01 for 4th Street and Campus Drive (Project) JANUARY 2023				
Mitigation Measures	Timing of Verification	Compliance Verified By	Verification of Completion	
			Date	Initials
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.* *c. Mitigation for Discovered Cultural Resources. If the professional*	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 submit to the Planning Division. Timing for recommendations	Planning Division		

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.*	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*	The Planning Division to review specifications to ensure inclusion of provisions in project-specific mitigation	Planning Division		

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.	measure.			
Hazards and Hazardous Material				
Mitigation Measure HAZ-1: *For all projects proposing residential development, a Phase I Environmental Site Assessment (ESA) is required prior to project approval.*	To be completed prior to approval of entitlements. Depending on results, a Phase II assessment may be required.	Planning Division		
Mitigation Measure HAZ-2: *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		
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
Biological Resources Assessment		
Biological Assessment	Argonaut Ecological, Inc. (916) 803-1454	Kathy Kinsland, CISEC, QSP, TOR-QISP, Owner/ Senior Scientist

7 APPENDICIES

7.1 Appendix A: CalEEMod Output Files

Prepared by Precision Civil Engineering dated January 6, 2023.

Campus Drive and Grapevine Drive General Plan Amendment and Rezone - San Joaquin Valley Air Basin, Annual

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

Campus Drive and Grapevine Drive General Plan Amendment and Rezone

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	248.00	Dwelling Unit	8.25	248,000.00	709

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	7			**Operational Year**	2026
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 - Project site is 8.25 acres

Mobile Land Use Mitigation -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	6.53	8.25
tblWoodstoves	NumberCatalytic	8.25	0.00
tblWoodstoves	NumberNoncatalytic	8.25	0.00

2.0 Emissions Summary

Campus Drive and Grapevine Drive General Plan Amendment and Rezone - 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

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	0.2675	2.1025	2.6333	5.6100e-003	0.3429	0.0896	0.4325	0.1314	0.0839	0.2153	0.0000	499.2122	499.2122	0.0852	0.0115	504.7719
2025	2.3568	0.2237	0.3571	6.9000e-004	0.0186	9.6000e-003	0.0282	4.9700e-003	8.9700e-003	0.0140	0.0000	61.0463	61.0463	0.0119	1.0200e-003	61.6476
Maximum	**2.3568**	**2.1025**	**2.6333**	**5.6100e-003**	**0.3429**	**0.0896**	**0.4325**	**0.1314**	**0.0839**	**0.2153**	**0.0000**	**499.2122**	**499.2122**	**0.0852**	**0.0115**	**504.7719**

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	0.2675	2.1025	2.6333	5.6100e-003	0.3429	0.0896	0.4325	0.1314	0.0839	0.2153	0.0000	499.2118	499.2118	0.0852	0.0115	504.7715
2025	2.3568	0.2237	0.3571	6.9000e-004	0.0186	9.6000e-003	0.0282	4.9700e-003	8.9700e-003	0.0140	0.0000	61.0462	61.0462	0.0119	1.0200e-003	61.6476
Maximum	**2.3568**	**2.1025**	**2.6333**	**5.6100e-003**	**0.3429**	**0.0896**	**0.4325**	**0.1314**	**0.0839**	**0.2153**	**0.0000**	**499.2118**	**499.2118**	**0.0852**	**0.0115**	**504.7715**

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	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**	0.6929	0.6929
2	**4-1-2024**	**6-30-2024**	0.5523	0.5523
3	**7-1-2024**	**9-30-2024**	0.5584	0.5584
4	**10-1-2024**	**12-31-2024**	0.5608	0.5608
5	**1-1-2025**	**3-31-2025**	2.5745	2.5745
		Highest	2.5745	2.5745

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	1.2674	0.1140	1.8792	6.9000e-004		0.0177	0.0177		0.0177	0.0177	0.0000	110.4434	110.4434	4.9400e-003	1.9700e-003	111.1538
Energy	0.0202	0.1727	0.0735	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	291.0438	291.0438	0.0186	5.4500e-003	293.1328
Mobile	0.5870	1.0437	5.5459	0.0136	1.3942	0.0121	1.4063	0.3731	0.0114	0.3845	0.0000	1,298.8819	1,298.8819	0.0645	0.0707	1,321.5620
Waste						0.0000	0.0000		0.0000	0.0000	23.1572	0.0000	23.1572	1.3686	0.0000	57.3710
Water						0.0000	0.0000		0.0000	0.0000	5.1263	11.3883	16.5146	0.5284	0.0127	33.4949
Total	**1.8746**	**1.3303**	**7.4985**	**0.0154**	**1.3942**	**0.0438**	**1.4380**	**0.3731**	**0.0431**	**0.4161**	**28.2835**	**1,711.7574**	**1,740.0409**	**1.9849**	**0.0908**	**1,816.7145**

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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	1.2674	0.1140	1.8792	6.9000e-004		0.0177	0.0177		0.0177	0.0177	0.0000	110.4434	110.4434	4.9400e-003	1.9700e-003	111.1538
Energy	0.0202	0.1727	0.0735	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	291.0438	291.0438	0.0186	5.4500e-003	293.1328
Mobile	0.5316	0.8757	4.6600	0.0109	1.1065	9.8100e-003	1.1163	0.2961	9.2100e-003	0.3053	0.0000	1,039.2435	1,039.2435	0.0561	0.0588	1,058.1802
Waste						0.0000	0.0000		0.0000	0.0000	23.1572	0.0000	23.1572	1.3686	0.0000	57.3710
Water						0.0000	0.0000		0.0000	0.0000	5.1263	11.3883	16.5146	0.5284	0.0127	33.4949
Total	**1.8192**	**1.1623**	**6.6126**	**0.0127**	**1.1065**	**0.0415**	**1.1480**	**0.2961**	**0.0409**	**0.3370**	**28.2835**	**1,452.1191**	**1,480.4025**	**1.9765**	**0.0789**	**1,553.3327**

	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	**2.96**	**12.62**	**11.81**	**17.69**	**20.63**	**5.30**	**20.17**	**20.63**	**5.06**	**19.02**	**0.00**	**15.17**	**14.92**	**0.43**	**13.06**	**14.50**

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	1/26/2024	5	20	
2	Site Preparation	Site Preparation	1/27/2024	2/9/2024	5	10	
3	Grading	Grading	2/10/2024	3/8/2024	5	20	

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4	Building Construction	Building Construction	3/9/2024	1/24/2025	5	230	
5	Paving	Paving	1/25/2025	2/21/2025	5	20	
6	Architectural Coating	Architectural Coating	2/22/2025	3/21/2025	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 20

Acres of Paving: 0

Residential Indoor: 502,200; Residential Outdoor: 167,400; 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	1	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
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

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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	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	179.00	27.00	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	36.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 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	0.0224	0.2088	0.1971	3.9000e-004		9.6000e-003	9.6000e-003		8.9200e-003	8.9200e-003	0.0000	33.9961	33.9961	9.5100e-003	0.0000	34.2338
Total	**0.0224**	**0.2088**	**0.1971**	**3.9000e-004**		**9.6000e-003**	**9.6000e-003**		**8.9200e-003**	**8.9200e-003**	**0.0000**	**33.9961**	**33.9961**	**9.5100e-003**	**0.0000**	**34.2338**

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3.2 Demolition - 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	4.3000e-004	2.8000e-004	3.4500e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9468	0.9468	3.0000e-005	3.0000e-005	0.9552
Total	**4.3000e-004**	**2.8000e-004**	**3.4500e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.9468**	**0.9468**	**3.0000e-005**	**3.0000e-005**	**0.9552**

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	0.0224	0.2088	0.1971	3.9000e-004		9.6000e-003	9.6000e-003		8.9200e-003	8.9200e-003	0.0000	33.9960	33.9960	9.5100e-003	0.0000	34.2338
Total	**0.0224**	**0.2088**	**0.1971**	**3.9000e-004**		**9.6000e-003**	**9.6000e-003**		**8.9200e-003**	**8.9200e-003**	**0.0000**	**33.9960**	**33.9960**	**9.5100e-003**	**0.0000**	**34.2338**

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3.2 Demolition - 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	4.3000e-004	2.8000e-004	3.4500e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9468	0.9468	3.0000e-005	3.0000e-005	0.9552
Total	**4.3000e-004**	**2.8000e-004**	**3.4500e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.9468**	**0.9468**	**3.0000e-005**	**3.0000e-005**	**0.9552**

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					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1359	0.0917	1.9000e-004		6.1500e-003	6.1500e-003		5.6600e-003	5.6600e-003	0.0000	16.7285	16.7285	5.4100e-003	0.0000	16.8638
Total	**0.0133**	**0.1359**	**0.0917**	**1.9000e-004**	**0.0983**	**6.1500e-003**	**0.1044**	**0.0505**	**5.6600e-003**	**0.0562**	**0.0000**	**16.7285**	**16.7285**	**5.4100e-003**	**0.0000**	**16.8638**

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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	2.6000e-004	1.7000e-004	2.0700e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5681	0.5681	2.0000e-005	2.0000e-005	0.5731
Total	**2.6000e-004**	**1.7000e-004**	**2.0700e-003**	**1.0000e-005**	**7.2000e-004**	**0.0000**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.5681**	**0.5681**	**2.0000e-005**	**2.0000e-005**	**0.5731**

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					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1359	0.0917	1.9000e-004		6.1500e-003	6.1500e-003		5.6500e-003	5.6500e-003	0.0000	16.7285	16.7285	5.4100e-003	0.0000	16.8638
Total	**0.0133**	**0.1359**	**0.0917**	**1.9000e-004**	**0.0983**	**6.1500e-003**	**0.1044**	**0.0505**	**5.6500e-003**	**0.0562**	**0.0000**	**16.7285**	**16.7285**	**5.4100e-003**	**0.0000**	**16.8638**

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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	2.6000e-004	1.7000e-004	2.0700e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5681	0.5681	2.0000e-005	2.0000e-005	0.5731
Total	**2.6000e-004**	**1.7000e-004**	**2.0700e-003**	**1.0000e-005**	**7.2000e-004**	**0.0000**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.5681**	**0.5681**	**2.0000e-005**	**2.0000e-005**	**0.5731**

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					0.0708	0.0000	0.0708	0.0343	0.0000	0.0343	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0166	0.1703	0.1476	3.0000e-004		7.2400e-003	7.2400e-003		6.6600e-003	6.6600e-003	0.0000	26.0639	26.0639	8.4300e-003	0.0000	26.2747
Total	**0.0166**	**0.1703**	**0.1476**	**3.0000e-004**	**0.0708**	**7.2400e-003**	**0.0781**	**0.0343**	**6.6600e-003**	**0.0409**	**0.0000**	**26.0639**	**26.0639**	**8.4300e-003**	**0.0000**	**26.2747**

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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	4.3000e-004	2.8000e-004	3.4500e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9468	0.9468	3.0000e-005	3.0000e-005	0.9552
Total	**4.3000e-004**	**2.8000e-004**	**3.4500e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.9468**	**0.9468**	**3.0000e-005**	**3.0000e-005**	**0.9552**

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					0.0708	0.0000	0.0708	0.0343	0.0000	0.0343	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0166	0.1703	0.1476	3.0000e-004		7.2400e-003	7.2400e-003		6.6600e-003	6.6600e-003	0.0000	26.0639	26.0639	8.4300e-003	0.0000	26.2746
Total	**0.0166**	**0.1703**	**0.1476**	**3.0000e-004**	**0.0708**	**7.2400e-003**	**0.0781**	**0.0343**	**6.6600e-003**	**0.0409**	**0.0000**	**26.0639**	**26.0639**	**8.4300e-003**	**0.0000**	**26.2746**

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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

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	4.3000e-004	2.8000e-004	3.4500e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9468	0.9468	3.0000e-005	3.0000e-005	0.9552
Total	**4.3000e-004**	**2.8000e-004**	**3.4500e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.9468**	**0.9468**	**3.0000e-005**	**3.0000e-005**	**0.9552**

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	0.1560	1.4250	1.7137	2.8600e-003		0.0650	0.0650		0.0612	0.0612	0.0000	245.7601	245.7601	0.0581	0.0000	247.2129
Total	**0.1560**	**1.4250**	**1.7137**	**2.8600e-003**		**0.0650**	**0.0650**		**0.0612**	**0.0612**	**0.0000**	**245.7601**	**245.7601**	**0.0581**	**0.0000**	**247.2129**

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

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	3.0700e-003	0.1266	0.0378	5.7000e-004	0.0190	8.2000e-004	0.0198	5.4800e-003	7.9000e-004	6.2700e-003	0.0000	54.4432	54.4432	2.3000e-004	8.1400e-003	56.8750
Worker	0.0549	0.0352	0.4365	1.2800e-003	0.1517	7.6000e-004	0.1525	0.0403	7.0000e-004	0.0410	0.0000	119.7589	119.7589	3.4400e-003	3.3000e-003	120.8281
Total	**0.0580**	**0.1618**	**0.4744**	**1.8500e-003**	**0.1707**	**1.5800e-003**	**0.1723**	**0.0458**	**1.4900e-003**	**0.0473**	**0.0000**	**174.2021**	**174.2021**	**3.6700e-003**	**0.0114**	**177.7031**

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	0.1560	1.4250	1.7137	2.8600e-003		0.0650	0.0650		0.0612	0.0612	0.0000	245.7598	245.7598	0.0581	0.0000	247.2126
Total	**0.1560**	**1.4250**	**1.7137**	**2.8600e-003**		**0.0650**	**0.0650**		**0.0612**	**0.0612**	**0.0000**	**245.7598**	**245.7598**	**0.0581**	**0.0000**	**247.2126**

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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	3.0700e-003	0.1266	0.0378	5.7000e-004	0.0190	8.2000e-004	0.0198	5.4800e-003	7.9000e-004	6.2700e-003	0.0000	54.4432	54.4432	2.3000e-004	8.1400e-003	56.8750
Worker	0.0549	0.0352	0.4365	1.2800e-003	0.1517	7.6000e-004	0.1525	0.0403	7.0000e-004	0.0410	0.0000	119.7589	119.7589	3.4400e-003	3.3000e-003	120.8281
Total	**0.0580**	**0.1618**	**0.4744**	**1.8500e-003**	**0.1707**	**1.5800e-003**	**0.1723**	**0.0458**	**1.4900e-003**	**0.0473**	**0.0000**	**174.2021**	**174.2021**	**3.6700e-003**	**0.0114**	**177.7031**

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	0.0123	0.1122	0.1448	2.4000e-004		4.7500e-003	4.7500e-003		4.4700e-003	4.4700e-003	0.0000	20.8728	20.8728	4.9100e-003	0.0000	20.9954
Total	**0.0123**	**0.1122**	**0.1448**	**2.4000e-004**		**4.7500e-003**	**4.7500e-003**		**4.4700e-003**	**4.4700e-003**	**0.0000**	**20.8728**	**20.8728**	**4.9100e-003**	**0.0000**	**20.9954**

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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	2.5000e-004	0.0107	3.1400e-003	5.0000e-005	1.6100e-003	7.0000e-005	1.6800e-003	4.7000e-004	7.0000e-005	5.3000e-004	0.0000	4.5384	4.5384	2.0000e-005	6.8000e-004	4.7409
Worker	4.3200e-003	2.6500e-003	0.0344	1.0000e-004	0.0129	6.0000e-005	0.0129	3.4200e-003	6.0000e-005	3.4800e-003	0.0000	9.9217	9.9217	2.6000e-004	2.6000e-004	10.0058
Total	**4.5700e-003**	**0.0134**	**0.0375**	**1.5000e-004**	**0.0145**	**1.3000e-004**	**0.0146**	**3.8900e-003**	**1.3000e-004**	**4.0100e-003**	**0.0000**	**14.4601**	**14.4601**	**2.8000e-004**	**9.4000e-004**	**14.7468**

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	0.0123	0.1122	0.1448	2.4000e-004		4.7500e-003	4.7500e-003		4.4700e-003	4.4700e-003	0.0000	20.8727	20.8727	4.9100e-003	0.0000	20.9954
Total	**0.0123**	**0.1122**	**0.1448**	**2.4000e-004**		**4.7500e-003**	**4.7500e-003**		**4.4700e-003**	**4.4700e-003**	**0.0000**	**20.8727**	**20.8727**	**4.9100e-003**	**0.0000**	**20.9954**

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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	2.5000e-004	0.0107	3.1400e-003	5.0000e-005	1.6100e-003	7.0000e-005	1.6800e-003	4.7000e-004	7.0000e-005	5.3000e-004	0.0000	4.5384	4.5384	2.0000e-005	6.8000e-004	4.7409
Worker	4.3200e-003	2.6500e-003	0.0344	1.0000e-004	0.0129	6.0000e-005	0.0129	3.4200e-003	6.0000e-005	3.4800e-003	0.0000	9.9217	9.9217	2.6000e-004	2.6000e-004	10.0058
Total	**4.5700e-003**	**0.0134**	**0.0375**	**1.5000e-004**	**0.0145**	**1.3000e-004**	**0.0146**	**3.8900e-003**	**1.3000e-004**	**4.0100e-003**	**0.0000**	**14.4601**	**14.4601**	**2.8000e-004**	**9.4000e-004**	**14.7468**

3.6 Paving - 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	9.1500e-003	0.0858	0.1458	2.3000e-004		4.1900e-003	4.1900e-003		3.8500e-003	3.8500e-003	0.0000	20.0193	20.0193	6.4700e-003	0.0000	20.1811
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.1500e-003**	**0.0858**	**0.1458**	**2.3000e-004**		**4.1900e-003**	**4.1900e-003**		**3.8500e-003**	**3.8500e-003**	**0.0000**	**20.0193**	**20.0193**	**6.4700e-003**	**0.0000**	**20.1811**

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3.6 Paving - 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	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	4.0000e-004	2.5000e-004	3.2000e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9238	0.9238	2.0000e-005	2.0000e-005	0.9316
Total	**4.0000e-004**	**2.5000e-004**	**3.2000e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.9238**	**0.9238**	**2.0000e-005**	**2.0000e-005**	**0.9316**

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	9.1500e-003	0.0858	0.1458	2.3000e-004		4.1900e-003	4.1900e-003		3.8500e-003	3.8500e-003	0.0000	20.0192	20.0192	6.4700e-003	0.0000	20.1811
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.1500e-003**	**0.0858**	**0.1458**	**2.3000e-004**		**4.1900e-003**	**4.1900e-003**		**3.8500e-003**	**3.8500e-003**	**0.0000**	**20.0192**	**20.0192**	**6.4700e-003**	**0.0000**	**20.1811**

3.6 Paving - 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	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	4.0000e-004	2.5000e-004	3.2000e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9238	0.9238	2.0000e-005	2.0000e-005	0.9316
Total	**4.0000e-004**	**2.5000e-004**	**3.2000e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.9238**	**0.9238**	**2.0000e-005**	**2.0000e-005**	**0.9316**

3.7 Architectural Coating - 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					
Archit. Coating	2.3277					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7100e-003	0.0115	0.0181	3.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5567
Total	**2.3294**	**0.0115**	**0.0181**	**3.0000e-005**		**5.2000e-004**	**5.2000e-004**		**5.2000e-004**	**5.2000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.4000e-004**	**0.0000**	**2.5567**

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3.7 Architectural Coating - 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	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	9.7000e-004	5.9000e-004	7.6900e-003	2.0000e-005	2.8800e-003	1.0000e-005	2.8900e-003	7.6000e-004	1.0000e-005	7.8000e-004	0.0000	2.2171	2.2171	6.0000e-005	6.0000e-005	2.2359
Total	**9.7000e-004**	**5.9000e-004**	**7.6900e-003**	**2.0000e-005**	**2.8800e-003**	**1.0000e-005**	**2.8900e-003**	**7.6000e-004**	**1.0000e-005**	**7.8000e-004**	**0.0000**	**2.2171**	**2.2171**	**6.0000e-005**	**6.0000e-005**	**2.2359**

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	2.3277					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7100e-003	0.0115	0.0181	3.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5567
Total	**2.3294**	**0.0115**	**0.0181**	**3.0000e-005**		**5.2000e-004**	**5.2000e-004**		**5.2000e-004**	**5.2000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.4000e-004**	**0.0000**	**2.5567**

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

3.7 Architectural Coating - 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	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	9.7000e-004	5.9000e-004	7.6900e-003	2.0000e-005	2.8800e-003	1.0000e-005	2.8900e-003	7.6000e-004	1.0000e-005	7.8000e-004	0.0000	2.2171	2.2171	6.0000e-005	6.0000e-005	2.2359
Total	**9.7000e-004**	**5.9000e-004**	**7.6900e-003**	**2.0000e-005**	**2.8800e-003**	**1.0000e-005**	**2.8900e-003**	**7.6000e-004**	**1.0000e-005**	**7.8000e-004**	**0.0000**	**2.2171**	**2.2171**	**6.0000e-005**	**6.0000e-005**	**2.2359**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Campus Drive and Grapevine Drive General Plan Amendment and Rezone - San Joaquin Valley Air Basin, Annual

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	0.5316	0.8757	4.6600	0.0109	1.1065	9.8100e-003	1.1163	0.2961	9.2100e-003	0.3053	0.0000	1,039.2435	1,039.2435	0.0561	0.0588	1,058.1802
Unmitigated	0.5870	1.0437	5.5459	0.0136	1.3942	0.0121	1.4063	0.3731	0.0114	0.3845	0.0000	1,298.8819	1,298.8819	0.0645	0.0707	1,321.5620

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,349.12	1,217.68	1014.32	3,716,491	2,949,721
Total	1,349.12	1,217.68	1,014.32	3,716,491	2,949,721

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	0.522587	0.052580	0.171418	0.151108	0.026705	0.007202	0.013509	0.026273	0.000644	0.000311	0.023008	0.001408	0.003247

5.0 Energy Detail

Historical Energy Use: N

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

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	91.0874	91.0874	0.0147	1.7900e-003	91.9881
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	91.0874	91.0874	0.0147	1.7900e-003	91.9881
NaturalGas Mitigated	0.0202	0.1727	0.0735	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	199.9564	199.9564	3.8300e-003	3.6700e-003	201.1447
NaturalGas Unmitigated	0.0202	0.1727	0.0735	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	199.9564	199.9564	3.8300e-003	3.6700e-003	201.1447

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	3.74704e+006	0.0202	0.1727	0.0735	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	199.9564	199.9564	3.8300e-003	3.6700e-003	201.1447
Total		**0.0202**	**0.1727**	**0.0735**	**1.1000e-003**		**0.0140**	**0.0140**		**0.0140**	**0.0140**	**0.0000**	**199.9564**	**199.9564**	**3.8300e-003**	**3.6700e-003**	**201.1447**

Campus Drive and Grapevine Drive General Plan Amendment and Rezone - 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

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	3.74704e+006	0.0202	0.1727	0.0735	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	199.9564	199.9564	3.8300e-003	3.6700e-003	201.1447
Total		**0.0202**	**0.1727**	**0.0735**	**1.1000e-003**		**0.0140**	**0.0140**		**0.0140**	**0.0140**	**0.0000**	**199.9564**	**199.9564**	**3.8300e-003**	**3.6700e-003**	**201.1447**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	984476	91.0874	0.0147	1.7900e-003	91.9881
Total		**91.0874**	**0.0147**	**1.7900e-003**	**91.9881**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	984476	91.0874	0.0147	1.7900e-003	91.9881
Total		**91.0874**	**0.0147**	**1.7900e-003**	**91.9881**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	1.2674	0.1140	1.8792	6.9000e-004		0.0177	0.0177		0.0177	0.0177	0.0000	110.4434	110.4434	4.9400e-003	1.9700e-003	111.1538
Unmitigated	1.2674	0.1140	1.8792	6.9000e-004		0.0177	0.0177		0.0177	0.0177	0.0000	110.4434	110.4434	4.9400e-003	1.9700e-003	111.1538

Campus Drive and Grapevine Drive General Plan Amendment and Rezone - San Joaquin Valley Air Basin, Annual

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

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	0.2328					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9686					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0109	0.0928	0.0395	5.9000e-004		7.5000e-003	7.5000e-003		7.5000e-003	7.5000e-003	0.0000	107.4354	107.4354	2.0600e-003	1.9700e-003	108.0739
Landscaping	0.0552	0.0212	1.8397	1.0000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	3.0079	3.0079	2.8800e-003	0.0000	3.0800
Total	**1.2674**	**0.1140**	**1.8792**	**6.9000e-004**		**0.0177**	**0.0177**		**0.0177**	**0.0177**	**0.0000**	**110.4434**	**110.4434**	**4.9400e-003**	**1.9700e-003**	**111.1538**

Campus Drive and Grapevine Drive General Plan Amendment and Rezone - San Joaquin Valley Air Basin, Annual

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

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	0.2328					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9686					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0109	0.0928	0.0395	5.9000e-004		7.5000e-003	7.5000e-003		7.5000e-003	7.5000e-003	0.0000	107.4354	107.4354	2.0600e-003	1.9700e-003	108.0739
Landscaping	0.0552	0.0212	1.8397	1.0000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	3.0079	3.0079	2.8800e-003	0.0000	3.0800
Total	**1.2674**	**0.1140**	**1.8792**	**6.9000e-004**		**0.0177**	**0.0177**		**0.0177**	**0.0177**	**0.0000**	**110.4434**	**110.4434**	**4.9400e-003**	**1.9700e-003**	**111.1538**

7.0 Water Detail

7.1 Mitigation Measures Water

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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	16.5146	0.5284	0.0127	33.4949
Unmitigated	16.5146	0.5284	0.0127	33.4949

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	16.1582 / 10.1867	16.5146	0.5284	0.0127	33.4949
Total		**16.5146**	**0.5284**	**0.0127**	**33.4949**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	16.1582 / 10.1867	16.5146	0.5284	0.0127	33.4949
Total		**16.5146**	**0.5284**	**0.0127**	**33.4949**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	23.1572	1.3686	0.0000	57.3710
Unmitigated	23.1572	1.3686	0.0000	57.3710

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

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	114.08	23.1572	1.3686	0.0000	57.3710
Total		**23.1572**	**1.3686**	**0.0000**	**57.3710**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	114.08	23.1572	1.3686	0.0000	57.3710
Total		**23.1572**	**1.3686**	**0.0000**	**57.3710**

9.0 Operational Offroad

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

Campus Drive and Grapevine Drive General Plan Amendment and Rezone - San Joaquin Valley Air Basin, Annual

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: Biological Resources Assessment

Prepared by Argonaut Ecological, Inc. dated January 19, 2023.

ARGONAUT ECOLOGICAL CONSULTING, INC.

TECHNICAL MEMORANDUM

DATE: January 19, 2023

TO: Jenna Chilingerian AICP, Precision Civil Engineering

FROM: Kathy Kinsland, Argonaut Ecological, Inc.

RE: **Technical Memorandum – 4th Street and Campus Drive Biological Assessment**

Overview and Background

The City of Arvin proposes a General Plan Amendment (GPA) No. 2023-01 and Rezone No. 2023-01 and rezoning a property on the east side of North Walnut Street between Grapevine Drive and Bear Mountain Boulevard, approximately 215 feet west of the intersection of 4th Street and Campus Drive ("Project site"). The parcels include (APNs) 190-260-01, 190-260-02, 190-260-06 (portion), and 190-260-08, totaling approximately 8.86 acres. GPA No. 2023-01 requests a land use change from Public Facilities to High Density Residential. Rezone No. 2023-01 requests a rezone from C-O – Professional Office/MUO – Mixed Use Overlay to R-3 – Limited Multiple-Family Dwelling Zone District. No physical development is proposed by the Project. See Figure 1.

The site is envisioned to be used for high-density residential or other approved uses. Although no ground disturbance is proposed for the GPA and rezoning action, for purposes of this technical report, it is assumed the site would eventually be developed and the habitat converted to another use. This biological assessment technical memorandum is intended to provide the technical basis for an Initial Study under the California Environmental Quality Act (CEQA).

Land Use, Topography, and Drainage

The Study Area is nearly flat. Review of historical topographic maps indicates little to no change to elevations within the Study Area since 1919.

Drainage is northwest. There are no natural stream or creeks within the Study Area or nearby. There is a segment of drainage ditch located at the southeastern portion of the Study Area. This ditch is located immediately behind a commercial development. There were several encampments within and along the ditch.

CITY OF ARVIN - 4TH STREET/CAMPUS GENERAL PLAN AMENDMENT AND REZONE

CREATED: 12/12/2022

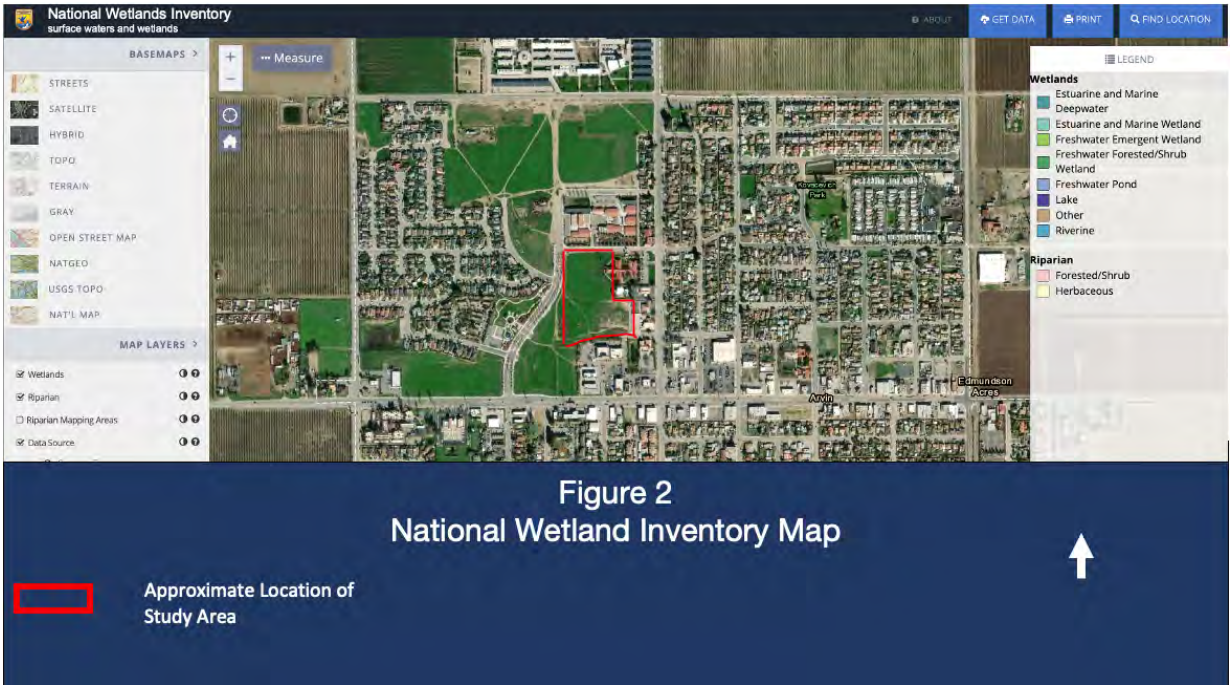
Figure 1

Land Use

Historically the property has been vacant since at least 1992, however, two structures were on the property. The building and water tank immediately northeast of the Study Area was built sometime before 1992 as was a building (now a fire station) adjacent to the eastern edge of the Study Area. The surrounding lands were developed with residential and commercial (south along Bear Mountain Road). Commercial developed along the southern edge of the Study Area was built in 2008.

Potential Waters/Wetlands

The National Wetland Inventory Map (NWI) identified any known mapped wetlands. The NWI mapping is based on a combination of arial photography and other sources and is not always reliable. However, the NWI does provide a basis for determining if there were wetland or drainages mapped based on aerial photography interpretation, and field work is required to confirm presence or absence. The NWI mapping is shown in Figure 2. The mapping does not show any drainages or wetlands within the Study Area or immediately adjacent to the Study Area.

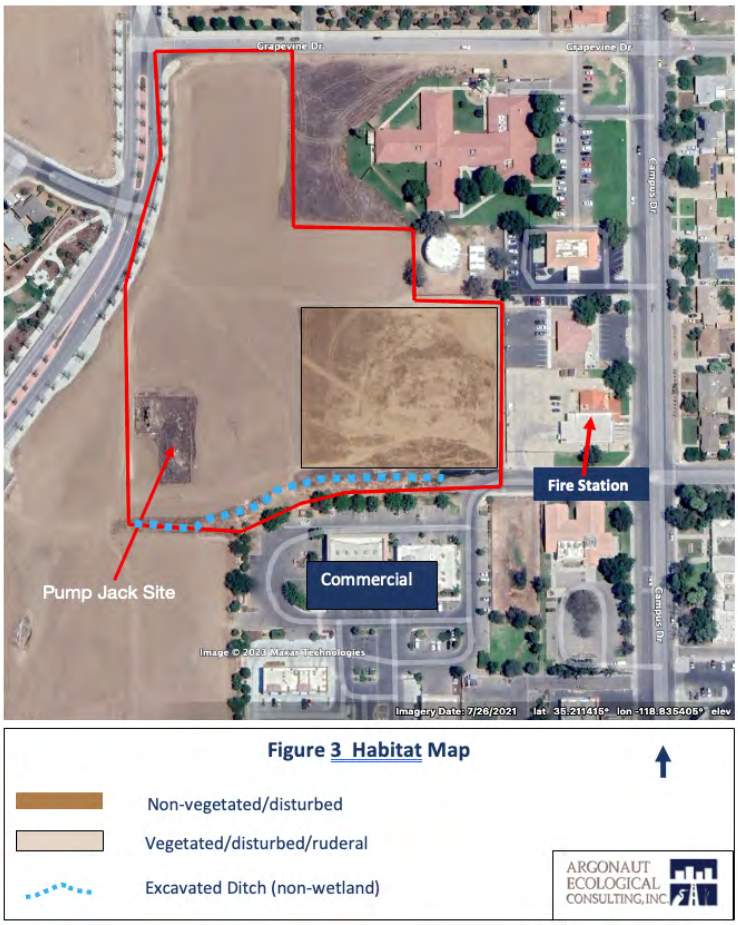


Habitat

The Study Area is predominately vegetated, but previously disturbed ruderal habitat composed of non-native annual plants and weedy species. Species present include: geranium, yellow mustard, Bermuda grass, rip-gut brome, and other non-native species. There are no trees within the Study Area, but some a few landscape trees along the western edge within the street right-of-way. The southeast portion of the Study Area has been graded and disturbed.

There are mature trees near the Study Area within the developed sites., but no mature trees are within the Study Area. The species include walnut and eucalyptus. No previously used nest for raptors were found in these trees.

There is an old pump jack site in the southwest corner of the property. The pump jack equipment indicates it's owned by Sequoia Exploration Inc., (APN 209-144-31) and the jack is numbered "Jewett #3".



Attachment A shows photographs of the Study Area.

Special Status Species

A review of the California Natural Diversity Database (CNDDB) and the U.S. Fish and Wildlife Service Information for Planning Consultation (IPaC) indicates the potential presence several species within region of the Study Area. However, there are no known records of special status species within or near the Study Area. The field review evaluated the habitat within the Study Area for the potential to support special status species, but no suitable habitat is present because of the highly disturbed habitat.

Table 1
Special Status Species Summary For 4th & Campus Drive Study Area

Common Name	*Scientific Name*	*Status*[1]	*Effects*[2]	*Occurrence in the Study Area*[3]
Mammals				
American badger	Taxidea taxus	--/--	NE	Absent. Ground burrowing mammal. No evidence of occupation observed. No underground burrows present.
San Joaquin kit fox	Vulpes macrotis mutica	FE/ST	NE	Absent. No evidence of occupation or den sites. Lack of prey base within Study Area.
Birds				
Long-eared owl	Asio otus	--/--	NE	Absent. No suitable habitat present
Burrowing owl	Athenia cunicularia	--/--	NE	Absent. No evidence of occupation and no ground squirrel population. Domestic dogs and cats on site observed and would disturb nesting for this species.
Swainson's hawk	Buteo swainsoni	--/CT	NE	Absent. Species could forage on the site, but no suitable nest trees and no evidence of raptor nests on adjacent properties.
Least Bell's vireo	Vireo belli pusillus	FE/CE	NE	Absent. No suitable habitat within or near the Study Area.
Plants				

Numerous plant species are listed in the CNDDB for this region (Arvin Quad).

The species includes:

- Horne's milk-vetch (Astragalus hornii var. hornii)
- Palmer's marispoa-lily ((Calochortu palmeri var. palmeri)
- Alkali mariposa-lily (Calochortus striatus)
- California jewlflower (Caulanthus californicus)
- Calico monkeyflower (Diplacus pictus)
- Kern mallow (Eremalche parryi ssp. Kerensis)
- Tejon poppy (Eschschiozia lemmonii ssp. Kerensis)
- Commanch Point layia (Layia leucopappa)
- Munz's tidy-tips (Laia munzii)
- San Joaquin wollythreads (Monalopia congdoni)
- Puite Mountains navarretia (Navarreti setiloba)
- Bakersfield cactus (Opuntia basilaris var treleasei)

Source: CNDDB = California Natural Diversity Database provided by CDFG

Based on the habitat requirements of these plant species, the field review, and habitat conditions within the Study Area, the likelihood of any one to these species being present is extremely low. Many of these species were recorded on the Tajon Ranch or Comache Point.

1 Status= Listing of special status species, unless otherwise indicated
- CE: California listed as Endangered
- CT: California listed as Threatened
- FE: Federally listed as Endangered
- FT: Federally listed as Threatened
- 1B.1, 1B.2, 2B.2, 2B.3: California Native Plant Society Society Ranking

2 Effects = Effect determination
- NE: No Affect
- ME: May affect, not likely to adversely affect

3 Definition of Occurrence Indicators

Present/Potentially: Species recorded in the area and some habitat elements present within Study Area similar to known occurrences.
Absent/Likely Absent: Species not recorded in Study Area and/or suitable habitat or critical habitat components not present

Summary, Conclusions, and Recommendations

- The Study Area is historically non-native grassland and periodically disturbed.
- There are no wetlands or waters of the US/State within or adjacent to the Study Area.
- There are no sensitive biological resouces present, or potentially present.
- There is no habitat suitable for special status species. There is also no nesting habitat for raptors.
- Development of the site for the proposed use will not result in any adverse biological impacts.
- No further biological studies are recommended.

Kathy R. Kinsland, CISEC, QSP-ToR
Senior Biologist

Attachments:

Attachment A - Photographs of Study Area

References

California Natural Diversity Database (CNDDB) Online. Subscription with updates. Available at: URL https://www.wildlife.ca.gov/Data/CNDDB

National Resource Conservation Service (NRCS), Web Soils Survey. Available at: URL https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

U.S. Fish and Wildlife Service. Information for Planning and Consultation (IPaC). Available at URL: https://ipac.ecosphere.fws.gov/

U.S. Fish and Wildlife Service, National Wetland Inventory Maps. Available at URL: https://www.fws.gov/wetlands/data/mapper.html

U.S. Geologic Survey, Historic topographic Map, Arvin Quadrangle, 1924, University of Texas, Austin, Perry-Castañeda Map Collection. Available at: URL: https://legacy.lib.utexas.edu/maps/

Attachment A
Photographs of 4th & N. Campus Drive Study Area

ARGONAUT ECOLOGICAL CONSULTING, INC.

Photographic Documentation

Photographs: January 6, 2023

Project: 4th & Campus Drive, Arvin, CA
Photographer: Kathy Kinsland

Photograph 1

View across Study Area, looking southwest toward N. Walnut Street

Photograph 2

Looking east across Study Area (foreground). In the background is a water tank and mature trees that are on an adjacent parcel.

ARGONAUT ECOLOGICAL CONSULTING, INC.

Photographic Documentation

Photographs: January 6, 2023

Project: 4th & Campus Drive, Arvin, CA
Photographer: Kathy Kinsland

Photograph 3

View of typical disturbed area on eastern side of Study Area, looking southwest.

Photograph 4

View looking west across Study Area showing the pump jack.

ARGONAUT ECOLOGICAL CONSULTING, INC.

Photographic Documentation

Photographs: January 6, 2023

Project: 4th & Campus Drive, Arvin, CA
Photographer: Kathy Kinsland

Photograph 5

View along southern edge of Study Area (commercial development to the right), looking east along north edge of excavated ditch (showing encampments).

Photograph 6

View looking southeast showing the western end of the excavated ditch. The ditch was excavated in upland habitat and does not connect to any downstream waters. The ditch does not support any wetland habitat.

Photographs: January 6, 2023

Project: 4th & Campus Drive, Arvin, CA
Photographer: Kathy Kinsland

Photograph 7

View of southern end of Study Area (foreground), looking toward the Southwest at the property to the south (offsite).

7.3 Appendix C: CHRIS Record Search Result

Prepared by San Joaquin Valley Information Center on August 29, 2022 and November 28, 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 22-438

Date: November 28, 2022

Re: Proposed General Plan Amendment and Rezone for Subject Property located west of Campus Drive between Grapevine Drive and 4th Avenue

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 no previous cultural resource studies conducted within the project area. There have been ten cultural resource studies conducted within the the one-half mile radius: KE-00285, 00297, 00411, 00690, 03101, 04013, 04079, 04489, 04959, and 05040.

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

According to the information in our files, there are no recorded resources within the project area, and it is not known if any exist there. There are seven recorded resources in the one-half mile radius: P-15-007945, 007946, 007947, 009042, 011698, 018878, 020546. These resources consist primarily of historic era buildings. They also include an historic era trash scatter, row of palm trees, and Highway 223.

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 this project consists of a General Plan Amendment and Zone Change for a vacant property. Further, we understand no development is proposed at this time. Because this property has not been previously studied for cultural resources, it is unknown if any are present. Given that no development is proposed at this time, no further cultural resource investigation is recommended. However, prior to any future ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. A list of qualified consultants can be found at www.chrisinfo.org.

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:

Celeste M. Thomson, Coordinator **Date**: November 28, 2022

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