APPENDIX G/INITIAL STUDY FOR A MITIGATED NEGATIVE DECLARATION

Environmental Checklist Form for: <u>Plan Amendment-Rezone Application No. P20-00213, Development Permit</u> Application No. P22-03749, and Planned Development Permit Application

No. P23-03173

1.	Project title: Plan Amendment-Rezone Application No. P20-00213 Development Permit Application No. P22-03749 Planned Development Permit Application No. P23-03173
2.	Lead agency name and address: City of Fresno Planning and Development Department 2600 Fresno Street Fresno, CA 93721
3.	Contact person and phone number: John George, Planner III City of Fresno Planning and Development Department (559) 621-8073
4.	Project location: 10047 North Chestnut Avenue: Northwest corner of East Behymer and North Chestnut Avenues (APN: 578-020-13, 578-020-16, and 578-020-17)
5.	Project sponsor's name and address: B.J. Johal 2607 West Lake Van Ness Circle Fresno, CA 93711
6.	General & Community plan land use designation: Existing: Employment – Office Proposed: Medium High Density Residential
7.	Zoning: Existing: O/UGM/cz (Office/Urban Growth Management/conditions of zoning) Proposed: RM-1/UGM/cz (Multi-Family Residential, Medium High Density/Urban Growth Management/conditions of zoning)
8.	Description of project:

Entitlements

Plan Amendment Application No. P20-00213, Development Permit Application No. P22-03749, and Planned Development Permit Application No. P23-03173 were filed by Dirk Poeschel Land Development Services, on behalf of Johal Homes, Inc, pertaining to approximately 3.78 acres of property located at the northwest corner of East Behymer and North Chestnut Avenues.

Plan Amendment Application No. P20-00213 requests authorization to amend the Fresno General Plan and Woodward Park Community Plan to change the planned land use designation for approximately 3.78 acres of the subject property from Employment – Office to Medium High Density Residential.

Rezone Application No. P20-00213 requests authorization to rezone approximately 3.78 acres of the subject property from the O/UGM/cz (Office/Urban Growth Management/conditions of zoning) zone district to the RM-1/UGM/cz (Multi-Family Residential, Medium High Density/Urban Growth Management/conditions of zoning) zone district.

Development Permit Application No. P22-03749 requests authorization to construct 48 multi-family residential units encompassed by six, two-story apartment buildings of which 16 are one-bed/one-bath units, 20 are two-bed/two-bath units, and 12 are three-bed/two-bath units within a gated private development including a clubhouse, swimming pool, and tot lot, as well as associated landscaping, parking and circulation, and infrastructure improvements in the 3.78-acre project site. Figure 1 shows the project site's regional and local context and Figure 2 shows an aerial view of the existing site and surrounding land uses.

Planned Development Permit Application No. P23-03173 requests authorization to allow for modified development standards of the RM-1 zone district to allow for the following:

- 16-foot minimum front setback.
- 43-foot minimum rear setback.
- Placement of fully enclosed trash enclosures within 4 feet from the rear property line.

Residential Development

The proposed project would result in the construction of 48 residential units in six, two-story apartment buildings. Construction within the 40-foot Fresno Irrigation District (FID) easement for the Enterprise Canal would be subject to FID approval, would require issuance of an Encroachment Agreement, and would be limited to improvements related to curbs and gutters, sidewalks, and asphalt paving for parking areas, as well as landscaping, limited to trees with non-invasive root types, located up to 15 feet from the edge of Enterprise Canal's pipeline alignment. The conceptual site plan is shown in Figure 3 and Figure 4. The height of proposed residential buildings

would not exceed 28 feet. Conceptual building elevations are shown in Figure 5.

Landscaping

The proposed project would include approximately 75,722 square feet of landscaped open space. Landscaping features would include planting approximately 54 trees along the perimeter of the project site. Drought tolerant landscaping would be installed throughout the project site. All landscaping to be located within the 40-foot FID easement would be limited to trees with non-invasive root types approved by FID prior to installation. A tot lot would be located at the northern end of the project site. Figure 7 and Figure 8 show the landscaping plan for the proposed project.

A Concrete Masonry Unit (CMU) retaining wall would be constructed along the western boundary of the project site to reinforce the existing grade change. The height and length of the CMU retaining wall would be determined prior to construction.

Access, Circulation, and Parking

Access to the project site would be provided by one ingress/egress driveway from North Chestnut Avenue. The driveway would be located at the southern end of the project site and would provide access to an internal 28-foot access drive lane that would connect to on-site parking spaces. On the northern end of the project site, the proposed project would provide a one-way egress driveway along North Chestnut Avenue for resident and service vehicles. This one-way egress driveway would also serve as an emergency entrance to the project site. The proposed project would provide 48 carport parking spaces and 33 uncovered parking spaces, for a total of 81 parking spaces.

A pedestrian sidewalk would be constructed along North Chestnut Avenue and would connect to existing sidewalks to the north and south of the project site. Meandering paths throughout the project site would connect parking areas, residential units, and site amenities.

Utilities and Infrastructure

The project site is located in an urban area and is currently served by existing utilities, including water, sanitary sewer, storm drainage, electricity, and natural gas infrastructure. Proposed utility connections are discussed below.

- Water. Water supply for the proposed project would be provided by the City of Fresno through the Department of Public Utilities (DPU) Water Division. The project site would connect to the existing water main located in North Chestnut Avenue.
- Wastewater. Wastewater services for the proposed project would be provided by the City of Fresno through the DPU Wastewater Management Division. The proposed project would include the installation of new on-site wastewater infrastructure that would connect to the City's existing wastewater infrastructure in North Chestnut Avenue.

- **Stormwater.** The Fresno Metropolitan Flood Control District (FMFCD) would provide flood control and urban storm water services to the project site. The proposed project would include construction of a new curb and gutter along North Chestnut Avenue to connect to the City's existing stormwater system.
- Electricity and Natural Gas. Electricity and natural gas services to the project site are provided by Pacific Gas and Electric Company (PG&E). Existing underground utility connections and gas mains provide electricity and gas to the project site. New underground electrical lines would be installed.

Grading and Construction

Construction of the proposed project is anticipated to occur over approximately 12 months, starting in January 2025 and ending in January 2026. As noted above, construction within the 40-foot FID easement for the Enterprise Canal would be subject to FID approval, would require issuance of an Encroachment Agreement, and would include improvements related to curbs and gutters, sidewalks, and asphalt paving for parking areas, as well as landscaping, limited to trees with non-invasive root types. Construction of the proposed project would require grading. Figure 6 shows existing grading lines along three profile sections in the project site.

APPROVALS/PERMITS

The following approvals are required by the City of Fresno:

- Adoption of the IS/MND
- General Plan Amendment from Employment Office to Medium High Density Residential
- Rezone from Office (O) to Residential Multi-Family, Medium High Density (RM-1).
- Water connection(s)
- Sanitary sewer connection(s)

9. Surrounding land uses and setting:

	Planned Land Use	Existing Zoning	Existing Land Use
North	Residential — Medium Low Density	RS-4/UGM (Residential Single- Family, Medium Low Density/Urban Growth Management)	Single-Family Residential Neighborhood
East	Public Facility — Water Recharge	PI (Public and Institutional/Urban Growth Management)	Water Recharge Basin
South	Employment — Office	O/UGM/cz (Office/Urban Growth Management/conditions of zoning)	Kids Kare
West	Residential — Medium Low Density	RS-4/UGM (Residential Single- Family, Medium Low Density/Urban Growth Management)	RML — medium low density residential

- 10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):
 - Pacific Gas & Electric
 - Fresno Irrigation District
 - County of Fresno, Department of Public Health
 - Fresno Metropolitan Flood Control District
 - San Joaquin Valley Air Pollution Control District
- 11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code (PRC) Section 21080.3.1? If so, has consultation begun?

The State requires lead agencies to consider the potential effects of proposed projects and consult with California Native American tribes during the local planning process for the purpose of protecting Traditional Tribal Cultural Resources through the California Environmental Quality Act (CEQA) Guidelines. Pursuant to PRC Section 21080.3.1, the lead agency shall begin consultation with the California Native American tribe that is traditionally and culturally affiliated with the geographical area of the proposed project. Such significant cultural resources are either sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe which is either on or eligible for inclusion in the California Historic Register or local historic register, or,

the lead agency, at its discretion, and support by substantial evidence, choose to treat the resources as a Tribal Cultural Resources (PRC Section 21074(a)(1-2)). According to the most recent census data, California is home to 109 currently recognized Indian tribes. Tribes in California currently have nearly 100 separate reservations or Rancherias. Fresno County has a number of Rancherias such as Table Mountain Rancheria, Millerton Rancheria, Big Sandy Rancheria, Cold Springs Rancheria, and Squaw Valley Rancheria. These Rancherias are not located within the city limits of Fresno.

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 21082.3I contains provisions specific to confidentiality.

Pursuant to Senate Bill (SB) 18, Native American tribes traditionally and culturally affiliated with the project area were invited to consult regarding the proposed project based on a list of contacts provided by the Native American Heritage Commission (NAHC). This list includes tribes that requested notification pursuant to Assembly Bill (AB) 52. The City of Fresno mailed notices of the proposed project to each of these tribes on September 10, 2020 which included the required 90-day time period for tribes to request consultation, which ended on December 9, 2020. No tribes elected to consult with City staff.

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/Soils	Greenhouse Gas Emissions
Hazards and Hazardous Materials	Hydrology/Water Quality
Land Use/Planning	Mineral Resources
Noise	Population/Housing

	Pu	blic Services		Recreation				
	Tra	ansportation		Tribal Cultural Resources				
	Uti	lities/Service Systems		Wildfire				
	Ma	andatory Findings of Significance						
DET	ERI	MINATION: (To be completed by the Lead	Age	ency)				
On t	ha h	pasis of this initial evaluation:						
		basis of this initial evaluation.						
		I find that the proposed project COUL	.D N	NOT have a significant effect on the				
		environment, and a NEGATIVE DECLAR						
		I find that although the proposed proje	ct c	ould have a significant effect on the				
X		environment, there will not be a significa						
		the project have been made by or agreed NEGATIVE DECLARATION will be prepared		, , , , ,				
		<u>. </u>						
		I find that the proposed project MAY have						
		and an ENVIRONMENTAL IMPACT REF	OR	i (EiR) is required.				
	_	I find that the proposed project MAY	have	e a "potentially significant impact" or				
		"potentially significant unless mitigated" in	mpa	ct on the environment, but at least one				
		effect 1) has been adequately analyzed in		·				
		legal standards, and 2) has been address		•				
		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 o						
		NEGATIVE DECLARATION, including i		•				
		imposed upon the proposed project, noth	ing	iumier is requirea.				

John George	Planner III	06/14/2024	
Planner Nam	e, Title	Date	

EVALUATION OF ADDITIONAL ENVIRONMENTAL IMPACTS:

- 1. For purposes of this Initial Study, the following answers have the corresponding meanings:
 - a. "No Impact" means the subsequent project will not cause any additional significant effect related to the threshold under consideration.

- b. "Less Than Significant Impact" means there is an impact related to the threshold under consideration, but that impact is less than significant;
- c. "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.
- d. "Potentially Significant Impact" means there is an additional potentially significant effect related to the threshold under consideration.
- 2. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 3. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 4. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 5. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from, "Earlier Analyses," as described in (6) below, may be cross-referenced).
- 6. Earlier analyses may be used where, pursuant to the tiering, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a. Earlier Analysis Used. Identify and state where they are available for review.
 - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by

- mitigation measures based on the earlier analysis.
- c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 7. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 8. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 9. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 10. The explanation of each issue should identify:
 - a. The significance criteria or threshold, if any, used to evaluate each question; and
 - b. The mitigation measure identified, if any, to reduce the impact to less than significant.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS – Except as provide	ded in PRC Se	ection 21099, wo	ould the projec	ct:
a) Have a substantial adverse effect on a scenic vista?			Х	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				Х
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?		Х		

DISCUSSION

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

A scenic vista is generally defined as a public vantage point with an expansive view of a significant landscape feature. The project site is located in a developed area of the city and is not located in an area with expansive or far field views. The proposed project would include construction of six, two-story residential buildings, club house, swimming pool, tot lot, and installation of associated landscaping. Adjacent parcels consist mostly of single-family residential and school land uses to the north, west, and south. A daycare facility is

located directly adjacent to the south of the project site. The City of Fresno Surface Water Treatment Facility (SWTF) is located east of the project site, across North Chestnut Avenue. Undeveloped lots and Clovis Community College are located further east. There are no significant trees, rock outcroppings, and/or historic buildings located on the subject property that have been identified as important scenic resources. Therefore, the proposed project would not diminish the scenic views of the project area and would likewise not block or impede surrounding views. Therefore, the proposed project would have a **less-than-significant impact** on a scenic vista.

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

According to the California Department of Transportation mapping of State Scenic Highways, ¹ the County of Fresno has one officially designated State Scenic Highway; a portion of State Route (SR) 180, east of Fresno. Three eligible State Scenic Highways are also located within the County of Fresno, the nearest is located along SR 168 east of the City of Clovis, approximately 3.6 miles southeast of the project site. Since there are no eligible or officially designated State Scenic Highways within the immediate vicinity of the project site, and the project site is not visible from any State Scenic Highway, the proposed project would not impact a designated State Scenic Highway. Furthermore, the eligibility of the three State Scenic Highways, scenic resources located within the highway segments or its viewshed would not be impacted by the proposed project. Therefore, **no impact** on scenic resources within a State Scenic Highway would occur as a result of the proposed project.

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?

The project site is located in an urbanized area and is currently vacant with ruderal vegetation. The proposed project would include construction of 48 residential units and associated, parking, amenities, and landscaping. Surrounding uses include single-family residential uses to the north and west, a surface water treatment facility and recharge basins to the east, and a child daycare to the south. Although developing the proposed project would change the visual characteristics of the project site, the design of the additions would be contemporary and would be consistent with urban development in the vicinity of the project site. Although the character of the project site would change from vacant and undeveloped to urban, the proposed project would not substantially degrade the visual character or quality of the project site and its surroundings. Therefore, the

¹ California Department of Transportation (Caltrans). State Scenic Highways. Website: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways (accessed July 18, 2023).

proposed project would have a less-than-significant impact.

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

The project site is located in an urbanized area, which is subject to preexisting exterior lighting from surrounding development and existing street lighting. The proposed project would introduce new sources of light and glare to the area in the form of new windows and exterior safety and security lighting. However, new sources of light and glare associated with the proposed project would not be substantial in the context of existing lighting sources. In addition, daytime glare would not be substantial because no highly-reflective glass elements or building material are proposed as part of the project.

Compliance with California Building Code (Title 24, California Code of Regulations) standards and recommendations from the City's Municipal Code (Article 25, Section 15-2508 Lighting and Glare), which require light fixtures to be shielded or strategically positioned to deflect light away from adjacent properties or public streets, as well as installation of lighting controls and low intensity light fixtures, would ensure that light and glare impacts from the proposed project would be less than significant. In addition, implementation of Mitigation Measures AES-1, AES-2 and AES-3 would address lighting of the proposed project and reflected light resulting from construction of the proposed project. The impact would be **less than significant with mitigation incorporated**.

Mitigation Measures

Mitigation Measure AES-1: Lighting systems for street and parking areas shall include shields to direct light to the roadway surfaces and parking areas. Vertical shields on the light fixtures shall also be used to direct light away from adjacent light sensitive land uses such as residences.

Mitigation Measure AES-2: Lighting systems for public facilities such as active play areas shall provide adequate illumination for the activity; however, low intensity light fixtures and shields shall be used to minimize spillover light onto adjacent properties.

Mitigation Measure AES-3: Materials used on building facades shall be non-reflective.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FOREST		CES - In determ		
to agricultural resources are significated to the California Agricultural Landard prepared by the California Dept. assessing impacts on agriculture are resources, including timberland, a may refer to information compiled Protection regarding the state's inverses seemed. Would the project and the Foremeasurement methodology provides the project and	d Evaluation of Conserva nd farmland. Ir re significant by the Califo entory of fores est Legacy As ed in Forest F	and Site Assettion as an option determining who environmental ornia Departments land, including seessment projection	ssment Mode onal model to ether impacts effects, lead a t of Forestry the Forest an ect; and fores	el (1997) o use in to forest agencies and Fire d Range t carbon
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	Ct.			Х
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				х
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?				Х

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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

DISCUSSION

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

There are no agricultural uses located within or adjacent to the project site. Additionally, the project site is classified as "Urban and Built-Up Land" by the State Department of Conservation.² Therefore, development of the proposed project would not convert agricultural land to a non-agricultural use. The proposed project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use and there would be **no impact**.

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

The project site is designated Employment - Office in the General Plan. The project site is located in the O/UGM/cz (Office/Urban Growth Management/conditions of zoning) zoning district which allows for administrative, financial, business, professional, medical, and public offices, as identified by the General Plan and Fresno Development Code (Chapter 15, Article 13). The project site is not subject to a Williamson Act contract. Therefore, development of the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and the proposed project would have **no impact**.

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))?

² California Department of Conservation. n.d. Farmland Mapping & Monitoring Program. Website: https://www.conservation.ca.gov/dlrp/fmmp (accessed July 18, 2023).

The site zoned within the O/UGM/cz (Office/Urban Growth project is Management/conditions of zoning) zoning district within the City of Fresno. Office zone district use classifications do not include forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526) or Timberland Production (as defined by Government Code section 51104(g)). proposed project would not conflict with the existing zoning for, or cause rezoning of, forest land or conversion of forest land to non-forest uses. Therefore, the proposed project would have **no impact** on forest land.

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

Please refer to the discussion for c) above. The proposed project would not result in the loss of forest land or conversion of forest land to non-forest uses. Therefore, the proposed project would have **no impact**.

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?

Please refer to discussions a) and c) above. The project site is located within an existing urban environment and would not result in the conversion of farmland to non-agricultural uses or forest land to non-forest uses. The proposed project would not adversely affect agricultural or forestry resources and there would be **no impact**.

Mitigation Measure

The proposed project would not result in any potentially significant impacts related to agricultural and forestry resources, and no mitigation is required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	
III. AIR QUALITY — Where available, the significance criteria established applicable air quality management or air pollution control district may be relied u make the following determinations. Would the project:					
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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X		
c) Expose sensitive receptors to substantial pollutant concentrations?			Х		
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			Х		

DISCUSSION

a) Conflict with or obstruct implementation of the applicable air quality plan?

The City of Fresno is part of the San Joaquin Valley Air Basin (SJVAB), which is within the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). The

SJVAPCD is responsible for air quality regulation within the eight-county San Joaquin Valley region.

Both the State and the federal governments have established health-based Ambient Air Quality Standards (AAQS) for six criteria air pollutants: carbon monoxide (CO), ozone (O₃), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), lead, and suspended particulate matter (PM_{2.5} and PM₁₀). The SJVAB is designated as non-attainment for O₃ and PM_{2.5} for federal standards and non-attainment for O₃, PM₁₀, and PM_{2.5} for State standards.

CEQA requires that certain proposed projects be analyzed for consistency with the applicable air quality plan. An air quality plan describes air pollution control strategies to be implemented by a city, county, or region classified as a non-attainment area. The main purpose of the air quality plan is to bring the area into compliance with the requirements of the federal and State air quality standards. To bring the SJVAB into attainment, the SJVAPCD adopted the 2022 Plan for the 2015 8-Hour Ozone Standard in December 2022 to satisfy Clean Air Act requirements and ensure attainment of the 75 parts per billion (ppb) 8-hour ozone standard.

To assure the SJVAB's continued attainment of the USEPA PM $_{10}$ standard, the SJVAPCD adopted the 2007 PM $_{10}$ Maintenance Plan in September 2007. SJVAPCD Regulation VIII (Fugitive PM $_{10}$ Prohibitions) is designed to reduce PM $_{10}$ emissions generated by human activity. The SJVAPCD adopted the 2018 plan for the 1997, 2006, and 2012 PM $_{2.5}$ standard to address the USEPA federal annual PM $_{2.5}$ standard of 12 μ g/m 3 , established in 2012.

For a project to be consistent with SJVAPCD air quality plans, the pollutants emitted from a project should not exceed the SJVAPCD emission thresholds or cause a significant impact on air quality. In addition, emission reductions achieved through implementation of offset requirements are a major component of the SJVAPCD air quality plans. As discussed below, construction of the proposed project would not result in the generation of criteria air pollutants that would exceed SJVAPCD thresholds of significance. Additionally, implementation of Regulatory Compliance Measure AIR-1 would further reduce construction dust impacts. Operational emissions associated with the proposed project would also not exceed SJVAPCD established significance thresholds. Therefore, the proposed project would not conflict with or obstruct implementation of SJVAPCD air quality plans. Therefore, impacts would be **less than significant**.

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?

The SJVAB is designated as non-attainment for O₃ and PM_{2.5} for federal standards and non-attainment for O₃, PM₁₀, and PM_{2.5} for State standards. The SJVAPCD's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a

cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, the SJVAPCD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Therefore, additional analysis to assess cumulative impacts is unnecessary. The following analysis assesses the potential project-level construction- and operation-related air quality impacts.

Short-Term Construction Emissions. During construction, short-term degradation of air quality may occur due to the release of particulate emissions generated by grading, paving, building, and other activities. Emissions from construction equipment are also anticipated and would include CO, NO_x, reactive organic gases (ROG), directly-emitted particulate matter (PM_{2.5} and PM₁₀), and toxic air contaminants (TACs) such as diesel exhaust particulate matter.

Project construction activities would include site preparation, grading, building construction, paving, and architectural coating activities. Construction-related effects on air quality from the proposed project would be greatest during the preparation phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the project site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM₁₀ emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM₁₀ emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. The SJVAPCD has implemented Regulation VIII measures for reducing fugitive dust emissions (PM₁₀). With the implementation of Regulation VIII measures, fugitive dust emissions from construction activities would not result in adverse air quality impacts.

In addition to dust-related PM₁₀ emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO₂, NO_x, ROG, and some soot particulate (PM_{2.5} and PM₁₀) in exhaust emissions. These emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

The SJVAPCD has established construction emissions thresholds on an annual basis as shown in Table 1 below. Construction emissions for the proposed project were analyzed using the California Emissions Estimator Model (CalEEMod) version 2022.1. Precise details of construction activities are unknown at this time; therefore, default assumptions (e.g., construction duration, phasing, and fleet activities) from CalEEMod were used. In addition, this analysis assumes the use of Tier 2 construction equipment as required by the California Air Resources Board. Construction-related emissions are presented in Table 1. CalEEMod output sheets are included in Appendix A.

Table 1: Project Construction Emissions (Tons per Year)

Project Construction Emissions	ROG	NOx	со	SOx	PM ₁₀	PM _{2.5}
2024	0.1	2.5	2.0	<0.1	0.1	0.1
2025	0.2	<0.1	<0.1	<0.1	<0.1	<0.1
Maximum Annual Construction Emissions	0.2	2.5	2.0	<0.1	0.1	0.1
SJVAPCD Significance Threshold	10.0	10.0	100.0	27.0	15.0	15.0
Exceed Threshold?	No	No	No	No	No	No

Source: LSA (June 2023).

Note: The CalEEMod analysis evaluated project construction emissions with a start date of January 2024 and a duration of 12 months. The proposed project's construction schedule has since been modified that project construction would begin January 2025 and would still occur over a 12-month duration. This modification to the project construction schedule was reviewed by LSA and it was determined that the modified construction start date would not result in any new or more severe air quality impacts than what is described within.

As shown in Table 1, construction emissions would not exceed the SJVAPCD threshold for annual construction emissions for the proposed project. In addition to the construction period thresholds of significance, the SJVAPCD has implemented Regulation VIII measures for dust control during construction. These control measures are intended to reduce the amount of PM₁₀ emissions during the construction period. Implementation of the fugitive dust control measures outlined in Regulatory Control Measure AIR-1, would ensure that the proposed project complies with Regulation VIII and further reduces the short-term construction period air quality impacts.

As shown in Table 1, construction emissions associated with the proposed project would not exceed the significance criteria for annual CO, NO_x, ROG, SO_x, PM₁₀, or PM_{2.5} emissions. Therefore, construction of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State AAQS. Impacts would be **less than significant**.

Long-Term Operational Emissions. Long-term air pollutant emission impacts associated with the proposed project are those related to mobile sources (e.g., vehicle trips), energy sources (e.g., natural gas), and area sources (e.g., architectural coatings and the use of landscape maintenance equipment).

PM₁₀ emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways. Entrainment of PM₁₀ occurs when vehicle tires pulverize small rocks and pavement and the vehicle wakes generate airborne dust. The contribution of tire and brake wear is small compared to the other PM emission processes. Gasoline-powered engines have small rates of particulate matter emissions compared with diesel-powered vehicles.

Energy source emissions result from activities in buildings for which natural gas is used. The quantity of emissions is the product of usage intensity (i.e., the amount is natural gas) and the emission factor of the fuel source.

Typically, area source emissions consist of direct sources of air emissions located at the project site, including architectural coatings and the use of landscape maintenance equipment. Area source emissions associated with the project would include emissions from the use of landscaping equipment and the use of consumer products.

Emission estimates for operation of the proposed project were calculated using CalEEMod version 2022.1. Model results are shown in Table 2. Trip generation rates for the proposed project were based on the project's trip generation estimate, as identified in Section XVII, Transportation. As discussed in Section XVII, Transportation, the proposed project would generate approximately 324 average daily trips.

The primary emissions associated with the proposed project are regional in nature, meaning that air pollutants are rapidly dispersed on release or, in the case of vehicle emissions associated with the proposed project; emissions are released in other areas of the Air Basin. The annual emissions associated with project operational trip generation, energy, and area sources are identified in Table 2.

Table 2: Project Operation Emissions (Tons per Year)

	ROG	NOx	CO	SO _x	PM ₁₀	PM _{2.5}
Mobile Source Emissions	0.2	0.2	1.2	<0.1	0.2	0.1
Area Source Emissions	.3	<0.1	0.7	<0.1	0.1	0.1
Energy Source Emissions	<0.1	0.1	<0.1	<0.1	<0.1	<0.1
Total Project Operation	0.5	0.3	1.9	<0.1	0.3	0.2
Emissions	0.5	0.3	1.9	<0.1	0.3	0.2
SJVAPCD Significance	10.0	10.0	100.0	27.0	15.0	15.0
Threshold	10.0	10.0	100.0	27.0	15.0	15.0
Exceed Threshold?	No	No	No	No	No	No

Source: LSA (June 2023).

The results shown in Table 2 indicate the proposed project's operational emissions would not exceed the significance criteria for annual CO, NO_x, ROG, SO_x, PM₁₀, or PM_{2.5} emissions. Therefore, operation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the proposed project region is in nonattainment under an applicable federal or State AAQS. As a result, impacts would

be less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Construction of the proposed project may expose surrounding sensitive receptors to airborne particulates, as well as a small quantity of construction equipment pollutants (i.e., usually diesel-fueled vehicles and equipment). The nearest residential receptors are single-family residences located just west of the project site, and Kids Kare River Bluff day care facility, located immediately south of the project site. However, as shown in Table 1, construction emissions associated with the project, would be minimal and would not be expected to result in impacts to surrounding receptors, given the emission rates are very low and are well below the SJVAPCD significance thresholds. Additionally, construction contractors would be required to implement measures to reduce or eliminate emissions by following the Regulation VIII, Fugitive PM₁₀ Prohibitions, outlined under Regulatory Compliance Measure AIR-1. Once the proposed project is constructed, the proposed project would not be a significant source of long-term operational emissions. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during project operation. As a result, impacts would be **less than significant**.

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

During construction, the various diesel-powered vehicles and equipment in use on-site would create localized odors. These odors would be temporary and are not likely to be noticeable for extended periods of time beyond the project site. The potential for diesel odor impacts is therefore considered less than significant. In addition, the proposed uses that would be developed within the project site are not expected to produce any offensive odors that would result in frequent odor complaints. The proposed project would not create objectionable odors affecting a substantial number of people during project construction or operation, and this impact would be **less than significant**.

Mitigation Measures

No Mitigation Measure is required. However, the following Regulatory Compliance Measure would be implemented:

Regulatory Compliance Measure AIR-1: Consistent with SJVAPCD Regulation VIII (Fugitive PM₁₀ Prohibitions), the following controls are required to be included as specifications for the proposed project and implemented at the construction site:

- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.
- All on-site unpaved roads and off-site unpaved access roads shall be effectively

- stabilized of dust emissions using water or chemical stabilizer/suppressant.
- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
- When materials are transported off-site, all material shall be covered, or effectively
 wetted to limit visible dust emissions, and at least 6 inches of freeboard space from
 the top of the container shall be maintained.
- All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.)
- Following the addition of materials to, or the removal of materials from, the surface of out-door storage piles, said piles shall be effectively stabilized of fugitive dust emission utilizing sufficient water or chemical stabilizer/suppressant.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES –	Would the pro	oject:		
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?				Х
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				Х
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	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				Х
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?			X	

DISCUSSION

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?

LSA prepared a Biological Resources Assessment³ for the proposed project (Appendix B) that describes and documents potential impacts to biological resources, including special-status species, associated with the proposed project. In addition, the Biological Resources Assessment contains measures to reduce potentially significant project-related impacts. The analysis in this Biological Resources section is based on the results of the Biological Resources Assessment.

LSA Biologist Kelly McDonald conducted a literature review and records search on July 31, 2020, to identify the existence and potential for occurrence of sensitive or special-status plant and animal species in the project vicinity. Federal and State lists of sensitive species were also examined. Current electronic database records reviewed included the following: California Natural Diversity Data Base information (CNDDB – RareFind 5); California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants; United States Fish and Wildlife Service's (USFWS) Information for Planning and Conservation (IPaC) Online System; and eBird. In addition to the databases listed above, historic and current aerial imagery along with previously prepared environmental reports and land use policies related to biological resources were reviewed. LSA Biologist Kelly McDonald conducted a general biological survey of the project site on August 4, 2020. The entirety of the project site was surveyed on foot, and

3 LSA. 2020. Biological Resources Assessment for the proposed North Fresno Residential Project. September 2.

all biological resources observed were noted. Suitable habitat for any species of interest or concern was duly noted, and general site conditions were photographed (see Appendix B).

The project site is located in an urbanized area and mainly consists of ruderal (e.g., disturbed, weedy) annual grassland vegetation and bare ground. Ongoing soil disturbance (e.g., vegetation control, foot traffic, and off-road vehicles) and the resulting competitive exclusion by invasive nonnative plants limit the potential for native flora to occur within most of the project site. Based on the results of the literature review and records search and the field survey, there is no designated or proposed critical habitat for any federally-listed species within the project site. The proposed project would not result in any adverse impacts to critical habitats or sensitive natural communities. In addition, no special-status species were identified during August 4, 2020 field survey of the project site, are expected to occur within the project site, or are expected to be adversely affected by the proposed project.

The project site and immediate vicinity contain vegetation that provides suitable nesting habitat for a variety of native and migratory bird species, which are protected while nesting. To ensure compliance with the Federal Migratory Bird Treaty Act and California Fish and Game Code Sections 3500–3516, pre-construction nesting bird surveys would occur prior to any vegetation clearing or construction activities planned to occur during the nesting bird season (January 1 through September 30), subject to Mitigation Measure BIO-1. With implementation of Mitigation Measure BIO-1, impacts to nesting birds would be avoided.

While no special-status animal species (or signs of such species) were observed on site during the survey, several small mammal burrows were observed within the project site that are considered suitable habitat for burrowing owl, a California Species of Special Concern. None of the small mammal burrows observed in the project site exhibited features typical of burrowing owl burrows at the time of the survey, although there is some potential for use by this species in the future. Potentially significant direct and indirect impacts, including mortality, harassment, or other forms of incidental take, could occur if construction-related ground disturbance occurs in or around an occupied burrow. Implementation of Mitigation Measure BIO-2 would be required to address potential impacts on burrowing owl.

If unmitigated or not avoided, these potential direct and indirect impacts on special-status wildlife species (burrowing owl) and/or nesting birds could be considered potentially significant. However, implementation of Measures BIO-1 and BIO-2, as summarized below, would effectively avoid, minimize, or mitigate any impacts on special-status species to less-than-significant levels.

No other special-status species were determined to have a moderate or high probability of occurrence on the project site. The removal of the ruderal habitat documented on the project site is not anticipated to substantially impact the population sizes of any special-

status animal species given the context and setting of the project site and additional habitats for such species in the project vicinity.

Implementation of Mitigation Measures BIO-1 and BIO-2 would effectively avoid, minimize, or mitigate any impacts on special-status species to less-than-significant levels. Therefore, the impact is **less than significant with mitigation incorporated**.

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?

As discussed in the Biological Resources Assessment⁴, no riparian habitat or other sensitive natural communities occur within the project site, or within the vicinity of the project site. 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?

As discussed in the Biological Resources Assessment⁵, No jurisdictional drainage features, wetlands or other state or federally protected aquatic resources occur within the project site, or within the vicinity of the project site. As a result, **no impact** would occur.

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?

The project site is surrounded by existing residential developments, roads, and other anthropogenic land uses. The wildlife species that occur in the project vicinity are adapted to the urban-wildland interface. The noise, vibration, light, dust, or human disturbance within construction areas would only temporarily deter wildlife from using areas in the immediate vicinity of construction activities. These indirect effects could temporarily alter migration behaviors, territories, or foraging habitats in select areas. However, because these are temporary effects, it is likely that wildlife already living and moving in close proximity to urban development would alter their normal functions for the duration of the project construction and then reestablish these functions once all temporary construction effects have been removed. The proposed project would not place any permanent barriers within any known wildlife movement corridors or interfere with habitat connectivity. No adverse effects on wildlife movement are anticipated, and this impact would be **less than significant**.

⁴ Ibid.

⁵ Ibid.

⁶ Ibid.

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

The proposed project would not conflict with any local policies or ordinances protecting biological resources. Though the proposed project is subject to provisions of the City's Municipal Code regarding trees on public property (Article 3 of Section 13 of the City of Fresno Municipal Code), the proposed project does not conflict with any of the existing ordinances. As a result, **no impact** would occur.

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?

The PG&E San Joaquin Valley Operation and Maintenance (O&M) Habitat Conservation Plan (HCP) was approved in 2007 and covers portions of nine counties, including Fresno County. This HCP covers PG&E activities which occur as a result of ongoing O&M that would have an adverse impact on any of the 65 covered species and provides incidental take coverage from the USFWS and CDFW. The City of Fresno is not located within the boundaries of any approved or draft Natural Community Conservation Plan (NCCP), or other adopted local, regional or State HCP. As previously discussed, the proposed project would not result in impacts to any special-status species, including the 65 species covered under the PG&E HCP. Therefore, the proposed project would not conflict with the provisions of the PG&E HCP and the proposed project would result in a **less-than-significant impact**.

Mitigation Measures

Mitigation Measure BIO-1: Nesting Bird Surveys and Active Nest Avoidance. Any vegetation removal should take place outside of the active nesting bird season (i.e., January 1—September 30), when feasible, to avoid impacts to nesting birds protected under the California Fish and Game Code and Migratory Bird Treaty Act. Should vegetation removal take place during this period, a qualified biologist shall conduct a nesting bird survey no more than 5 days prior to clearing activities. If nesting birds are discovered during preconstruction surveys, the biologist shall identify an appropriate buffer where no clearing, grading, or construction activities with potential to have direct or indirect impacts on the nesting bird(s) are allowed to take place until after the nest is no longer active (e.g., the young birds have fledged), or as otherwise determined by the qualified biologist.

Mitigation Measure BIO-2: Conduct Preconstruction Surveys for Burrowing Owl. A preconstruction survey for burrowing owl is required to take place no more than 30 calendar days prior to initiation of any vegetation or ground-disturbing project activities. A qualified biologist will provide the results of the survey to the City of Fresno. If an active burrow of the species is detected on the project site, the Project

Applicant must coordinate with the California Department of Fish and Wildlife (CDFW) prior to any project activities and specific avoidance, passive relocation, and compensatory mitigation activities shall be performed as required by CDFW.

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

DISCUSSION

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

LSA prepared a Cultural Resources Review⁷ for the proposed project (Appendix C). The Cultural Resources Review included (1) a records search at the Southern San Joaquin Valley Information Center (SSJVIC); (2) a Sacred Lands File records search at the Native American Heritage Commission (NAHC); (3) a review of historic-period maps and aerial images; and (4) a pedestrian field survey of the project site by LSA Archaeologist Isaac Younglund on August 7, 2020. The SSJVIC is the official State repository of cultural resources records and studies in Fresno County, and the NAHC is the official State repository of Native American sacred site location records. In addition, relevant environmental and archaeological literature was reviewed for background information and to assess the potential for subsurface archaeological deposits in the vicinity of the project site.

A historical resource defined by CEQA includes one or more of the following criteria: 1) the resource is listed, or found eligible for listing in, the California Register of Historical Resources (CRHR); 2) listed in a local register of historical resources as defined by Public Resources Code (PRC) Section 5020.1(k); 3) identified as significant in a historical resources survey meeting the requirements of PRC Section 5024.1(g); or 4) determined

⁷ LSA. 2020. North Fresno Residential Project in Fresno County, California; Cultural Resources Review (LSA Project No. BJD2001). August 19.

to be a historical resource by the project's lead agency (PRC Section 21084.1; CEQA Guidelines Section 15064.(a)). Under CEQA, historical resources include built-environment resources and archaeological sites.

As discussed in the Cultural Resources Review, no historical resources were identified within or adjacent to the project site. The project site has a low potential for encountering subsurface historic-period archaeological deposits because there is no evidence of former homesteads or buildings at this location and it was used for agricultural purposes throughout the historic period. The Enterprise Canal, a primary feature of the Fresno Irrigation District constructed between 1870 and 1890, is aligned in its historic location along the western edge of the project site but has been buried since its period of significance. The proposed project would maintain a 40-foot easement along the Enterprise Canal alignment. Additionally, construction within the FID easement for the Enterprise Canal would be subject to FID approval, would require issuance of an Encroachment Agreement, and would be limited to improvements related to curbs and gutters, sidewalks, and asphalt paving for parking areas, as well as landscaping limited to trees with non-invasive root types located up to 15 feet from the edge of Enterprise Canal's pipeline alignment. Because the proposed project does not propose alteration of this resource, and no excavation will be conducted at the location of this resource, no significant impacts are expected to occur.

In addition, the City has determined that impacts to cultural resources could occur as a result of development within the City, and that unknown archaeological materials may be present. Although no evidence of archeological deposits have been identified, there is a potential for unknown archaeological resources that qualify as a historical resource under CEQA to be discovered during construction. Mitigation Measure CUL-1 would apply to the proposed project and requires that if unknown historical resources are discovered during construction, work in the area would halt and a qualified historical resource specialist would be contacted. Therefore, adherence to the requirements in Mitigation Measure CUL-1 would reduce potential impacts to unknown historical resources to less than significant with mitigation incorporated.

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

According to the CEQA Guidelines, "When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource" (CEQA Guidelines Section 15064.5(c)(1)). Those archaeological sites that do not qualify as historical resources shall be assessed to determine if these qualify as "unique archaeological resources" (California PRC Section 21083.2).

As discussed in the Cultural Resources Review, assessing the potential for buried archaeological site deposits in the vicinity of the proposed project requires an understanding of landform age and overlying soils. Fundamentally, there is an inverse relationship between landform age and the potential for buried archaeological deposits.

Some landforms predate human occupation of the region (e.g., Pleistocene alluvial fan deposits) and, as such, archaeological deposits on these landforms, if present, would be located at or near the surface. In contrast, those landforms that were formed during the Holocene (circa 11,700 years ago to the present) have a potential for containing buried surfaces (paleosols) that would have been available for human habitation during prehistory.

The project site is within the Great Valley Geomorphic Province, which encompasses a large alluvial plain in the central part of the State. This 50-mile-wide by 400- mile-long trough is divided into two valleys, each named for the respective rivers that drain them: the Sacramento Valley to the north and the San Joaquin Valley to the south. Sediments eroding from the Coast Ranges to the west and the Sierra Nevada to the east have accumulated in the Great Valley almost continuously since the Jurassic Period (201–145 million years ago). Geologic maps of the area were refined to determine the geological context of the sediments on the project site. Because the proposed project is within the San Joaquin Valley, it has experienced heavy accumulation of redeposited sediments from the weathering of surrounding mountain ranges. The project site is at an elevation of approximately 380 feet above mean sea level. Older Quaternary alluvial fan deposits were observed within the project site and are composed of San Joaquin sandy loam, hard substratum.⁸ This soil type is associated with the older Pleistocene Non-marine landform depicted at this location that predates human occupation. Therefore, the project site's potential to contain buried archaeological deposits is low and any archaeological artifacts or features would be identified at or near the ground surface.9

Although the landform age and soil types present on the project site suggest low sensitivity for buried precontact-period archaeological resources, the possibility of encountering subsurface features still exists. Mitigation Measure CUL-2 would be required to avoid impacts that may occur from inadvertent disturbances to unknown buried archaeological resources.

No archaeological resources were identified in the project site. However, there is a potential for unknown archaeological resources to be discovered during construction. Mitigation Measure CUL-2 requires that if unknown archaeological resources are discovered during construction, work in the area would halt and a qualified archaeologist would be contacted. Therefore, adherence to the requirements in Mitigation Measure CUL-2 would reduce potential impacts to archaeological resources to less than significant with mitigation incorporated.

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

⁸ Natural Resources Conservation Service (NRCS). 2022. Web Soil Survey. United States Department of Agriculture. Electronic dataset. Website: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx (accessed July 18, 2023).

⁹ Meyer, Jack, D. Craig Young, and Jeffrey Rosenthal. 2010. *A Geoarchaeological Overview and Assessment of Caltrans Districts 6 and 9*. Far Western Anthropological Research Group, Inc., Davis, California.

Disturbance of human remains interred outside of formal cemeteries would result in a significant impact. If human remains are identified during project construction, Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the Public Resources Code shall apply, as appropriate. Although field survey did not indicate presence of cultural resources or human remains, Native American skeletal remains could potentially be identified in the project site during construction. In the event of accidental discovery of human remains, the specific protocol outlined by Section 7050.5 of the Health and Safety Code should be followed. If the Coroner determines the remains are not subject to his or her authority, and if the Coroner recognizes the remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she will contact the NAHC by telephone within 24 hours.

The NAHC shall identify the person or persons it believes to be the most likely descended from the deceased Native American. The most likely descendent may make recommendations to the County or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods, as provided in Public Resources Code §5097.98.

In addition, Mitigation Measure CUL-3 would apply to the proposed project. Therefore, adherence to the requirements in Mitigation Measure CUL-3 would reduce potential impacts to unknown human remains to **less than significant with mitigation incorporated**.

Mitigation Measures

Mitigation Measure CUL-1: If previously unknown resources are encountered before or during grading activities, construction shall stop in the immediate vicinity of the find and a qualified historical resources specialist shall be consulted to determine whether the resource requires further study. The qualified historical resources specialist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines and the City's Historic Preservation Ordinance.

If the resources are determined to be unique historical resources as defined under Section 15064.5 of the CEQA Guidelines, measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could include avoidance or capping, incorporation of the project site in green space, parks, or open space, or data recovery excavations of the finds.

No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these. Any historical artifacts recovered as a result of mitigation shall be provided to a City-approved institution or person who is capable of providing long-term preservation to allow future scientific study.

Mitigation Measure CUL-2: Subsequent to a preliminary City review of the project grading plans, if there is evidence that a project will include excavation or construction activities within previously undisturbed soils, a field survey and literature search for prehistoric archaeological resources shall be conducted. The following procedures shall be followed.

If prehistoric resources are not found during either the field survey or literature search, excavation and/or construction activities can commence. In the event that buried prehistoric archaeological resources are discovered during excavation and/or construction activities, construction shall stop in the immediate vicinity of the find and a qualified archaeologist shall be consulted to determine whether the resource requires further study. The qualified archaeologist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with CEQA Guidelines Section 15064.5.

If the resources are determined to be unique prehistoric archaeological resources as defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could include avoidance or capping, incorporation of the project site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any prehistoric archaeological artifacts recovered as a result of mitigation shall be provided to a Cityapproved institution or person who is capable of providing long-term preservation to allow future scientific study.

If prehistoric resources are found during the field survey or literature review, the resources shall be inventoried using appropriate State record forms and submit the forms to the Southern San Joaquin Valley Information Center. The resources shall be evaluated for significance. If the resources are found to be significant, measures shall be identified by the qualified archaeologist. Similar to above, appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the project site in green space, parks, or open space, or data recovery excavations of the finds.

In addition, appropriate mitigation for excavation and construction activities in the vicinity of the resources found during the field survey or literature review shall include an archaeological monitor. The monitoring period shall be determined by the qualified archaeologist. If additional prehistoric archaeological resources are found during excavation and/or construction activities, the procedure identified above for the discovery of unknown resources shall be followed.

Mitigation Measure CUL-3: 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.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. ENERGY – 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?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			Х	

DISCUSSION

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

The proposed new development would be constructed using energy efficient modern building materials and construction practices, and the proposed project also would use new modern appliances and equipment, in accordance with the Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608). The expected energy consumption during construction and operation of the proposed project would be consistent with typical usage rates for residential uses; however, energy consumption is largely a function of personal choice and the physical structure and layout of buildings. It can be assumed that implementation of the proposed project would result in additional energy demand in the City; however, since the proposed project would be located in a primarily developed urban area, the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. Impacts would be **less than significant** and no mitigation is required.

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

In 2002, the Legislature passed Senate Bill 1389, which required the California Energy Commission (CEC) to develop an integrated energy plan every two years for electricity, natural gas, and transportation fuels, for the California Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least

environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero emission (ZE) vehicles and their infrastructure needs, and encouragement of urban designs that reduce VMT and accommodate pedestrian and bicycle access.

The most recently CEC adopted energy report is the 2023 Integrated Energy Policy Report. The 2023 Integrated Energy Policy Report provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs. The 2023 Integrated Energy Policy Report covers a broad range of topics, including implementation of Senate Bill 350, integrated resource planning, distributed energy resources, transportation electrification, solutions to increase resiliency in the electricity sector, energy efficiency, transportation electrification, barriers faced by disadvantaged communities, demand response, transmission and landscape-scale planning, the California Energy Demand Preliminary Forecast, the preliminary transportation energy demand forecast, renewable gas (in response to Senate Bill 1383), updates on Southern California electricity reliability, natural gas outlook, and climate adaptation and resiliency.

As indicated above, the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. Because California's energy conservation planning actions are conducted at a regional level, and because the proposed project's total impact to regional energy supplies would be minor, the proposed project would not conflict with California's energy conservation plans as described in the CEC's 2023 Integrated Energy Policy Report.

In addition, the proposed project would comply with the CALGreen Code (CCR Title 24, Part 11) and the California Energy Code (CCR Title 24, Part 6), which includes provisions related to insulation and design aimed at minimizing energy consumption. The proposed project would also comply with objectives and policies included in the City's General Plan that are aimed at reducing energy consumption. In addition, as discussed Section VIII, Greenhouse Gas Emissions, the proposed project would be consistent with the applicable strategies from the GHG Reduction Plan.

Thus, as shown above, the proposed project would be consistent with applicable State and local plans related to renewable energy and energy efficiency. Impacts would be **less than significant** and no mitigation would be required.

¹⁰ California Energy Commission, 2023. 2023 Integrated Energy Policy Report. California Energy Commission. Docket Number: 23-IEPR-01.

Mitigation Measures

The proposed project would not result in any potentially significant impacts related to energy, and no mitigation is required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS – Wo	uld 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.			X	
ii) Strong seismic ground shaking?			Х	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			Х	
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	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				Х
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		Х		

DISCUSSION

- 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.

Fault rupture is generally expected to occur along active fault traces that have exhibited signs of recent geological movement (i.e., 11,000 years). Alquist-Priolo Earthquake Fault Zones delineate areas around active faults with potential surface fault rupture hazards that would require specific geological investigations prior to approval of certain kinds of development within the delineated area. The project site is not located within an Alquist-Priolo Earthquake Fault Zone. In addition, no known active or potentially active faults or fault traces are located in the project vicinity. The closest active faults are the Nunez Fault, located approximately 60 miles from the project site, and the Ortigalita Fault, located approximately 64 miles from the project site. As a result, a **less-than-significant impact** related to a fault rupture would occur.

ii. Strong seismic ground shaking?

The City of Fresno is located in an area with historically low to moderate level of seismicity. However, strong ground shaking could occur within the project site during seismic events and occurrences have the possibility to result in significant impacts. Major seismic activity along the nearby Great Valley Fault Zone or the Nunez Fault, or other associated faults, could affect the project site through strong seismic ground shaking. Strong seismic ground shaking could potentially cause structural damage to

the proposed project. However, due to the distance to the known faults, hazards due to ground shaking would be minimal. In addition, compliance with the California Building Code (Title 24, California Code of Regulations) would ensure that geotechnical design of the proposed project would minimize or eliminate potential impacts related to strong seismic ground shaking. Therefore, the project would not directly or indirectly cause substantial adverse effects related to strong seismic ground shaking. As such, the proposed project would have a **less than significant** impact. No mitigation is required.

iii. Seismic-related ground failure, including liquefaction?

Soil liquefaction is a phenomenon primarily associated with saturated soil layers located close to the ground surface. During ground shaking, these soils lose strength and acquire "mobility" sufficient to permit both horizontal and vertical movements. Soils that are most susceptible to liquefaction are clean, loose, uniformly graded, saturated, fine-grained sands that lie relatively close to the ground surface. However, loose sands that contain a significant amount of fines (silt and clay) may also liquefy. Based on the predicted seismic accelerations, and soil and groundwater conditions typically encountered in the region, general liquefaction potential is low in the Fresno Planning Area. Additionally, compliance with the Fresno Municipal Code and the California Building Code would ensure potential impacts associated with liquefaction would be **less than significant**.

iv. Landslides?

A landslide generally occurs on relatively steep slopes and/or on slopes underlain by weak materials. The project site is located on a relatively flat area and is not located next to any hills. In general, the potential for land sliding or slope failure in Fresno is very low and the project site would not be susceptible to landslides. Therefore, the potential for the proposed project to expose people or structures to risk as a result of landslides would be **less than significant**.

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

The project site is 3.78 acres. Grading and earthmoving during project construction has the potential to result in erosion and loss of topsoil. Exposed soils could be entrained in stormwater runoff and transported off the project sites. However, this impact would not be substantial because the project is required to comply with water quality control measures of the Construction General Permit, which include preparation of a Stormwater Pollution Prevention Plan (SWPPP) (refer to Section X, Hydrology and Water Quality). Although designed primarily to protect stormwater quality, the SWPPP would incorporate

¹¹ City of Fresno. 2020. General Plan Program Environmental Impact Report. 4.7: Geology and Soils. p. 4.7-1. Website: https://www.fresno.gov/wp-content/uploads/2023/03/Fresno-GP-Public-Review-Draft-Program-EIR.pdf (accessed July 18, 2023).

Best Management Practices (BMPs) to minimize erosion. Additional details regarding the SWPPP are provided in Section X, Hydrology and Water Quality of this Initial Study. This impact would be **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?

As described in response to a) in this section, soils on the project site would not be subject to liquefaction, lateral spreading, or landslides. Additionally, the proposed project would be required to conform with the California Building Code, which establishes building and construction design standards and requirements based on project location, proposed occupancy type at the project site, soil characteristics, and other site-specific characteristics. Implementation of the CBC would reduce risks related to unstable soils, including threats to the stability and security of structures and the safety of the people occupying them. Therefore, the proposed project would have a **less-than-significant impact** related to the potential to 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. No mitigation is required.

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?

Expansive soils are characterized by the potential for shrinking and swelling as the moisture content of the soil decreases and increases, respectively. Shrink-swell potential is influenced by the amount and type of clay minerals present and can be measured by the percent change of the soil volume. The project site's soil type is composed of San Joaquin sandy loam, hard substratum. Compliance with the California Building Code requirements would ensure that geotechnical design of the proposed project would minimize or eliminate potential impacts potential impacts related to expansive soils. As such, the risk of expansive soil affecting the proposed project is considered low. Impacts to 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 would be **less than significant**.

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

The project site would be served by a wastewater conveyance system maintained by the Wastewater Management Division (WMD) of the City of Fresno. Wastewater from the

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¹² Natural Resources Conservation Service (NRCS), 2020. op. cit.

City's collection system is treated at the City's wastewater treatment plant. Development of the proposed Project would not involve the use of septic tanks or alternative wastewater disposal systems. Therefore, the proposed project would have **no impact** related to septic tanks or alternative wastewater disposal systems.

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

No paleontological resources or unique geological features are known to exist within or near the project site, and the proposed project is not expected to alter or destroy a paleontological resource, site, or unique geologic feature. Furthermore, the proposed project would not require excavation to depths that have not already been disturbed by previous construction. However, should unknown paleontological resource or unique geologic feature be discovered within the project site, Mitigation Measure GEO-1 would apply to the proposed project. Therefore, adherence to the requirements in Mitigation Measure GEO-1 would reduce potential impacts to unknown human remains to less than significant with mitigation incorporated.

Mitigation Measures

Mitigation Measure GEO-1: Subsequent to a preliminary City review of the project grading plans, if there is evidence that a project will include excavation or construction activities within previously undisturbed soils, a field survey and literature search for unique paleontological/geological resources shall be conducted. The following procedures shall be followed.

If unique paleontological/geological resources are not found during either the field survey or literature search, excavation and/or construction activities can commence. In the event that unique paleontological/geological resources are discovered during excavation and/or construction activities, construction shall stop in the immediate vicinity of the find and a qualified paleontologist shall be consulted to determine whether the resource requires further study. The qualified paleontologist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to, excavation of the finds and evaluation of the finds. If the resources are determined to be significant, mitigation measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the project site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any paleontological/geological resources recovered as a result of mitigation shall be provided to a City-approved institution or person who is capable of providing long-term preservation to allow future scientific study.

If unique paleontological/geological resources are found during the field survey or

literature review, the resources shall be inventoried and evaluated for significance. If the resources are found to be significant, mitigation measures shall be identified by the qualified paleontologist. Similar to above, appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the project site in green space, parks, or open space, or data recovery excavations of the finds. In addition, appropriate mitigation for excavation and construction activities in the vicinity of the resources found during the field survey or literature review shall include a paleontological monitor. The monitoring period shall be determined by the qualified paleontologist. If additional paleontological/geological resources are found during excavation and/or construction activities, the procedure identified above for the discovery of unknown resources shall be followed.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSI	ONS – Would	the project:		
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?			Х	

DISCUSSION

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

Greenhouse gas emissions (GHGs) are present in the atmosphere naturally, and are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. However, over the last 200 years, human activities have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere, and enhancing the natural greenhouse effect, which is believed to be causing global climate change. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- Carbon dioxide (CO₂)
- Methane (CH₄)

- Nitrous oxide (N₂O)
- Hydrofluorocarbons
- Perfluorocarbons
- Sulfur Hexafluoride

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of Global Warming Potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and the length of time that the gas remains in the atmosphere ("atmospheric lifetime").

The GWP of each gas is measured relative to CO₂, the most abundant GHG; the definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO₂ over a specified time period. GHG emissions are typically measured in terms of pounds or tons of "CO₂ equivalents" (CO₂e).

The State CEQA Guidelines indicate that a project would normally have a significant adverse green-house gas emission impact if the project would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reduction the emissions of greenhouse gases.

Section 15064.4 of the *State CEQA Guidelines* states that: "A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project." In performing that analysis, the lead agency has discretion to determine whether to use a model or methodology to quantify greenhouse gas emissions, or to rely on a qualitative analysis or performance-based standards. In making a determination as to the significance of potential impacts, the lead agency then considers the extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting, whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project, and 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 City's GHG Reduction Plan meets the requirements for a Qualified GHG Reduction Strategy. Therefore, the proposed project's GHG emissions would not be considered a

significant impact if the proposed project would be consistent with the City's GHG Reduction Strategy.

The GHG Reduction Plan Update includes a Consistency Checklist to help the City provide a streamlined review process for new development projects that are subject to discretionary review pursuant to CEQA. The City's GHG Reduction Plan Update has not yet been adopted; however, for purposes of this analysis, the proposed project's GHG emissions would not be considered a significant impact if the proposed project would be consistent with the City's GHG Reduction Plan Update.

Projects that meet the requirements of the Consistency Checklist will be deemed to be consistent with the Fresno GHG Reduction Plan Update and will be found to have a less than significant contribution to cumulative GHG emissions (i.e., the project's incremental contribution to cumulative GHG effects is not cumulatively considerable), pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b). Projects that do not meet the requirements in the Consistency Checklist will be deemed to be inconsistent with the Fresno GHG Reduction Plan Update and must prepare a project-specific analysis of GHG emissions, including quantification of existing and projected GHG emissions and incorporation of the measures in the Consistency Checklist to the extent feasible.

In addition, as the proposed project would require a rezone, the GHG Reduction Plan requires the estimated GHG emissions under both the proposed project and the maximum buildout of the existing designation. Based on the existing Office designation and a 151,160-square-foot project site, the maximum buildout of the existing designation would be a 303,120-square-foot general office building. Table 3 provides a comparison of the estimated CO₂e per year from the proposed project's operational activities under the maximum buildout of the existing Office designation and the proposed project. As provided in Table 3, the proposed project's estimated maximum buildout of the existing Office designation annual GHG emissions are approximately 3,469.5 metric tons of CO₂e and the proposed project's estimated annual GHG emissions are approximately 390.5 metric tons of CO₂e. Therefore, the proposed project would be less than the estimated project emissions at maximum buildout of the existing designation. As such, in accordance with the City's Significance Determination Thresholds, the proposed project's GHG impact is less than significant.

Table 3: Comparison of Project and Existing Designation GHG Emissions

Emissions Source	GHG Emissions (Metric Tons CO₂e per Year)			
Emissions Source	Existing Designation	Proposed Project		
Mobile Source Emissions	1,976.0	251.0		
Area Source Emissions	4.4	30.2		
Energy Source Emissions	1,308.0	94.8		
Water Source Emissions	93.1	3.4		
Waste Source Emissions	88.0	11.1		
Total Operational Emissions	3,469.5	390.5		
City of Fresno Criteria	If the proposed project emissions are lower than equivalent to or less than the estimated project emissions at maximum buildout of the existing designation			
Significant impact?	N	No		

Source: LSA (June 2023).

The proposed project's Consistency Checklist is included in Appendix D. As shown in the Consistency Checklist, the proposed project would be consistent with the applicable strategies from the GHG Reduction Plan. Therefore, as demonstrated in the attached Consistency Checklist, the proposed project would not conflict with plans, policies, or regulations adopted for the purpose of reducing GHG emissions. In addition, the proposed project would not result in a substantial increase in GHG emissions. Therefore, the proposed project would not generate GHG emissions that may have a significant effect on the environment. Impacts 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?

The SJVAPCD has adopted a Climate Change Action Plan (CCAP), which includes suggested best performance standards (BPS) for proposed residential development projects. However, the SVJAPCD's CCAP was adopted in 2009 and was prepared based on the State's 2020 GHG targets, which are now superseded by State policies (i.e., the 2019 California Green Building Code) and the 2030 GHG targets, established in Senate Bill (SB) 32. As discussed above, the proposed project is consistent with the City's GHG Reduction Plan Update.

In addition, the proposed project was analyzed for consistency with the goals of Executive Order B-30-15, SB 32, AB 197, and the 2022 Scoping Plan.

Executive Order B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. The California Air Resources Board (CARB) released the 2017 Scoping Plan to reflect the 2030 target set by Executive Order B-30-15 and codified by SB 32. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in Executive Order B-30-15. SB 32 builds on AB 32 and keeps us on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels. The companion bill to SB 32, AB 197, provides additional

direction to the CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 intended to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

The 2022 Scoping Plan¹³ assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

The 2022 Scoping Plan focuses on building clean energy production and distribution infrastructure for a carbon-neutral future, including transitioning existing energy production and transmission infrastructure to produce zero-carbon electricity and hydrogen, and utilizing biogas resulting from wildfire management or landfill and dairy operations, among other substitutes. The 2022 Scoping Plan states that in almost all sectors, electrification will play an important role. The 2022 Scoping Plan evaluates clean energy and technology options and the transition away from fossil fuels, including adding four times the solar and wind capacity by 2045 and about 1,700 times the amount of current hydrogen supply. As discussed in the 2022 Scoping Plan, EO N-79-20 requires that all new passenger vehicles sold in California will be zero-emission by 2035, and all other fleets will have transitioned to zero-emission as fully possible by 2045, which will reduce the percentage of fossil fuel combustion vehicles.

As identified above, the Scoping Plan contains GHG reduction measures that work towards reducing GHG emissions, consistent with the targets set by Executive Order B-30-15 and codified by SB 32 and AB 197. The measures applicable to the proposed project include energy efficiency measures, water conservation and efficiency measures, and transportation and motor vehicle measures, as discussed below.

Energy efficient measures are intended to maximize energy efficiency building and appliance standards, pursue additional efficiency efforts including new technologies and new policy and implementation mechanisms, and pursue comparable investment in energy efficiency from all retail providers of electricity in California. In addition, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. The proposed project would be required to comply with the latest Title 24 standards of the California Code of Regulations, established by the CEC, regarding energy conservation and green building standards. Therefore, the proposed project would comply with applicable energy measures.

California Air Resources Board. 2022. 2022 Scoping Plan for Achieving Carbon Neutrality. December. Website: https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf (accessed July 18, 2023).

Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. As noted above, the proposed project would be required to comply with the latest Title 24 standards of the California Code of Regulations, which includes a variety of different measures, including reduction of wastewater and water use. In addition, the proposed project would be designed to include drought tolerant landscaping. Therefore, the proposed project would not conflict with any of the water conservation and efficiency measures.

The goal of transportation and motor vehicle measures is to develop regional GHG emissions reduction targets for passenger vehicles. Specific regional emission targets for transportation emissions would not directly apply to the proposed project. However, vehicles traveling to the project site would comply with the Pavley II (LEV III) Advanced Clean Cars Program. The second phase of Pavley standards will reduce GHG emissions from new cars by 34 percent from 2016 levels by 2025, resulting in a 3 percent decrease in average vehicle emissions for all vehicles by 2020. Vehicles traveling to the project site would comply with the Pavley II (LEV III) Advanced Clean Cars Program. Therefore, the proposed project would not conflict with the identified transportation and motor vehicle measures.

Therefore, the proposed project would comply with existing State regulations adopted to achieve the overall GHG emissions reduction goals identified in Executive Order B-30-15, SB 32, AB 197, and would be consistent with applicable plans and programs designed to reduce GHG emissions. Therefore, the proposed project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs. Impacts would be **less than significant**.

Mitigation Measures

The proposed project would not result in any potentially significant impacts related to greenhouse gas emissions, and no mitigation is required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS	MATERIAL -	- Would the pro	ject:	
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			Х	
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?			Х	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			Х	
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?				Х
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?				Х

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			Х	

DISCUSSION

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

Construction activities associated with the proposed project would involve the use of limited amounts of potentially hazardous materials, including but not limited to, solvents, paints, fuels, oils, and transmission fluids. However, all materials used during construction would be contained, stored, and handled in compliance with applicable standards and regulations established by the Department of Toxic Substances Control (DTSC), the USEPA, and the Occupational Safety and Health Administration (OSHA). No manufacturing, industrial, or other uses utilizing large amounts of hazardous materials would occur within the project site. Project operation would involve the use of small quantities of commercially available hazardous materials (e.g., paint, cleaning supplies) that could be potentially hazardous if handled improperly or ingested. However, these products are not considered acutely hazardous and are not generally considered unsafe. All storage, handling, and disposal of hazardous materials during project construction and operation would comply with applicable standards and regulations, including General Plan Policies NS-4-a, NS-4-e, and NS-4-f. 14 The proposed residential uses would not generate significant amounts of any hazardous materials. Therefore, the proposed project would have a less-than-significant impact associated with the routine transport, use, or disposal of hazardous materials.

¹⁴ City of Fresno. 2014. Fresno General Plan. Noise and Safety Element. pp. 9-33 - 9-34. Website: https://www.fresno.gov/wp-content/uploads/2023/03/9-Noise-and-Safety-02-03-21.pdf (accessed July 18, 2023).

- Policy NS-4-a: Processing and Storage. Require safe processing and storage of hazardous materials, consistent with the California Building Code and the Uniform Fire Code, as adopted by the City.
- Policy NS-4-e: Compliance with County Program. Require that the production, use, storage, disposal, and transport of hazardous materials conform to the standards and procedures established by the County Division of Environmental Health. Require compliance with the County's Hazardous Waste Generator Program, including the submittal and implementation of a Hazardous Materials Business Plan, when applicable.
- Policy NS-4-f: Hazardous Materials Facilities. Require facilities that handle hazardous materials or hazardous wastes to be designed, constructed, and operated in accordance with applicable hazardous materials and waste management laws and regulations.
- 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?

See discussion above, under subsection a. The proposed project would not result in a significant hazard to the public or the environment through the transport, use, or disposal of hazardous materials. Additionally, the proposed project would comply with the General Plan Policies outlined above, which require compliance with local, State and federal standards and procedures to avoid the release or upset of hazardous materials. This impact would be **less than significant**.

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

The closest existing schools are Kids Kare River Bluff day care facility, located adjacent to the southern border of the project site, and Riverview Elementary School, located approximately 340 feet southeast of the project site. As previously stated, the proposed project would not result in the use or emission of substantial quantities of hazardous materials that would pose a human or environmental health risk. In addition, all materials would be handled, stored, and disposed of in accordance with applicable standards and regulations. Therefore, because the proposed project does not involve activities that would result in the emission of hazardous materials or acutely hazardous substances, implementation of the proposed project would result in a **less-than-significant impact**.

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?

According to the DTSC EnviroStor database¹⁵, the project site is not located on a federal superfund site, State response site, voluntary cleanup site, school cleanup site, evaluation site, school investigation site, military evaluation site, tiered permit site, or corrective action site. The project site is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.¹⁶ As a result, no impacts related to this issue are anticipated, and no mitigation is required. There would be **no impact**.

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?

The nearest airports include the Fresno Yosemite International Airport, located approximately 6.8 miles south from the project site, the Sierra Sky Airport, located approximately 7.8 miles west from the project site, and Fresno Chandler Executive Airport, located approximately 11.2 miles southwest from the project site. In addition, the nearest medical center helipads to the project site are located at the Valley's Children Hospital, approximately 3.3 miles west of the project site, and at the Saint Agnes Medical Center, approximately 3.5 miles southwest of the project site. The project site is not located within 2 miles of any local airports or helipads, or within any Airport Land Use Compatibility Plan (ALUCP). Therefore, implementation of the proposed project would not expose persons to airport-related hazards, and **no impact** would occur.

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

The California Emergency Services Act requires cities to prepare and maintain an Emergency Plan for natural, manmade, or war-caused emergencies that result in conditions of disaster or in extreme peril to life. The City's full-time Emergency Preparedness Officer (EPO) is responsible for ensuring that Fresno's emergency response plans are up-to-date and implemented properly. The EPO also facilitates cooperation between City departments and other local, State and federal agencies that would be involved in emergency response operations. The City of Fresno Emergency Operations Center (EOC) serves as the coordination and communication between the City of Fresno and Fresno County Operational Area EOC. The proposed project would

¹⁵ California Department of Toxic Substances Control. n.d. EnviroStor. Website: https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=fresno (accessed July 18, 2023).

¹⁶ California Environmental Protection Agency. 2018. Government Code Section 65962.5(a) Hazardous Waste and Substances Site List. Website: https://calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/ (accessed July 18, 2023).

not result in any alterations of existing roadways that would permanently block the circulation of emergency response services or introduce elements that would conflict with the operations of the EOC. Therefore, the proposed project would not interfere with emergency evacuation plans in the City, and this impact 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?

Wildland fires occur in geographic areas that contain the types and conditions of vegetation, topography, weather, and structure density susceptible to risks associated with uncontrolled fires that can be started by lightning, improperly managed campfires, cigarettes, sparks from automobiles, and other ignition sources. The project site is located in an area mapped as Local Responsibility Area (LRA) Unzoned, indicating that the area is urbanized and not susceptible to wildland conflagrations, and is not located within a very high fire hazard severity zone (VHFHSZ).¹⁷ Therefore, the proposed project would not expose people or structures to a significant loss, injury or death involving wildland fires and the impact would be **less than significant**.

Mitigation Measures

The proposed project would not result in any potentially significant impacts related to hazards and hazardous materials, and no mitigation is required.

¹⁷ California Department of Forestry and Fire Protection (CAL FIRE). 2022. Fresno County State Responsibility Area Fire Hazard Severity Zones. Website: https://osfm.fire.ca.gov/fire-hazard-severity-zones-maps-2022/ (accessed July 18, 2023).

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLOGY AND WATER Q	UALITY – Wo	uld the project:		
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			Х	
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:				
i) Result in a substantial erosion or siltation on- or off-site;			Х	
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site:			Х	
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			Х	
iv) impede or redirect flood flows?				Х

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				Х
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			Х	

DISCUSSION

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

The State Water Resources Control Board and nine Regional Water Quality Control Boards regulate the water quality of surface water and groundwater bodies throughout California. The proposed project is within the jurisdiction of the Central Valley Regional Water Quality Control Board (RWQCB).

Pollutants of concern during construction include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. During construction activities, excavated soil would be exposed with an increased potential to expose soils to wind and water erosion, which could result in temporary minimal increases in sediment load in nearby water bodies, including the Enterprise Canal, which is buried underneath the project site. The proposed project does not propose alteration of the Enterprise Canal and no excavation would be conducted at the location of the Enterprise Canal. In addition, because the project would disturb greater than 1 acre of soil, it is required to comply with the State Water Resources Control Board's National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, as amended by 2010-0014-DWG and 2012-0006-DWQ, NPDES No. CAS000002) (Construction General Permit). The project is also subject to Article 7, Urban Storm Water Quality Management and Discharge Control, Section 6-714, Requirement to Prevent, Control, and Reduce Storm Water Pollutants of the City's Municipal Code. The Construction General Permit requires the preparation of a Storm Water Pollution Prevention Plan (SWPPP) and implement Construction Best Management Practices (BMPs). Construction BMPs would include, but not be limited to, erosion and sediment control, designed to minimize erosion and retain sediment on site, and good housekeeping practices to prevent spills, leaks, and discharge of construction debris and waste into receiving waters. Section 6-714 of the City's Municipal Code also requires the implementation of BMPs to the maximum extent technologically and economically feasible to prevent and reduce pollutants from entering stormwater during construction. Therefore, adherence to the required SWPPP and the City's Municipal Code and implementation of construction BMPs, would reduce the potential for the discharge of pollutants during construction, and impacts associated with the violation of water quality standards or waste discharge requirements would be less than significant.

Operation of the proposed project could result in surface water pollution associated with chemicals, liquid products, petroleum products (such as paints, solvents, and fuels), and waste that may be spilled or leaked and have the potential to be transported via runoff during periods of heavy precipitation into these water bodies. The City of Fresno operates under the California Regional Water Quality Control Board Central Valley Regional National Pollutant Discharge Elimination System Permit and Waste Discharge Requirements General Permit for Discharges from Municipal Separate Storm Sewer Systems (MS4) (Order No. R5-2016-0040-014, NPDES No. CAS0085324). Consistent with the City of Fresno's MS4 Permit, the project would implement storm water quality controls recommended in the Fresno-Clovis Storm Water Quality Management Construction and Post-Construction Guidelines. Adherence to the City of Fresno's MS4 Permit would reduce the potential for the discharge of pollutants during project operations and impacts associated with the violation of water quality standards or waste discharge requirements would be less than significant.

Therefore, impacts associated with the proposed project would be less than significant.

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

The proposed project would result in an increase in impervious surfaces given that the project site is mostly built out aside from planting areas located in parking lots, surrounding proposed buildings, and along the perimeter of the project site. An increase in impervious surface area decreases infiltration, which can decrease the amount of water that is able to recharge the aquifer/groundwater. However, the stormwater from the project site would be collected and directed to the Fresno Metropolitan Flood Control District's (FMFCD) storm drain system, which includes infiltration facilities to replenish groundwater supplies in the basin. Therefore, the project would not impede the Central Valley Regional Water Quality Control Board's ability to manage groundwater. Thus, this project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project would impede sustainable management of the Kings Subbasin. Impacts would be less than significant, and no mitigation is required.

As discussed below in Section XIX, Utilities and Service Systems, the City receives all of its water supply from groundwater. The City has indicated that groundwater wells, pump stations, recharge facilities, water treatment and distribution systems shall be expanded

incrementally to mitigate increased water demands. One of the primary objectives of Fresno's future water supply plans detailed in Fresno's current Urban Water Management Plan (UWMP) is to balance groundwater operations through a host of strategies. Through careful planning, Fresno has designed a comprehensive plan to accomplish this objective by increasing surface water supplies and surface water treatment facilities, intentional recharge, and conservation, thereby reducing groundwater pumping. The City continually monitors impacts of land use changes and development project proposals on water supply facilities by assigning fixed demand allocations to each parcel by land use as currently zoned or proposed to be rezoned.

Until 2004, groundwater was the sole source of water for the City. In June 2004, a \$32 million Surface Water Treatment Facility (SWTF) began providing Fresno with water treated to drinking water standards. A second surface water treatment facility is operational in southeast Fresno to meet demands anticipated by the growth implicit in the 2025 Fresno General Plan. Surface water is used to replace lost groundwater through Fresno's artificial recharge program at the City-owned Leaky Acres and smaller facilities in Southeast Fresno. Fresno holds entitlements to surface water from Millerton Lake and Pine Flat Reservoir. In 2006, Fresno renewed its contract with the United States Bureau of Reclamation, through the year 2045, which entitles the City to 60,000 acre-feet per year of Class 1 water. This water supply has further increased the reliability of Fresno's water supply.

Also, in 2006, Fresno updated its Metropolitan Water Resources Management Plan designed to ensure the Fresno metro area has a reliable water supply through 2050. The plan implements a conjunctive use program, combining groundwater, treated surface water, artificial recharge and an enhanced water conservation program.

In the near future, groundwater will continue to be an important part of the City's supply but will not be relied upon as heavily as has historically been the case. The City is planning to rely on expanding their delivery and treatment of surface water supplies and groundwater recharge activities.

In addition, the General Plan policies require the City to maintain a comprehensive conservation program to help reduce per capita water usage and includes conservation programs such as landscaping standards for drought tolerance, irrigation control devices, leak detection and retrofits, water audits, public education and implementing US Bureau of Reclamation Best Management Practices for water conservation to maintain surface water entitlements.

Implementation of the Fresno General Plan policies, the Kings Basin Integrated Regional Water Management Plan, City of Fresno UWMP, Fresno-Area Regional Groundwater Management Plan, and City of Fresno Metropolitan Water Resource Management Plan and the applicable mitigation measures of approved environmental review documents will address the issues of providing an adequate, reliable, and sustainable water supply for the proposed project.

The Project Applicant would be required to comply with all requirements of the City of Fresno Department of Public Utilities that would reduce the proposed project's water impacts to less than significant. When development permits are issued, the subject site would be required to pay drainage fees pursuant to the Drainage Fee Ordinance. The Fresno Metropolitan Flood Control District (FMFCD) has stated that the FMFCD system can accommodate the proposed request subject to several conditions of approval. Therefore, the proposed project would not decrease groundwater supplies, interfere substantially with groundwater recharge or impede sustainable groundwater management of the basin. Impacts would be **less than significant**.

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?

Construction of the proposed project would result in grading and landform alteration on the project site that would expose native soils that could be subject to the effects associated with wind and water erosion unless adequate measures are taken to limit the transport of soils in surface water from the project site to downstream locations. As discussed under discussion a) in this section, the Project Applicant would be required to implement a SWPPP that would identify specific measures to address erosion and siltation resulting from grading and construction as well as the City's MS4 permit requirements to address potential long-term water quality impacts.

Stormwater collection and disposal, and flood control for the City of Fresno, City of Clovis, and the unincorporated areas within the City of Fresno's sphere of influence are provided by the Fresno Metropolitan Flood Control District (FMFCD). The proposed project would include construction of a new curb and gutter along North Chestnut Avenue to connect to the City's existing stormwater system.

The project site currently does not include any impervious surface. The proposed project would result in an increase in impervious surfaces associated with an ingress/egress driveway, drive lanes, and parking, which would increase the volume of runoff during a storm, and which can more effectively transport sediments to receiving waters. At project completion, much of the project site would be impervious surface area and not prone to onsite erosion or siltation because no exposed soil would be present in these areas. The remaining portion of the site would consist of pervious surface area, which would contain landscaping that would minimize onsite erosion and siltation by stabilizing the soil. Additionally, the Project Applicant would be required to establish and maintain existing drainage patterns. Therefore, the proposed project would not alter the existing drainage pattern of the site or increase the rate or amount of surface runoff in a manner that

would result in an impact related to substantial erosion or siltation on- or off-site. Impacts would be **less than significant**.

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

During construction, soil would be disturbed and compacted, and drainage patterns would be temporarily altered, which can increase the volume and velocity of stormwater runoff and increase the potential for localized flooding compared to existing conditions. As discussed above, the Construction General Permit requires the preparation of a SWPPP and implementation of construction BMPs to control and direct surface runoff on site. With adherence to the Construction General Permit, construction impacts related to altering the existing drainage pattern of the site or area or increase the rate or amount of surface runoff in a manner that would result in flooding on site or off site would be less than significant.

While the project would permanently increase the impervious surface area in the project site, the project would be required to direct runoff towards proposed drainage infrastructure along North Chestnut Avenue. In addition, prior to final development approval, the project applicant shall submit a Grading Plan and Drainage Report to the FMFCD for review and approval. According to the City's preliminary review, permanent drainage service is available for the project area, provided that the Project Applicant can verify to the satisfaction of the City that runoff can be safely conveyed to existing and proposed Master Plan inlets and drainage infrastructure.

The FMFCD's existing Master Plan drainage system is designed to serve medium density residential uses, and the proposed project would introduce a medium high density residential use in the site. With implementation of the City's conditions of approval for the project's Grading Plan and Drainage Report, the runoff from the project site would be able to be safely conveyed through proposed Master Plan drainage infrastructure on North Chestnut Avenue. Additionally, the project would be required to maintain the existing drainage pattern of the site. Therefore, the project would not increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site and impacts would be considered **less than significant**.

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?

The proposed project would result in an increase in impervious surfaces given that the project site would be mostly built out aside from planting areas located in parking lots, surrounding proposed buildings, and along the perimeter of the project site. However, compliance with pre-existing regulatory requirements,

including compliance with the Construction General Permit, implementation of a SWPPP, would reduce or eliminate the potential for project construction to cause substantial additional polluted runoff or runoff in excess of existing or planned stormwater drainage systems. Therefore, construction would not result in additional sources of polluted runoff to be discharged to the storm drain system and impacts would be less than significant. No mitigation is required.

As discussed above, the proposed project would result in an increase in impervious surfaces and therefore would substantially increase runoff from the project site. However, compliance with existing regulatory requirements, including the City's MS4 Permit, would reduce or eliminate the potential for project operations to cause substantial additional polluted runoff or runoff in excess of existing or planned stormwater drainage systems. Therefore, project operations would not result in additional sources of polluted runoff to be discharged to the storm drain system and impacts would be **less than significant**.

iv. Impede or redirect flood flows?

The proposed project is not located within the 100-year flood hazard area as mapped by the Federal Emergency Management Agency (FEMA).¹⁸ Therefore, the proposed project would not impede or redirect potential flood flows, and the proposed project would have **no impact**.

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

The project site is not located in flood hazard, tsunami, or seiche zones. Refer to discussion a) in Section IX, Hazards and Hazardous Materials regarding the use of hazardous materials within the project site. As a result, **no impact** would occur.

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

The City is located within the Kings Sub-basin, which is part of the larger San Joaquin Valley Groundwater Basin. The planning documents regarding water resources for the City include City of Fresno Urban Water Management Plan, and City of Fresno Metropolitan Water Resources Management Plan. As noted above in the discussion for b), the proposed project would be required to adhere to NPDES drainage control requirements during construction and operation as well as to FMFCD drainage control requirements. As a result, the proposed project would not include any other waste discharges that could conflict with the Basin Plan, and a **less-than-significant impact** would occur.

Federal Emergency Management Agency, 2020. FEMA Flood Map Service Center: Search By Address. Website: https://msc.fema.gov/portal/search?AddressQuery#searchresultsanchor (accessed November 2023).

Mitigation Measures

The proposed project would not result in any potentially significant impacts related to hydrology and water quality, and no mitigation is required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING -	Would the pr	oject:		
a) Physically divide an established community?			Х	
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	

DISCUSSION

a) Physically divide an established community?

The physical division of an established community typically refers to the construction of a physical feature (such as an interstate highway or railroad tracks) or removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community, or between a community and outlying areas. For instance, the construction of an interstate highway through an existing community may constrain travel from one side of the community to another; similarly, such construction may also impair travel to areas outside of the community.

The project site is located in a primarily developed area of Fresno. Single-family residential and school land uses are located to the north, west, and south. A daycare facility is located directly adjacent to the south of the project site. The City of Fresno SWTF is located east of the project site, across North Chestnut Avenue. Undeveloped lots and the Clovis Community College are located to the east. The proposed project would include 48 residential units with a clubhouse, pool, tot lot, as well as associated landscaping, parking and circulation, and infrastructure improvements. These improvements would not affect connectivity and would not divide an established community. Therefore, the proposed project would result in 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?

The project site is designated Employment - Office in the Fresno General Plan. This land use designation is intended for administrative, financial, business, professional, medical, and public offices. This designation is mainly intended to apply to existing office uses on smaller lots, generally located on arterial roadways. This designation is also considered compatible with existing residential neighborhoods given the smaller level of noise and traffic generated compared to commercial uses. Retail uses would be limited to business services, food services, and convenience goods for those who work in the area. The maximum floor area ratio (FAR) is 2.0.

The project site is zoned Office (O), which is intended to provide sites for administrative, financial, business, professional, medical, and public offices, as identified by the General Plan. Retail uses would be limited to business services and food service and convenience goods for those who work in the area. This district is intended for locations where the noise or traffic generated by retail sales, restaurants, and service commercial may be incompatible with surrounding residential neighborhoods.

The proposed project would require a General Plan Amendment to Medium High Density Residential and Rezone to Multi-Family Residential, Medium High Density (RM-1).

General Plan

The City's General Plan is the fundamental policy document of the City of Fresno. Within the General Plan, the Urban Form, Land Use, and Design Element is the principal document guiding land use and development within the City. As identified above, without a General Plan amendment, the proposed project is inconsistent with the policies of the General Plan as they pertain to the existing Office designation. The proposed project would amend the General Plan to Medium High Density Residential.

The Medium High Density Residential district is intended for neighborhoods with a mix of single-family residences, townhomes, garden apartments, and multi-family units intended to support a fine-grain, pedestrian scale. This land use accommodates densities from 12 to 16 units per acre overall.

The proposed project would be consistent with applicable Urban Form, Land Use, and Design Element policies:

 Policy LU-2-a: Infill Development and Redevelopment. Promote development of vacant, underdeveloped, and re-developable land within the City Limits where urban services are available by considering the establishment

- and implementation of supportive regulations and programs.
- Policy LU-5-d: Medium-High Density Residential Uses. Promote medium-high density residential uses to optimize use of available or planned public facilities and services and to provide housing opportunities with convenient access to employment, shopping, services, and transportation.
- Policy LU-5-g: Scale and Character of New Development. Allow new
 development in or adjacent to established neighborhoods that is compatible in
 scale and character with the surrounding area by promoting a transition in scale
 and architectural character between new buildings and established
 neighborhoods, as well as integrating pedestrian circulation and vehicular
 routes.
- Policy LU-5-h: Housing Offering Amenities. Support housing that offers
 residents a range of amenities, including public and private open space,
 landscaping, and recreation facilities with direct access to commercial services,
 public transit, and community gathering spaces.

As described above, the project site is located in a primarily developed area of Fresno. Single-family residential and school land uses are located to the north, west, and south. A daycare facility is located directly adjacent to the south of the project site. The City of Fresno SWTF is located east of the project site, across North Chestnut Avenue. Undeveloped lots and the Clovis Community College are located to the east. Therefore, the proposed project would be consistent with Implementing Policy LU-2a. The proposed multi-family residential land uses would be consistent with the allowable uses within the Medium High Density Residential designation and Implementing Policy LU-5-d. The project site is currently vacant with ruderal vegetation. The proposed project would include construction of 48 residential units in six, two-story buildings and associated parking, amenities, and landscaping. Although development of the proposed project would change the visual characteristics of the project site, the design of the additions would be contemporary and would be consistent with urban development in the vicinity of the project site, consistent with Implementing Policy LU-5-g. In addition, the proposed project would include site amenities for residents, including a clubhouse, pool, and tot lot, consistent with Implementing Policy LU-5-h.

Zoning Code

The current zoning for the project site is O; however, the proposed project would require a rezone to RM-1. The RM-1 zone allows for a variety of residential housing types, including detached single-unit dwellings, attached single-unit dwellings, second dwelling units, duplexes, multi-unit residential, and cottage housing development. The RM-1 zone allows for a density range of 12 to 26 units with a maximum height of 40 feet. The following additional setback requirements are required for all structures, including accessory structures: a minimum front setback requirement of 10 to 20 feet; an interior side setback of 10 feet; and a rear setback of 10 feet. The RM-1 zone requires landscape buffers and when a multi-story building is proposed and the

second story or above is located within 50 feet of the side or rear yard of a single-family lot, screening measures are required to provide a reasonable degree of privacy. The maximum lot coverage is 50 percent of the lot. The RM-1 zone also requires a minimum on-site open space equal to at least 20 percent of the lot area.

As discussed above, the proposed project would result in the construction of 48 residential units in six, two-story buildings. The proposed residential buildings would be two stories in height and would not exceed 28 feet. The proposed project would comply with the City's setbacks and lot coverage. In addition, landscaping features would include planting approximately 48 trees along the perimeter of the project site and a tot lot and dog park would be located at the northern end of the project site. Therefore, the proposed project would be consistent with the RM-1 zoning requirements.

Summary

Although the proposed project would require a General Plan Amendment and a Zone Change, the proposed multi-family residences would be consistent with the Multi-Family Residential, Medium High Density (RM-1) zone. Therefore, the proposed project would be consistent with the proposed General Plan and zoning designations and would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. This impact would be **less than significant**.

Mitigation Measures

The proposed project would not result in any potentially significant impacts related to land use and planning, and no mitigation is required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES – Wo	ould the projec	et:		
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?				Х
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?				Х

DISCUSSION

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?

The project site is located within an urban area on an infill site. There are no known mineral resources within or in the vicinity of the project site. The principal area for mineral resources in the City is along the San Joaquin River Corridor. The California Department of Mines and Geology classifies lands along the San Joaquin River Corridor as Mineral Resource Zone (MRZ) 1, MRZ 2, and MRZ 3. The project site is not located in the vicinity of the San Joaquin River Corridor, is not a MRZ, and it doesn't contain a MRZ. Therefore, the proposed project would not result in the loss of availability of known mineral resources. ¹⁹ ²⁰ Therefore, **no impact** would occur.

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?

Please refer to the discussion for a). The proposed project would not result in the loss of availability of any known, locally important mineral resource recovery sites. Therefore, **no impact** would occur.

Mitigation Measures

¹⁹ Fresno County. 2000. Fresno County General Plan. Background Report. Website: https://www.fresnocountyca.gov/files/sharedassets/county/vision-files/files/8398-background report june04.pdf (accessed July 18, 2023).

²⁰ California Department of Conservation. 2016. Mines & Mineral Resource Related Data & Maps. Website: https://maps.conservation.ca.gov/mineralresources/ (accessed July 18, 2023).

The proposed project would not result in any potentially significant impacts related to mineral resources, and no mitigation is required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE – Would the project re	sult in:			
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?			Х	
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?				Х

DISCUSSION

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?

Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep. Several noise measurement scales exist that are used to describe noise in a particular location. A decibel (dB) is a unit of measurement that indicates the relative intensity of a sound. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a 10-fold increase in acoustic energy, while 20 dB is 100 times more intense and 30 dB is 1,000 times more intense. Each 10 dB increase in sound level is perceived as approximately a doubling of loudness; and

similarly, each 10 dB decrease in sound level is perceived as half as loud. Sound intensity is normally measured through the A-weighted sound level (dBA). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. The A-weighted sound level is the basis for 24-hour sound measurements that better represent human sensitivity to sound at night.

As noise spreads from a source, it loses energy so that the farther away the noise receiver is from the noise source, the lower the perceived noise level would be. Geometric spreading causes the sound level to attenuate or be reduced, resulting in a 6 dB reduction in the noise level for each doubling of distance from a single point source of noise to the noise sensitive receptor of concern.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous sound level (Leq) is the total sound energy of time varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the Leq, the community noise equivalent level (CNEL), and the day-night average level (Ldn) based on dBA. CNEL is the time varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly Leq for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). Ldn is similar to the CNEL scale, but without the adjustment for events occurring during the evening relaxation hours. CNEL and Ldn are within one dBA of each other and are normally exchangeable. The noise adjustments are added to the noise events occurring during the more sensitive hours.

A project would have a significant noise effect if it would substantially increase the ambient noise levels for adjoining areas or conflict with adopted environmental plans and goals of applicable regulatory agencies, including, as appropriate, the City of Fresno.

The City of Fresno addresses noise in the Noise Element of the General Plan and in Chapter 10, Article 1 (Noise Regulations), of the Fresno Municipal Code. Listed below are objectives and policies related to noise that are presented in the Noise Element of the General Plan. In addition, the Noise Element sets noise standards for transportation and stationary noise sources as shown in Table 4 and Table 5 below.

Table 4: Transportation (Non-Aircraft) Noise Sources

Noise-Sensitive Land Use ¹	Outdoor Activity Areas ²	Interior Spaces	
	L _{dn} /CNEL, dB	L _{dn} /CNEL, dB	L _{eq} dB ²
Residential	65	45	-
Transient Lodging	65	45	-
Hospitals, Nursing Homes	65	45	-
Theaters, Auditoriums, Music Halls	-	-	35
Churches, Meeting Halls	65	-	45

Table 4: Transportation (Non-Aircraft) Noise Sources

Noise-Sensitive Land Use ¹	Outdoor Activity Areas ²	Interior Spaces	
	L _{dn} /CNEL, dB	L _{dn} /CNEL, dB	L _{eq} dB ²
Office Buildings	-	-	45
Schools, Libraries, Museums	-	-	45

Source: City of Fresno General Plan (2014).

Where the location of outdoor activity areas is unknown or is not applicable, the exterior noise level standard shall be applied to the property line of the receiving land use.

As determined for a typical worst-case hour during periods of use.

Table 5: Stationary Noise Sources

	Daytime (7:00 a.m. – 10:00 p.m.)	Nighttime (10:00 p.m. to 7:00 a.m.)
Hourly Equivalent Sound Level (Leq), dBA	50	45
Maximum Sound Level (Lmax), dBA	70	60

Source: City of Fresno General Plan (2014).

- Policy NS-1-a: Desirable and Generally Acceptable Exterior Noise Environment. Establish 65 dBA L_{dn} or CNEL as the standard for the desirable maximum average exterior noise levels for defined usable exterior areas of residential and noise-sensitive uses for noise but designate 60 dBA L_{dn} or CNEL (measured at the property line) for noise generated by stationary sources impinging upon residential and noise-sensitive uses. Maintain 65 dBA L_{dn} or CNEL as the maximum average exterior noise levels for non-sensitive commercial land uses and maintain 70 dBA L_{dn} or CNEL as maximum average exterior noise level for industrial land uses, both to be measured at the property line of parcels where noise is generated which may impinge on neighboring properties.
- Policy NS-1-b: Conditionally Acceptable Exterior Noise Exposure Range.
 Establish the conditionally acceptable noise exposure level range for residential and other noise sensitive uses to be 65 dB L_{dn} or require appropriate noise reducing mitigation measures as determined by a site specific acoustical analysis to comply with the desirable and conditionally acceptable exterior noise level and the required interior noise level standards set in Table 4.
- Policy NS-1-c: Generally Unacceptable Exterior Noise Exposure Range. Establish the exterior noise exposure of greater than 65 dB L_{dn} or CNEL to be generally unacceptable for residential and other noise sensitive uses for noise generated by sources in Policy NS-1-a, and study alternative less noise-sensitive uses for these areas if otherwise appropriate. Require appropriate noise reducing mitigation measures as determined by a site-specific acoustical analysis to comply with the generally desirable or generally acceptable exterior noise level and the required 45 dB interior noise level standards set in Table 4 as conditions of permit approval.
- Policy NS-1-g: Noise mitigation measures which help achieve the noise level targets
 of this plan include, but are not limited to, the following:
 - Façades with substantial weight and insulation;
 - o Installation of sound-rated windows for primary sleeping and activity areas;

The Planning and Development Director, on a case-by-case basis, may designate land uses other than those shown in this table to be noise-sensitive, and may require appropriate noise mitigation measures.

As determined at outdoor activity areas. Where the location of outdoor activity areas is unknown or not applicable, the noise exposure standard shall be applied at the property line of the receiving land use. When ambient noise levels exceed or equal the levels in this table, mitigation shall only be required to limit noise to the ambient plus five dB.

- Installation of sound-rated doors for all exterior entries at primary sleeping and activity areas;
- Greater building setbacks and exterior barriers;
- Acoustic baffling of vents for chimneys, attic and gable ends;
- Installation of mechanical ventilation systems that provide fresh air under closed window conditions.
- Policy NS-1-h: Interior Noise Level Requirement. Comply with the State Code requirement that any new multifamily residential, hotel, or dorm buildings must be designed to incorporate noise reduction measures to meet the 45 dB Ldn interior noise criterion and apply this standard as well to all new single-family residential and noise sensitive uses.
- Policy NS-1-j: Significance Threshold. Establish, as a threshold of significance for the City's environmental review process, that a significant increase in ambient noise levels is assumed if the project would increase noise levels in the immediate vicinity by 3 dB Ldn or CNEL or more above the ambient noise limits established in this General Plan Update.

Chapter 10, Article 1 (Noise Regulations), of the Fresno Municipal Code establishes excessive noise guidelines and exemptions. Section 10-109 states that construction noise is exempted from City noise regulations provided such work takes place between the hours of 7:00 a.m. and 10:00 p.m. on any day except Sunday.

Certain land uses are considered more sensitive to noise than others. Examples of these land uses include residential areas, educational facilities, hospitals, childcare facilities, and senior housing. The project site is surrounded by a mix of uses within a developed area of the City, including residential, school, and industrial uses. The closest sensitive receptors to the proposed project include the single-family residences located immediately west of the project site and the Kids Kare River Bluff daycare located immediately south of the project site.

The following section describes how the short-term construction and long-term operational noise impacts of the proposed project would be **less than significant with mitigation**.

Short-Term (Construction) Noise Impacts. Project construction would result in short-term noise impacts on the nearby sensitive receptors. Maximum construction noise would be short-term, generally intermittent depending on the construction phase, and variable depending on receiver distance from the active construction zone. The duration of noise impacts generally would be from one day to several days depending on the phase of construction. The level and types of noise impacts that would occur during construction are described below.

Short-term noise impacts would occur during grading and site preparation activities. Table 6 lists typical construction equipment noise levels (L_{max}) recommended for noise impact assessments, based on a distance of 50 feet between the equipment and a noise receptor, obtained from the FHWA Roadway Construction Noise Model. Construction-related short-term noise levels would be higher than existing ambient noise levels currently in the project area but would no longer occur once construction of the proposed project is completed.

Two types of short-term noise impacts could occur during construction of the proposed project. The first type involves construction crew commutes and the transport of construction equipment and materials to the project site, which would incrementally increase noise levels on roads leading to the project site. As shown in Table 6, there would be a relatively high single-event noise exposure potential at a maximum level of 84 dBA L_{max} with trucks passing at 50 feet.

The second type of short-term noise impact is related to noise generated during grading and construction on the project site. Construction is performed in discrete steps, or phases, each with its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on-site. Therefore, the noise levels vary as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase.

Table 6 lists maximum noise levels recommended for noise impact assessments for typical construction equipment, based on a distance of 50 feet between the equipment and a noise receptor. Typical noise levels range up to 88 dBA L_{max} at 50 feet during the noisiest construction phases. The preparation phase, which includes excavation and grading of the project site, tends to generate the highest noise levels because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery such as backfillers, bulldozers, draglines, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings.

Table 6: Typical Construction Equipment Noise Levels

Equipment Description	Acoustical Usage Factor (%)	Maximum Noise Level (L _{max}) at 50 Feet ¹
Backhoes	40	80
Compactor (ground)	20	80
Compressor	40	80
Cranes	16	85
Dozers	40	85
Dump Trucks	40	84
Excavators	40	85
Flat Bed Trucks	40	84
Forklift	20	85
Front-end Loaders	40	80
Graders	40	85
Impact Pile Drivers	20	95
Jackhammers	20	85
Pick-up Truck	40	55
Pneumatic Tools	50	85
Pumps	50	77
Rock Drills	20	85
Rollers	20	85
Scrapers	40	85
Tractors	40	84
Welder	40	73

Source: Roadway Construction Noise Model (FHWA 2006).

Note: Noise levels reported in this table are rounded to the nearest whole number.

L_{max} = maximum instantaneous sound level

Construction details (e.g., construction fleet activities) are not yet known; therefore, this analysis assumes that scrapers, bulldozers, and water trucks/pickup trucks would be operating simultaneously during construction of the proposed project. As discussed above, noise levels associated with this equipment operating simultaneously would be approximately 88 dBA L_{max} at 50 feet.

As noted above, the closest sensitive receptors to the proposed project include the single-family residences located immediately west of the project site and the daycare facility located immediately south of the project site. Based on building setbacks, the closest sensitive receptors are the single-family residential buildings, which are approximately 25 feet from the project site's property line. Based on a reduction in noise of 6 dBA per doubling of distance, there would be an increase of approximately 6 dBA from the active construction area to the nearest residences. However, these residences have a wood fence, which would reduce noise levels by approximately 5 dBA. Therefore, the closest off-site sensitive receptors may be subject to short-term construction noise reaching 89 dBA L_{max} when construction is occurring.

However, construction equipment would operate at various locations within the 3.78-acre project site and would only generate maximum noise levels when operations occur closest to the receptor.

Maximum noise levels were developed based on Spec 721.560 from the Central Artery/Tunnel (CA/T) program to be consistent with the City of Boston's Noise Code for the "Big Dig" project.

Construction noise is permitted by the City of Fresno when activities occur between the hours of 7:00 a.m. and 10:00 p.m. Monday through Saturday. Construction noise is prohibited on Sundays. In addition, Mitigation Measure NOI-1 would be required to limit construction activities to the permitted hours and require the use of mufflers for construction equipment to reduce potential construction period noise impacts for the indicated sensitive receptors to less-than-significant levels.

As such, implementation of Mitigation Measure NOI-1 would reduce construction noise impacts to a level of **less than significant with mitigation**.

Operational Noise Impacts. Motor vehicles with their distinctive noise characteristics are the dominant noise source in the project vicinity. The amount of noise varies according to many factors, such as volume of traffic, vehicle mix (percentage of cars and trucks), average traffic speed, and distance from the observer. Implementation of the proposed project would result in new daily trips on local roadways in the project site vicinity. A characteristic of sound is that a doubling of a noise source is required in order to result in a perceptible (3 dBA or greater) increase in the resulting noise level.

As discussed below in Section XVII, Transportation, the proposed project would generate approximately 351 daily trips. Therefore, project daily trips would not result in a doubling of traffic volumes along any roadway segment in the project vicinity and would not result in a perceptible increase in traffic noise levels at receptors in the project vicinity.

In addition, with implementation of the proposed project, there would be an increase in activity at the project site. The project site itself is located in a primarily developed area surrounded by single-family residential and school uses. Noise from the proposed project would be similar to existing conditions and would generally include noise from vehicles, air conditioner units, and other similar equipment. Due to its location near other residential land uses, it is not expected that the proposed project would result in a perceptible increase in noise to surrounding land uses. Therefore, it is not expected that the proposed project would substantially increase noise levels over existing conditions. Operation of the proposed project would result in similar noise levels as existing conditions and, therefore, it is not expected that the proposed project would substantially increase noise levels over existing conditions, and impacts would be **less than significant**.

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

Vibration refers to groundborne noise and perceptible motion. Groundborne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors. Vibration energy propagates from a source, through intervening soil and rock layers, to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the structure. Building vibration may be perceived by the occupants as the motion of building surfaces, rattling of items on shelves or hanging on walls, or as a low-frequency rumbling noise. The rumbling noise is caused by the vibrating walls, floors, and ceilings radiating sound waves. Annoyance from vibration

often occurs when the vibration exceeds the threshold of perception by 10 dB or less. This is an order of magnitude below the damage threshold for normal buildings.

Typical sources of groundborne vibration are construction activities (e.g., pavement breaking and operating heavy-duty earthmoving equipment), and occasional traffic on rough roads. In general, groundborne vibration from standard construction practices is only a potential issue when within 25 feet of sensitive uses. As noted above, the closest sensitive receptors to the proposed project include the single-family residences located immediately west of the project site and the day care facility located immediately south of the project site. Based on building setbacks, the closest sensitive receptors are the single-family residential buildings, which are approximately 25 feet from the project site's property line. At 25 feet, construction activities associated with implementation of the proposed project are not expected to result in excessive groundborne vibration or groundborne noise levels. Once operational, no permanent noise sources would be located within the project site that would expose persons to excessive groundborne vibration or noise levels. Therefore, implementation of the proposed project would not permanently expose persons within or around the project site to excessive groundborne vibration or noise and the project impacts would be **less than significant**.

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?

The nearest airports include the Fresno Yosemite International Airport, located approximately 6.8 miles southeast from the project site, the Sierra Sky Airport, located approximately 7.8 miles southwest from the project site, and Fresno Chandler Executive Airport, located approximately 11.2 miles southwest from the project site. Each of these airports has an Airport Land Use Compatibility Plan (ALUCP) which guides approximate compatible land uses. The City of Fresno General Plan, other City land use plans, and all City land use decisions must be compatible with the adopted ALUCP. Each ALUCP includes CNEL noise contours based on projected airport and aircraft operations. The project site is not located in an ALUCP. Therefore, project implementation would not expose people residing or working in the project area to excessive noise levels, and a less-than-significant impact would occur.

Mitigation Measures

Mitigation Measure NOI-1: The project contractor shall implement the following measures during construction of the project:

- Equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.
- Ensure that all general construction related activities are restricted to between the hours of 7:00 a.m. and 10:00 p.m. Monday through Saturday to avoid noisesensitive hours of the day. Construction shall be prohibited on Sundays.

 Designate a "disturbance coordinator" at the City who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler) and would determine and implement reasonable measures warranted to correct the problem.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSIN	G – Would the	e 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)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				х

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)?

The project site is designated Employment - Office in the Fresno General Plan and is zoned Office (O), which is intended to provide sites for administrative, financial, business, professional, medical, and public offices. The proposed project would require a General Plan Amendment to Medium High Density Residential and Rezone to Multi-Family Residential, Medium High Density (RM-1). The project site does not currently contain any permanent residents in the existing condition. Therefore, implementation of the proposed project would potentially result in an increase in unplanned population growth in the City. The proposed project would result in the development of 48 multi-family residential apartment units, which would result in approximately 146 additional residents based on the estimated 3.04 persons per household²¹ in Fresno. The addition of 146 new residents represents approximately 0.03 percent of Fresno's 2020 population of 542,107.²² As such, population growth in the area as a result of additional housing would be negligible.

All of the utilities infrastructure, including sewer and water facilities and storm drains, exist in the immediate vicinity of the project site and would be extended to the project site.

²¹ U.S. Census Bureau. 2022. QuickFacts Fresno city, California. Website: https://www.census.gov/quickfacts/fact/table/fresnocitycalifornia,US/PST045219 (accessed July 18, 2023).

These existing utility and service systems have adequate capacity to serve the proposed project (refer to Section XIX, Utilities, below). Therefore, the proposed project would not result in significant population growth as a result of project implementation. Impacts would be **less than significant**.

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

No housing is currently present on the project site, and therefore, there are no people living on the project site that would be displaced by the proposed project. Conversely, the proposed project would result in the development of multi-family residential uses. Therefore, there would be **no impacts** related to the displacement of substantial numbers of people or housing units, and no mitigation is required.

Mitigation Measures

The proposed project would not result in any potentially significant impacts related to population and housing, and no mitigation is required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. PUBLIC SERVICES – Would to	the project:			
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:				
Fire protection?			X	
Police protection?			X	
Schools?			X	
Parks?			X	
Other public facilities?			X	

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

i. Fire protection?

The City of Fresno Fire Department (FFD) would provide fire protection services to the proposed project. There are 23 FFD fire stations in Fresno, with the closest fire station, Fire Station 17, located at 10512 North Maple, approximately 0.5 miles northwest from the project site. As discussed above in Section XIV, Population and Housing, the proposed project would result in an incremental increase in the population of the City and therefore incrementally increase the demand for

emergency fire services and emergency medical services. However, the proposed project would be required to comply with all applicable codes for fire safety and emergency access. In addition, the Project Applicant would be required to submit plans to the FFD for review and approval prior to the issuance of building permits to ensure the proposed project would conform to applicable building codes. Furthermore, the Project Applicant would be required to pay a Fire Facilities Fee pursuant to Chapter 12, Article 4.9 of the Fresno Code of Ordinances to account for the potential impacts to fire service facilities.

The FFD would provide services to the project site and would not require additional firefighters to serve the proposed project. The construction of a new or expanded fire station would not be required.²³ The proposed project would not result in a significant impact on the physical environment due to the incremental increase in demand for fire protection and life safety services. The incremental increase in demand for services is not expected to adversely affect existing responses times to the project site or within the City. Therefore, construction and operation of the proposed project would have a **less-than-significant impact** on fire protection and safety services and facilities.

ii. Police protection?

The City of Fresno Police Department (FPD) provides police protection to the project site. The FPD headquarters are located at 2323 Mariposa Street, approximately 12.9 miles from the project site. The project site is within the northeast policing district and the northeast district police station is located at 1450 East Teague Avenue, approximately 2.6 miles from the project site. As discussed above in Section XIV, Population and Housing, the proposed project would result in an incremental increase in the population of the City and therefore incrementally increase the demand for emergency police services to the project site. The Project Applicant would be required to pay a Police Facilities Fee pursuant to Chapter 12. Article 4.8 of the Fresno Code of Ordinances to account for the potential impacts to police protection services. The FPD would provide services to the project site and would not require additional officers to serve the project site. The construction of new or expanded police facilities would not be required.²⁴ Therefore, the proposed project would not result in a substantial adverse impact associated with the provision of additional police facilities or services, and impacts to police services represent a less-than-significant impact.

iii. Schools?

Any urban residential development occurring as a result of the proposed project

²³ City of Fresno. Semonious, Ted. Deputy Fire Chief. December 1, 2023. Personal communication

²⁴ City of Fresno. Gross, Donald. Northeast Policing District Captain. December 13, 2023. Personal communication.

would result in an impact on the Clovis Unified School District student capacity. The estimated number of students the proposed project would generate is derived by multiplying the number of students per dwelling unit (the student yield factor) by the number of dwelling units in the proposed project (48 new units). The California State Allocation Board Office of Public School Instruction reports that the Statewide student yield factor of 0.7 students per dwelling unit is applicable for unified school districts. Applying the Statewide average student yield factor, the proposed project would generate 34 students. The Project Applicant would be required to pay appropriate school developer fees at time of building permits to address potential impacts to CUSD services, as set forth in Education Code Section 17620, pursuant to Government Code 65995. These fees would be directed towards maintaining adequate service levels, which would ensure that any impact to schools that could result from the proposed project would be offset by development fees. As a result, a **less-than-significant impact** would occur.

iv. Parks?

As discussed above in Section XIV, Population and Housing, the proposed project is anticipated to increase the City's population by less than one percent. As such, development of the proposed project could increase the use of parks within the vicinity of the project site. However, this minimal increase in use is not expected to adversely affect the physical conditions of local and regional open space areas or recreational facilities or require the provision of new parks or facilities. In addition, the proposed project would provide a clubhouse and pool located in the southern portion of the project site, a tot lot and dog park located at the northern end of the project site, as well as approximately 75,722 square feet of landscaped open space. Required open space for properties zoned within the RM-1 district, per Table 15-1003 of the Fresno Municipal Code, is 20 percent of the property area. The proposed 75,722 square feet of landscaped open space represent approximately 46 percent of the project site area. As such, the proposed project would exceed open space requirements for the RM-1 district, which would offset the potential project demand for public parks.

The Project Applicant would be required to pay a Park Facilities Fee, pursuant to Chapter 12, Article 4.7 of the Fresno Code of Ordinances at the time building permits are obtained or receive credits for construction as may be memorialized within a subdivision or development agreement. Maintenance would be afforded through annexation into a Community Facilities District (CFD). Payment of the Park Facilities Fee, or parkland dedication would offset impacts to parks and recreational facilities. As a result, a **less-than-significant impact** would occur.

v. Other public facilities?

Development of the proposed project could also increase demand for other public services, including libraries, community centers, and public health care facilities.

The Project Applicant would be required to coordinate with the City the payment of applicable impact fees to mitigate impacts to public facilities resulting from the proposed project. As such, the impact would be **less than significant**.

Mitigation Measures

The proposed project would not result in any potentially significant impacts related to public services, and no mitigation is required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION - Would the pr	oject:			
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	

DISCUSSION

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?

The proposed project would construct 48 residential units and would provide a clubhouse and pool located in the southern portion of the project site and a tot lot located at the northern end of the project site. Residents of the proposed project would be expected to use local parks and community facilities within the City as well as regional recreational facilities. Although the proposed project would incrementally increase use of these facilities, this minor increase in use is not expected to result in substantial physical deterioration of local parks, trails, and community centers and this impact would be less than significant. Specifically, the proposed project is anticipated to increase the City's population by less than one percent and these facilities are anticipated to have capacity

to serve this minimal increase in demand. As such, demand for parks generated by the proposed project is within planned services levels of the City of Fresno Parks and Community Services Department and the Project Applicant would be required to pay any required impact fees at the time building permits are obtained or receive credits for construction as may be memorialized within a subdivision or development agreement. Therefore, the proposed project would have a **less-than-significant impact** on existing parks or other recreational facilities.

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

As discussed above, the proposed project would construct 48 residential units with a clubhouse, pool and tot lot, as well as associated landscaping, parking and circulation, and infrastructure improvements. The proposed project does not include or require the construction or expansion of existing public recreational facilities. The proposed project would provide approximately 75,722 square feet of landscaped open space, representing approximately 46 percent of the project site area. Required open space for properties zoned within the RM-1 district, per Table 15-1003 of the Fresno Municipal Code, is 20 percent of the property area. Therefore, proposed landscaped open space for the project would exceed open space requirements for the RM-1 district, which would off-set demand for public recreational facilities in the project vicinity. The proposed project would also comply with the City's design and construction requirements for landscaped open space, as applicable. Therefore, development of the proposed project and associated recreational opportunities for use by users of the project site would not result in additional environmental effects beyond those described in this document. As a result, a less-thansignificant impact would occur.

Mitigation Measures

The proposed project would not result in any potentially significant impacts related to recreation, and no mitigation is required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION - Would	d the project:			
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)?			×	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			Х	
d) Result in inadequate emergency access?			Х	

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

The City's General Plan Mobility and Transportation Element includes objectives and implementing policies create a safe and efficient transportation system, optimize travel by all modes, make efficient use of the City's transportation system, maintain a continuous, safe, and easily accessible bikeways system, establish a well-integrated network of pedestrian facilities, provide public transit options, and establish parking standards.

The 2016 City of Fresno Active Transportation Plan (ATP) is a comprehensive guide outlining the vision for active transportation in the City of Fresno. The ATP envisions a complete, safe, and comfortable network of trails, sidewalks, and bikeways that serves all residents of Fresno. This plan seeks to achieve the following goals:

- Equitably improve the safety and perceived safety of walking and bicycling in Fresno.
- Increase walking and bicycling trips in Fresno by creating user-friendly facilities.
- Improve the geographic equity of access to walking and bicycling facilities in Fresno.

Fill key gaps in Fresno's walking and bicycling networks.

Vehicular access to the project site would occur along North Chestnut Avenue. Currently, Behymer Avenue contains sidewalks and bike lanes on each side of the street. Chestnut Avenue currently contains sidewalks on the east side of the street and the west side of the street contains sidewalks north and south of the project site, but not along the project site frontage. No bike lanes are currently provided along Chestnut Avenue. No bus or transit stops are located in the immediate vicinity of the project site.

The City includes four Traffic Impact Zones (TIZ) and each zone has a different level of service (LOS) threshold standard. The project site is located within TIZ III, which generally represents areas near or outside the City Limits but within the SOI as of December 31, 2012 and maintains a peak hour standard of LOS D or better for all the roadway segments (TIZ-III). According to the Mobility and Transportation Element²⁵, projects in TIZ III that generate more than 100 peak hour trips would require a detailed traffic analysis. According to the Trip Generation/VMT Memorandum²⁶ (Appendix E) prepared for the proposed project, trip generation for the proposed project was developed using rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 11th Edition.

Table 7: Project Trip Generation

Land Use	Units	Daily	AM Peak Hour			PM Peak Hour		
	Ullits	Trips	Total	In	Out	Total	In	Out
Multi-Family Residential	48	324	19	5	14	24	15	9

Note: Rates per ITE Trip Generation Manual, 11th Edition; Land Use Code (220) Multi-Family Housing (Low-Rise) Not Close to Rail Transit, Setting/Location General Urban/Suburban.

Source: Compiled by LSA (May 2023).

As shown in Table 7 above, the proposed project is expected to generate approximately 324 average daily vehicle trips, with 19 trips occurring during the AM peak hour and approximately 24 trips occurring during the PM peak hour.²⁷ The anticipated AM and PM peak hour trips would be well below the City's standard of 100 or more peak hour new vehicle trips for TIZ-III. Therefore, the anticipated peak hour trips would be expected to remain below the City's standard of 100 peak hour trips.

Due to the limited addition of project-related traffic, the proposed project is not anticipated to generate a significant number of trips that would result in the deficiency of existing intersections within the project vicinity. As such, the addition of project traffic is not anticipated to exceed the City's level of significance threshold of LOS (LOS D or better). In addition, the project-related traffic would not result in a deficiency to existing transit,

²⁵ City of Fresno. 2014. Fresno General Plan. Mobility and Transportation Element. p. 4-32. Website: https://www.fresno.gov/wp-content/uploads/2023/03/upload_temp4-Mobility-and-Transportation-9-30-2021.pdf (accessed July 18, 2023).

²⁶ Institute of Transportation Engineers. 2017. Trip Generation Manual 11th Edition. September.

²⁷ LSA. 2023. North Fresno Residential Project Trip Generation and Vehicle Miles Traveled (VMT) Analysis Memorandum (LSA Project # BDJ2002). May 25.

roadway, bicycle and pedestrian facilities. Therefore, the proposed project would not conflict with any plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system or congestion management program. Impacts would be **less than significant**.

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

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 auto travel (additional miles driven) a proposed project would create on California roads. If the project adds excessive car travel onto State roads, the project may cause a significant transportation impact.

The State CEQA Guidelines were amended to implement SB 743, by adding Section 15064.3. Among its provisions, Section 15064.3 confirms that, except with respect to transportation projects, a project's effect on automobile delay shall not constitute a significant environmental impact. Therefore, LOS measures of impacts on traffic facilities is no longer a relevant CEQA criteria for transportation impacts.

CEQA Guidelines Section 15064.3(b)(4) states that "[a] lead agency has discretion to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate 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."

On June 25, 2020, the City of Fresno adopted CEQA Guidelines for Vehicle Miles Traveled Thresholds (VMT Guidelines)²⁸, pursuant to Senate Bill 743 to be effective by July 1, 2020. The VMT Guidelines document was prepared and adopted consistent with the requirements of CEQA Guidelines Sections 15064.3 and 15064.7. The December 2018 Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory) published by the Governor's Office of Planning and Research (OPR), was utilized as a reference and guidance document in the preparation of the VMT Guidelines.

As discussed in the VMT Guidelines, the impact of transportation has shifted from congestion to climate change, and the purpose of the CEQA analysis is to disclose and ultimately reduce GHG emissions by reducing the number and length of automobile trips.

²⁸ City of Fresno, 2020. CEQA Guidelines for Vehicle Miles Traveled Thresholds for the City of Fresno. Website: https://www.fresno.gov/wp-content/uploads/2023/03/CEQA-Guidelines-for-Vehicle-Miles-Traveled-Final-Adopted-Version.pdf (accessed November 2023)

As such, reduction in GHG directly corresponds to reduction in VMT. As part of the SB 375 land use/transportation integration process and GHG goal setting, the State of California and Regional Transportation Planning Agencies (RTPA) have agreed to reduce GHG through integrated land use and transportation planning by a statewide average of approximately 15 percent by 2035. The State of California recognizes Fresno County's contribution to the aggregate 15 percent statewide GHG emission reduction is 13 percent. Therefore, in order to reach the statewide GHG reduction goal of 15 percent, the City must reduce GHG by 13 percent. The method of reducing GHG by 13 percent is to reduce VMT by 13 percent as well. As such, the City has established a threshold for land use developments, specifically residential, of a 13 percent reduction from the existing regional VMT per capita as indicative of a significant environmental impact. This means that projects that generate VMT in excess of 87 percent of existing regional VMT per capita or per employee would have a significant environmental impact. Projects that generate VMT that is less than 87 percent of existing regional VMT per capita or employee are less than significant.

To streamline project review processes, the VMT Guidelines establishes a screening standard and criteria that can be used to screen out qualified projects that meet the adopted criteria from needing to prepare a detailed VMT analysis. This screening criteria is directly related to a project's potential to achieve a VMT per capita that results in a reduction of more than 13 percent from the existing regional VMT per capita.

According to the screening criteria of the VMT Guidelines, a common GHG emissions threshold is 3,000 metric tons (MT) of carbon dioxide equivalent (CO2e) per year. Vehicle emissions are typically more than 50 percent of the total project GHG emissions. Thus, a project with 500 average daily trips (ADT) would generally have total project emissions that could be less than 1,300 MT CO2e/year (i.e., 50 percent or 643 MT CO2e/year coming from vehicle emissions and the other 50 percent coming from other project activities). As this level of GHG emissions would be less than 3,000 MT CO2e/year, the emissions of GHG from a project up to 500 ADT would typically be less than significant. Therefore, the City allows screening out projects if the proposed project would generate less than 500 daily trips.

As identified in Table 7 above, the proposed project would generate approximately 324 daily trips.²⁹ As the level of GHG emissions produced for 324 daily trips would be lower than emissions for 500 ADT, the GHG emissions from the proposed project would be less than significant, which would also indicate that the project would result in a less than significant VMT impact.

As such, implementation of the proposed project would result in **less than significant VMT impacts**, and no mitigation would be required.

²⁹ LSA. 2023. North Fresno Residential Project Trip Generation and Vehicle Miles Traveled (VMT) Analysis Memorandum (LSA Project # BDJ2002). May 25.

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

Access to the project site would be provided by one ingress/egress driveway from North Chestnut Avenue. The driveway would be located at the southern end of the project site and would provide access to an internal 28-foot access drive lane that would connect to on-site parking spaces. On the northern end of the project site, the proposed project would also provide a one-way exit driveway for resident and service vehicles that would also serve as an emergency entrance to the project site.

Pedestrian circulation for the proposed project would occur through a proposed pedestrian sidewalk along the project frontage with North Chestnut Avenue and through internal sidewalks and walkways in the project site.

The proposed project would include 48 residential units with a clubhouse, pool and tot lot, as well as associated landscaping, parking and circulation, and infrastructure improvements. No sharp curves or other roadway design elements are proposed that would create dangerous conditions. In addition, the project design features would be required to comply with standards set by the City's General Plan and City Engineer. In addition, the proposed project would also be required to submit plans to the FFD for review and approval prior to the issuance of building permits to ensure there are no substantial hazards associated with the project design. Furthermore, the proposed uses would be compatible with adjacent residential uses. Therefore, the proposed project would not substantially increase hazards due to a design feature, and impacts would be less than significant.

d) Result in inadequate emergency access?

The proposed project includes 48 residential units with a clubhouse, pool and tot lot, as well as associated landscaping, parking and circulation, and infrastructure improvements. Emergency vehicles would have access to the project site via one ingress/egress driveway and one emergency entrance driveway from North Chestnut Avenue. The driveways would be located at the southern and northern ends of the project site, and would provide access to an internal 28-foot access drive lane. In addition, the proposed project's site plan would be subject to review and approval by the FFD to ensure the proposed project includes adequate emergency access. Therefore, the proposed project would result in **less-than-significant** impacts related to emergency access and no mitigation is required.

Mitigation Measures

The proposed project would not result in any potentially significant impacts related to transportation, and no mitigation is required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRIBAL CULTURAL RESOL	JRCES – Wou	uld the project:	T	T
a) 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:				
i) 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,		Х		
ii) 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		

a) 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:

- i. 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
- ii. 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.

Tribal Cultural Resources are those resources with inherent tribal values that are difficult to identify through the same means as archaeological resources. These resources can be identified and understood through direct consultation with the tribes who attach tribal value to the resource. 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)).

Additional 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.

Pursuant to Senate Bill 18 (SB 18), Native American tribes traditionally and culturally affiliated with the project area were invited to consult regarding the proposed project based on a list of contacts provided by the Native American Heritage Commission (NAHC). These tribes included: Big Sandy Rancheria of Western Mono Indians, North Valley Yokuts Tribe, Cold Springs Rancheria of Mono Indians, Picayune Rancheria of Chukchansi Indians, Dumna Wo-Wah Tribal Government, Santa Rosa Rancheria Tachi Yokut Tribe, Kings River Choinumni Farm Tribe, Table Mountain Rancheria, North Fork Rancheria of Mono Indians, Traditional Choinumni Tribe, North Valley Yokuts Tribe, Tule River Indian Tribe, and Wuksache Indian Tribe/Eshom Valley Band. None of the contacted tribes provide a response to invitations to consult. As such, SB18 requirements have been fulfilled.

Assembly Bill (AB) 52, which became law January 1, 2015, requires that, as part of the CEQA review process, public agencies provide early notice of a project to California

Native American Tribes to allow for consultation between the tribe and the public agency. The purpose of AB 52 is to provide the opportunity for public agencies and tribes to consult and consider potential impacts to Tribal Cultural Resources (TCR's), as defined by the Public Resources Code (PRC) Section 2107(a). Under AB 52, public agencies shall reach out to California Native American Tribes who have requested to be notified of projects in areas within or which may have been affiliated with their tribal geographic range. Pursuant to AB 52, the Big Sandy Rancheria of Western Mono Indians, North Valley Yokuts Tribe, Cold Springs Rancheria of Mono Indians, Picayune Rancheria of Chukchansi Indians, Dumna Wo-Wah Tribal Government, Santa Rosa Rancheria Tachi Yokut Tribe, Kings River Choinumni Farm Tribe, Table Mountain Rancheria, North Fork Rancheria of Mono Indians, Traditional Choinumni Tribe, North Valley Yokuts Tribe, Tule River Indian Tribe, and Wuksache Indian Tribe/Eshom Valley Band were invited to consult under AB 52. The contracted Tribes did not provide a response to invitations to consult. As such, AB52 consultation requirements have been fulfilled.

As described in Section V, Cultural Resources, no cultural resources were identified on the project site through the preliminary review of historic-period maps and aerial images, SSJVIC records search, Sacred Lands File records search, and field survey conducted for the project's Cultural Resources Review. However, if any artifacts are inadvertently discovered during ground-disturbing activities, existing federal, State, and local laws and regulations would require construction activities to cease until such artifacts are properly examined and determined not to be of significance by a qualified cultural resources professional. In addition, Mitigation Measures CUL-1, CUL-2 and CUL-3 included above in Section V, Cultural Resources, would apply to the proposed project and would require consultation with a qualified historical specialist or archaeologist, and compliance with the State Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98, as applicable. Therefore, adherence to the requirements in Mitigation Measures CUL-1, CUL-2 and CUL-3 would reduce potential impacts to unknown resources to less than significant with mitigation incorporated.

Mitigation Measures

Mitigation Measure CUL-1: If previously unknown resources are encountered before or during grading activities, construction shall stop in the immediate vicinity of the find and a qualified historical resources specialist shall be consulted to determine whether the resource requires further study. The qualified historical resources specialist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines and the City's Historic Preservation Ordinance.

³⁰ LSA. 2020. North Fresno Residential Project in Fresno County, California; Cultural Resources Review (LSA Project No. BJD2001). August 19.

If the resources are determined to be unique historical resources as defined under Section 15064.5 of the CEQA Guidelines, measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could include avoidance or capping, incorporation of the project site in green space, parks, or open space, or data recovery excavations of the finds.

No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these. Any historical artifacts recovered as a result of mitigation shall be provided to a City-approved institution or person who is capable of providing long-term preservation to allow future scientific study.

Mitigation Measure CUL-2: Subsequent to a preliminary City review of the project grading plans, if there is evidence that a project will include excavation or construction activities within previously undisturbed soils, a field survey and literature search for prehistoric archaeological resources shall be conducted. The following procedures shall be followed.

If prehistoric resources are not found during either the field survey or literature search, excavation and/or construction activities can commence. In the event that buried prehistoric archaeological resources are discovered during excavation and/or construction activities, construction shall stop in the immediate vicinity of the find and a qualified archaeologist shall be consulted to determine whether the resource requires further study. The qualified archaeologist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with CEQA Guidelines Section 15064.5.

If the resources are determined to be unique prehistoric archaeological resources as defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could include avoidance or capping, incorporation of the project site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any prehistoric archaeological artifacts recovered as a result of mitigation shall be provided to a Cityapproved institution or person who is capable of providing long-term preservation to allow future scientific study.

If prehistoric resources are found during the field survey or literature review, the resources shall be inventoried using appropriate State record forms and submit the forms to the Southern San Joaquin Valley Information Center. The resources shall be evaluated for significance. If the resources are found to be significant, measures shall be identified by the qualified archaeologist. Similar to above, appropriate mitigation measures for significant resources could include avoidance or capping, incorporation

of the project site in green space, parks, or open space, or data recovery excavations of the finds.

In addition, appropriate mitigation for excavation and construction activities in the vicinity of the resources found during the field survey or literature review shall include an archaeological monitor. The monitoring period shall be determined by the qualified archaeologist. If additional prehistoric archaeological resources are found during excavation and/or construction activities, the procedure identified above for the discovery of unknown resources shall be followed.

Mitigation Measure CUL-3: 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.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact		
XIX. UTILITIES AND SERVICE SY	XIX. UTILITIES AND SERVICE SYSTEMS – 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 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 waste water 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?			Х			
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			Х			

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?

The Department of Public Utilities has determined that adequate sanitary sewer and water services would be available to serve the proposed project subject to the payment of any applicable connection charges and/or fees and extension of services in a manner which is compliant with the Department of Public Utilities standards, specifications, and policies. The Project Applicant would need to contact the Department of Public Utilities to determine service requirements.

Impacts to storm drainage facilities have been previously discussed in Section X, Hydrology and Water Quality, while the proposed project would result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of such facilities would not cause significant environmental effects.

Electric power, natural gas, and telecommunication facilities would require connections to the project site. However, because the project site is located within an urbanized area with existing facilities in close proximity, connection to these facilities would not cause significant environmental effects. As a result, the proposed project would result in a **less-than-significant impact** related to the relocation or construction of new or expanded utilities.

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

The City of Fresno Department of Public Utilities would supply water to the project site. Based on the City's 2020 Urban Water Management Plan (UWMP), the water supplies under normal conditions for the City from 2025 (329,030 Acre Feet (AF)/year) to 2045 (357,330 AF/year) would be sufficient to cover the potable water demand (i.e., 136,504 AF by 2025 and 167,947 AF by 2045) for each normal year respectively.³¹

During a single dry year, water supplies for the City from 2025 (188,852 AF/year) to 2045 (211,158 AF/year) would be sufficient to cover the potable water demand for each year (i.e., 136,504 AF by 2025 and 167,947 AF by 2045) respectively.

After a 5-year dry period, water supplies for the City from 2025 (315,000 AF/year) to 2045 (340,000 AF/year) would be sufficient to cover the potable water demand for each year (i.e., 136,504 AF by 2025 and 167,947 AF by 2045) respectively.

³¹ City of Fresno. 2021. 2020 Urban Water Management Plan. Website: https://www.fresno.gov/wp-content/uploads/2023/03/Fresno-2020-UWMP_Final_2021-07-21.pdf (accessed July 18, 2023).

The City's 2020 UWMP projects potable water demand through 2045 using land use-based projections sourced from the City's Geographic Information System (GIS) database and the City's General Plan. The land use-based projections correspond with the planned land use at buildout as described in the City's General Plan.

As described in Section XI, Land Use and Planning, the proposed project would require a General Plan Amendment from Employment – Office to Medium High Density Residential. The proposed project would result in the development of 48 multi-family residential apartment units, which would result in approximately 146 additional residents based on the estimated 3.04 persons per household in Fresno.³² The projected water demand for multifamily residential land use in 2045 is anticipated to be 23,935 acre-feet annually, or 7,799 million gallons per year (mgy) in the UWMP. The proposed project is anticipated to require approximately 13.2 mgy based on the City's daily per capita water use target of 247 gallons per capita per day (GPCD). The project's water demand would represent less than 1 percent of the City's anticipated water demand. As such, the project is not anticipated to strain the existing and future water system in a way that would require the relocation or construction of new or expanded infrastructure. Therefore, the proposed project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years, and the impact would be **less than significant**.

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?

Water supply and wastewater services for the proposed project would be provided by the City of Fresno through the Department of Public Utilities (DPU) Water and Wastewater Management Divisions. The City of Fresno owns and operates two wastewater treatment facilities. They are the Fresno/Clovis Regional Wastewater Reclamation Facility and the North Fresno Wastewater Reclamation Facility. The RWRF currently has a capacity of 87 million gallons per day (mgd).³³ The North Fresno Facility has a capacity of 1.07 mgd.³⁴ The Department of Public Utilities has determined that adequate sanitary sewer and water services would be available to serve the proposed project subject to the payment of any applicable connection charges and/or fees and extension of services in a manner which is compliant with the Department of Public Utilities standards, specifications, and policies. The Project Applicant would need to contact the Department of Public Utilities to determine service requirements. This impact would be **less than significant**.

³² U.S. Census Bureau. 2022. QuickFacts Fresno city, California. Website: https://www.census.gov/quickfacts/fact/table/fresnocitycalifornia,US/PST045219 (accessed July 18, 2023).

³³ City of Fresno. 2021. 2020 Urban Water Management Plan. Website: https://www.fresno.gov/wp-content/uploads/2023/03/Fresno-2020-UWMP_Final_2021-07-21.pdf (accessed July 18, 2023).

³⁴ Ibid.

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?

Garbage disposed of in the City of Fresno is taken to Cedar Avenue Recycling and Transfer Station. Once trash has been off-loaded at the transfer station, it is sorted and non-recyclable solid waste is loaded onto large trucks and taken to the American Avenue Landfill located approximately 6 miles southwest of Kerman.

The American Avenue Landfill (i.e. American Avenue Disposal Site 10-AA-0009) has a maximum permitted capacity of 32,700,000 cubic yards and a remaining capacity of 29,358,535 cubic yards, with an estimated closure date of August 31, 2031. The maximum permitted throughput is 2,200 tons per day.³⁵

Other landfills within the County of Fresno include the Clovis Landfill (City Of Clovis Landfill 10-AA-0004) with a maximum remaining permitted capacity of 7,740,000 cubic yards, a maximum permitted throughput of 2,000 tons per day, and an estimated closure date of 2047.³⁶

Based on the CalEEMod Model results for the project (Appendix A), operation of the proposed project would generate approximately 195 pounds of solid waste per day or about 35.6 tons of solid waste per year. Given the available capacity at the landfills, the additional solid waste generated by the proposed project is not anticipated to cause the facility to exceed its daily permitted capacity. As such, the proposed project would be served by a landfill with sufficient capacity to accommodate the proposed project's waste disposal needs, and impacts associated with the disposition of solid waste would be **less than significant**.

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

The proposed project would comply with Cal Green, the City's Construction and Demolition (C&D) Waste Management Guide, and with waste management policies and recommendations from the General Plan and the Greenhouse Gas Reduction Plan Update. The proposed project would dispose of waste in accordance with applicable federal, state, and local recycling, reduction, and waste requirements and policies. Therefore, the proposed project would not conflict with federal, state, and local management and reduction statutes and regulations related to solid waste, and the impact would be **less than significant**.

³⁵ CalRecycle. American Avenue Disposal Site (10-AA-0009). Website: https://www2.calrecycle.ca.gov/SolidWaste/Site/Summary/352 (accessed July 18, 2023).

³⁶ CalRecycle. City Of Clovis Landfill (10-AA-0004). Website: https://www2.calrecycle.ca.gov/SolidWaste/Site/Summary/347 (accessed July 18, 2023).

Mitigation Measures

The proposed project would not result in any potentially significant impacts related to utilities and service systems, and no mitigation is required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE – If located in or no very high fire hazard severity zone:			or lands clas	sified as
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			Х	
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	

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

The proposed project would not interfere with any emergency evacuation routes within the City of Fresno or an adopted emergency response plan. The project would not impede

access to any nearby roadways that may serve as emergency access routes in the project vicinity. Therefore, the impact would be **less than significant**.

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?

The project site is located in an area mapped by CAL FIRE as Local Responsibility Area (LRA) Unzoned, indicating that the area is urbanized and not susceptible to wildland conflagrations, and is not located within a very high fire hazard severity zone (VHFHSZ). and is not located within a VHFHSZ.³⁷ The project site would comply with City and County fire safety regulations for project construction and operation. Therefore, the proposed project would not exacerbate wildfire risks and potentially expose project occupants to wildfires. The impact would be **less than significant**.

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?

The project site is located in an LRA Unzoned area and is not located within a VHFHSZ. Although the proposed project may require the installation of infrastructure to serve the project site, the installation of this infrastructure would comply with design and construction requirements of the City and FMFCD and would not exacerbate fire risk in the project vicinity. The Project Applicant would also pay for applicable impact fees and connection fees for utilities that would serve the project site. Compliance with utility installation requirements of the City and utility providers would reduce potential impacts to less than significant.

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?

As discussed above, the project is not located within a VHFHSZ. The project site is also located on a relatively flat area and is not adjacent to any hills. In general, the potential for land sliding or slope failure in the City is very low, and the project site would not be susceptible to landslides. The project site is also not located on a flood hazard zone and would not be susceptible to flooding due to post-fire drainage changes. Therefore, the proposed project would not expose people or structures to significant post-fire risks, and the impact would be **less than significant**.

³⁷ California Department of Forestry and Fire Protection (CAL FIRE). 2022. Fresno County State Responsibility Area Fire Hazard Severity Zones. Website: https://osfm.fire.ca.gov/fire-hazard-severity-zones-maps-2022/ (accessed July 18, 2023).

Mitigation Measures

The proposed project would not result in any potentially significant impacts related to wildfires, and no mitigation is required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. MANDATORY FINDINGS OF	SIGNIFICAN	CE		
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		

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?

With the incorporation of mitigation measures included in this Initial Study, including Mitigation Measures BIO-1 and BIO-2 and CUL-1, CUL-2 and CUL-3, development of the proposed project would not: 1) degrade the quality of the environment; 2) substantially reduce the habitat of a fish or wildlife species; 3) cause a fish or wildlife species population to drop below self-sustaining levels; 4) threaten to eliminate a plant or animal community; 5) reduce the number or restrict the range of a rare or endangered plant or animal; or 6) eliminate important examples of the major periods of California history. Therefore, this impact would be **less than significant with mitigation incorporated**.

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.)

The proposed project's impacts would be individually limited and not cumulatively considerable due to the site-specific nature of the potential impacts. The potentially significant impacts that can be reduced to less-than-significant levels with implementation of recommended mitigation measures include the topics of Aesthetics, Biological Resources, Cultural Resources, Geology and Soils, and Noise. These impacts would primarily be related to construction-period activities, would be temporary in nature, and would not substantially contribute to any potential cumulative impacts associated with these topics.

For the topics of Agriculture and Forestry Resources, Air Quality, Energy, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, Transportation, Tribal Cultural Resources, Utilities and Service Systems, and Wildlife, the proposed project would have no impacts or less-than-significant impacts, and therefore, the proposed project would not substantially contribute to any potential cumulative impacts for these topics. All environmental impacts that could occur as a result of the proposed project would be reduced to a less-than-significant level through the implementation of the mitigation measures recommended in this document.

Implementation of these measures would ensure that the impacts of the proposed project would be below established thresholds of significance and that these impacts would not combine with the impacts of other cumulative projects to result in a cumulatively considerable impact on the environment as a result of project development. Therefore, this impact would be **less than significant with mitigation incorporated**.

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

The proposed project's potential to result in environmental effects that could directly or indirectly impacts human beings have been evaluated in this Initial Study. With implementation of the recommended mitigation measures, all environmental effects that could adversely affect human beings would be **less than significant with mitigation incorporated**.

Mitigation Measure Monitoring Program for P20-00213/P22-03749/P23-03173

This Mitigation Monitoring and Reporting Program (MMRP) was formulated based upon the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) prepared for the proposed Living Spaces Fresno Project (project). The MMRP, which is found in Table A of this section, lists mitigation measures recommended in the IS/MND for the proposed project and identifies mitigation monitoring requirements.

This MMRP has been prepared to comply with the requirements of State law (Public Resources Code Section 21081.6). State law requires the adoption of an MMRP when mitigation measures are required to avoid significant impacts. This requirement facilitates implementation of all mitigation measures adopted through the California Environmental Quality Act (CEQA) process. The MMRP is intended to ensure compliance during implementation of the project.

The MMRP is organized in a matrix format. The first column identifies the mitigation measure. The second column, entitled "Timing for Mitigation Measure," refers to the implementation and schedule of mitigation measures. The third column, entitled "Mitigation Responsibility," refers to the party responsible for implementing the mitigation measure. The fourth column, entitled "Monitoring/Reporting Agency," refers to the agency responsible for oversight or ensuring that the mitigation measure is implemented. The fifth column, entitled "Verification," will be initialed and dated by the individual designated to verify adherence to the project specific mitigation, when the mitigation measure is completed.

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Table A: Mitigation Monitoring and Reporting Program

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)	
I. AESTHETICS					
Mitigation Measure AES-1: Lighting systems for street and parking areas shall include shields to direct light to the roadway surfaces and parking areas. Vertical shields on the light fixtures shall also be used to direct light away from adjacent light sensitive land uses such as residences.	Prior to issuance of building permits	Project Applicant	Public Works Department (PW) and Planning and Development		
Mitigation Measure AES-2: Lighting systems for public facilities such as active play areas shall provide adequate illumination for the activity; however, low intensity light fixtures and shields shall be used to minimize spillover light onto adjacent properties.	Prior to issuance of building permits	Project Applicant	Planning and Development		
Mitigation Measure AES-3: Materials used on building facades shall be non-reflective.	Prior to issuance of building permits	Project Applicant	Planning and Development		
II. AGRICULTURE AND FORESTRY RESOURC	ES				
There are no significant impacts to Agriculture and	d Forestry Resourc	es.			
III. AIR QUALITY					
There are no significant impacts to Air Quality.					
IV. BIOLOGICAL RESOURCES					
Mitigation Measure BIO-1: Nesting Bird Surveys and Active Nest Avoidance. Any	Prior to issuance of	Construction contractor,	Planning and Development		

Table A: Mitigation Monitoring and Reporting Program

	Timing for	1 3 5	Monitoring/	Verification
MITIGATION MEASURE	Mitigation Measure	Mitigation Responsibility	Reporting Agency	(Initials and Date)
vegetation removal should take place outside of the active nesting bird season (i.e., January 1–September 30), when feasible, to avoid impacts to nesting birds protected under the California Fish and Game Code and Migratory Bird Treaty Act. Should vegetation removal take place during this period, a qualified biologist shall conduct a nesting bird survey no more than 5 days prior to clearing activities. If nesting birds are discovered during preconstruction surveys, the biologist shall identify an appropriate buffer where no clearing, grading, or construction activities with potential to have direct or indirect impacts on the nesting bird(s) are allowed to take place until after the nest is no longer active (e.g., the young birds have fledged), or as otherwise determined by the qualified biologist.	grading permits	qualified biologist		
Mitigation Measure BIO-2: Conduct Preconstruction Surveys for Burrowing Owl. A preconstruction survey for burrowing owl is required to take place no more than 30 calendar days prior to initiation of any vegetation or ground-disturbing project activities. A qualified biologist will provide the results of the survey to the City of Fresno. If an active burrow of the species is detected on	Prior to issuance of grading permits	qualified biologist	Planning and Development	

Table A: Mitigation Monitoring and Reporting Program

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MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)	
the project site, the Project Applicant must coordinate with the California Department of Fish and Wildlife (CDFW) prior to any project activities and specific avoidance, passive relocation, and compensatory mitigation activities shall be performed as required by CDFW.					
V. CULTURAL RESOURCES			,		
Mitigation Measure CUL-1: If previously unknown resources are encountered before or during grading activities, construction shall stop in the immediate vicinity of the find and a qualified historical resources specialist shall be consulted to determine whether the resource requires further study. The qualified historical resources specialist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines and the City's Historic Preservation Ordinance. If the resources are determined to be unique historical resources as defined under Section 15064.5 of the CEQA Guidelines, measures shall be identified by the monitor and	Prior to and during construction activities	Construction contractor, qualified historical resources specialist	Planning and Development		

Table A: Mitigation Monitoring and Reporting Program

<u> </u>	Timing for	Mitigation	Monitoring/	Verification
MITIGATION MEASURE	Mitigation Measure	Responsibility	Reporting Agency	(Initials and Date)
recommended to the Lead Agency. Appropriate measures for significant resources could include avoidance or capping, incorporation of the project site in green space, parks, or open space, or data recovery excavations of the finds.				
No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these. Any historical artifacts recovered as a result of mitigation shall be provided to a City-approved institution or person who is capable of providing long-term preservation to allow future scientific study.				
Mitigation Measure CUL-2: Subsequent to a preliminary City review of the project grading plans, if there is evidence that a project will include excavation or construction activities within previously undisturbed soils, a field survey and literature search for prehistoric archaeological resources shall be conducted. The following procedures shall be followed.	Prior to and during construction activities	Construction contractor, qualified archaeologist	Planning and Development	
If prehistoric resources are not found during either the field survey or literature search,				

Table A: Mitigation Monitoring and Reporting Program

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
excavation and/or construction activities can commence. In the event that buried prehistoric archaeological resources are discovered during excavation and/or construction activities, construction shall stop in the immediate vicinity of the find and a qualified archaeologist shall be consulted to determine whether the resource requires further study. The qualified archaeologist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with CEQA Guidelines Section 15064.5.				
If the resources are determined to be unique prehistoric archaeological resources as defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could include avoidance or capping, incorporation of the project site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these				

Table A: Mitigation Monitoring and Reporting Program

Table A. Integation Monitoring and Reporting Frogram					
MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)	
resources. Any prehistoric archaeological artifacts recovered as a result of mitigation shall be provided to a City-approved					
institution or person who is capable of providing long-term preservation to allow future scientific study.					
If prehistoric resources are found during the field survey or literature review, the resources					
shall be inventoried using appropriate State record forms and submit the forms to the Southern San Joaquin Valley Information					
Center. The resources shall be evaluated for significance. If the resources are found to be					
significant, measures shall be identified by the qualified archaeologist. Similar to above, appropriate mitigation measures for					
significant resources could include avoidance or capping, incorporation of the project site in					
green space, parks, or open space, or data recovery excavations of the finds.					
In addition, appropriate mitigation for excavation and construction activities in the					
vicinity of the resources found during the field survey or literature review shall include an archaeological monitor. The monitoring					
period shall be determined by the qualified archaeologist. If additional prehistoric					

Table A: Mitigation Monitoring and Reporting Program

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
archaeological resources are found during excavation and/or construction activities, the procedure identified above for the discovery of unknown resources shall be followed.				
Mitigation Measure CUL-3: 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	During construction activities	Construction contractor, qualified archaeologist	Planning and Development	

Table A: Mitigation Monitoring and Reporting Program

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
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.				
VI. ENERGY			,	
There are no significant impacts to Energy.				
VII. GEOLOGY AND SOILS				
Mitigation Measure GEO-1: Subsequent to a preliminary City review of the project grading plans, if there is evidence that a project will include excavation or construction activities within previously undisturbed soils, a field survey and literature search for unique paleontological/geological resources shall be conducted. The following procedures shall be followed.	Prior to and during construction activities	Construction contractor, qualified paleontologist	Planning and Development	
If unique paleontological/geological resources are not found during either the field survey or literature search, excavation and/or construction activities can commence. In the				

Table A: Mitigation Monitoring and Reporting Program

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MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
event that unique paleontological/geological				
resources are discovered during excavation				
and/or construction activities, construction				
shall stop in the immediate vicinity of the find				
and a qualified paleontologist shall be				
consulted to determine whether the resource				
requires further study. The qualified				
paleontologist shall make recommendations				
to the City on the measures that shall be				
implemented to protect the discovered				
resources, including but not limited to,				
excavation of the finds and evaluation of the				
finds. If the resources are determined to be				
significant, mitigation measures shall be				
identified by the monitor and recommended				
to the Lead Agency. Appropriate mitigation				
measures for significant resources could				
include avoidance or capping, incorporation				
of the project site in green space, parks, or				
open space, or data recovery excavations of				
the finds. No further grading shall occur in the				
area of the discovery until the Lead Agency				
approves the measures to protect these				
resources. Any paleontological/geological				
resources recovered as a result of mitigation				
shall be provided to a City-approved				
institution or person who is capable of				
providing long-term preservation to allow				
future scientific study.				

Table A: Mitigation Monitoring and Reporting Program

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
If unique paleontological/geological resources are found during the field survey or literature review, the resources shall be inventoried and evaluated for significance. If the resources are found to be significant, mitigation measures shall be identified by the qualified paleontologist. Similar to above, appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the project site in green space, parks, or open space, or data recovery excavations of the finds. In addition, appropriate mitigation for excavation and construction activities in the vicinity of the resources found during the field survey or literature review shall include a paleontological monitor. The monitoring period shall be determined by the qualified paleontologist. If additional paleontological/geological resources are found during excavation and/or construction activities, the procedure identified above for the discovery of unknown resources shall be followed.				

There are no significant impacts to Greenhouse Gas Emissions.

Table A: Mitigation Monitoring and Reporting Program

	The state of the s	Reporting Progra		
MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
IX. HAZARDS AND HAZARDOUS MATERIALS				
There are no significant impacts to Hazards and I	Hazardous Material	S.		
X. HYDROLOGY AND WATER QUALITY				
There are no significant impacts to Hydrology and	Water Quality.			
XI. LAND USE AND PLANNING				
There are no significant impacts to Land Use and	Planning.			
XII. MINERAL RESOURCES				
There are no significant impacts to Mineral Resou	ırces.			
XIII. NOISE				
 Mitigation Measure NOI-1: The project contractor shall implement the following measures during construction of the project: Equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards. Ensure that all general construction related activities are restricted to between the hours of 7:00 a.m. and 10:00 p.m. Monday through Saturday to avoid noisesensitive hours of the day. Construction shall be prohibited on Sundays. Designate a "disturbance coordinator" at the City who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of 	Prior to issuance of grading permits, during project construction	Construction contractor	Planning and Development	

Table A: Mitigation Monitoring and Reporting Program

MITIGATION MEASURE	Timing for Mitigation	Mitigation	Monitoring/ Reporting	Verification (Initials
	Measure	Responsibility	Agency	and Date)
the noise complaint (e.g., starting too				
early, bad muffler) and would determine				
and implement reasonable measures				
warranted to correct the problem.				
XIV. POPULATION AND HOUSING				
There are no significant impacts to Population and	d Housing.			
XV. PUBLIC SERVICES				
There are no significant impacts to Public Service	S.			
XVI. RECREATION				
There are no significant impacts to Recreation.				
XVII. TRANSPORTATION				
There are no significant impacts to Transportation				
XVII. TRIBAL CULTURAL RESOURCES				
Mitigation Measure CUL-1: If previously	Prior to and	Construction	Planning and	
unknown resources are encountered before	during	contractor,	Development	
or during grading activities, construction shall	construction	qualified		
stop in the immediate vicinity of the find and a	activities	archaeologist		
qualified historical resources specialist shall be consulted to determine whether the				
resource requires further study. The qualified				
historical resources specialist shall make				
recommendations to the City on the				
measures that shall be implemented to				
protect the discovered resources, including				
but not limited to excavation of the finds and				

Table A: Mitigation Monitoring and Reporting Program

	Timing for	Mitigation	Monitoring/	Verification
MITIGATION MEASURE	Mitigation Measure	Mitigation Responsibility	Reporting Agency	(Initials and Date)
evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines and the City's Historic Preservation Ordinance.				
If the resources are determined to be unique historical resources as defined under Section 15064.5 of the CEQA Guidelines, measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could include avoidance or capping, incorporation of the project site in green space, parks, or open space, or data recovery excavations of the finds.				
No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these. Any historical artifacts recovered as a result of mitigation shall be provided to a City-approved institution or person who is capable of providing long-term preservation to allow future scientific study.				
Mitigation Measure CUL-2: Subsequent to a preliminary City review of the project grading plans, if there is evidence that a project will include excavation or construction activities within previously undisturbed soils, a field	Prior to and during construction activities	Construction contractor, qualified archaeologist	Planning and Development	

Table A: Mitigation Monitoring and Reporting Program

	ir mornioring and	Reporting Frogra		
MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
survey and literature search for prehistoric archaeological resources shall be conducted. The following procedures shall be followed.				
If prehistoric resources are not found during either the field survey or literature search, excavation and/or construction activities can commence. In the event that buried prehistoric archaeological resources are discovered during excavation and/or construction activities, construction shall stop in the immediate vicinity of the find and a qualified archaeologist shall be consulted to determine whether the resource requires further study. The qualified archaeologist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with CEQA Guidelines Section 15064.5.				
If the resources are determined to be unique prehistoric archaeological resources as defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could include avoidance				

Table A: Mitigation Monitoring and Reporting Program

Table A. Mitigation Monitoring and Reporting Frogram							
MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)			
or capping, incorporation of the project site in							
green space, parks, or open space, or data							
recovery excavations of the finds. No further							
grading shall occur in the area of the							
discovery until the Lead Agency approves the							
measures to protect these resources. Any							
prehistoric archaeological artifacts recovered							
as a result of mitigation shall be provided to a							
City-approved institution or person who is							
capable of providing long-term preservation							
to allow future scientific study.							
If prehistoric resources are found during the							
field survey or literature review, the resources							
shall be inventoried using appropriate State							
record forms and submit the forms to the							
Southern San Joaquin Valley Information							
Center. The resources shall be evaluated for							
significance. If the resources are found to be							
significant, measures shall be identified by the							
qualified archaeologist. Similar to above,							
appropriate mitigation measures for							
significant resources could include avoidance							
or capping, incorporation of the project site in							
green space, parks, or open space, or data							
recovery excavations of the finds.							
In addition, appropriate mitigation for							
excavation and construction activities in the							

Table A: Mitigation Monitoring and Reporting Program

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
vicinity of the resources found during the field survey or literature review shall include an archaeological monitor. The monitoring period shall be determined by the qualified archaeologist. If additional prehistoric archaeological resources are found during excavation and/or construction activities, the procedure identified above for the discovery of unknown resources shall be followed.				
Mitigation Measure CUL-3: 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	Prior to and during construction activities	Construction contractor, qualified archaeologist	Planning and Development	

Table A: Mitigation Monitoring and Reporting Program

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
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.				
XIX. UTILITIES AND SERVICE SYSTEMS				
There are no significant impacts to Utilities and Se	ervice Systems.			
XX. WILDFIRE				
There are no significant impacts to Wildfire.				
XXI. MANDATORY FINDINGS OF SIGNIFICANO	E			
Mitigation Measure BIO-1: Nesting Bird Surveys and Active Nest Avoidance. Any vegetation removal should take place outside of the active nesting bird season (i.e., January 1–September 30), when feasible, to avoid impacts to nesting birds protected under the California Fish and Game Code and Migratory	Prior to issuance of grading permits	qualified biologist	Planning and Development	

Table A: Mitigation Monitoring and Reporting Program

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
Bird Treaty Act. Should vegetation removal take place during this period, a qualified biologist shall conduct a nesting bird survey no more than 5 days prior to clearing activities. If nesting birds are discovered during preconstruction surveys, the biologist shall identify an appropriate buffer where no clearing, grading, or construction activities with potential to have direct or indirect impacts on the nesting bird(s) are allowed to take place until after the nest is no longer active (e.g., the young birds have fledged), or as otherwise determined by the qualified biologist.	Measure		Agency	and bate)
Mitigation Measure BIO-2: Conduct Preconstruction Surveys for Burrowing Owl. A preconstruction survey for burrowing owl is required to take place no more than 30 calendar days prior to initiation of any vegetation or ground-disturbing project activities. A qualified biologist will provide the results of the survey to the City of Fresno. If an active burrow of the species is detected on the project site, the Project Applicant must coordinate with the California Department of Fish and Wildlife (CDFW) prior to any project activities and specific avoidance, passive relocation, and compensatory mitigation	Prior to issuance of grading permits	qualified biologist	Planning and Development	

Table A: Mitigation Monitoring and Reporting Program

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MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
activities shall be performed as required by CDFW.				
Mitigation Measure CUL-1: If previously unknown resources are encountered before or during grading activities, construction shall stop in the immediate vicinity of the find and a qualified historical resources specialist shall be consulted to determine whether the resource requires further study. The qualified historical resources specialist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines and the City's Historic Preservation Ordinance.	Prior to and during construction activities	Construction contractor, qualified archaeologist	Planning and Development	
If the resources are determined to be unique historical resources as defined under Section 15064.5 of the CEQA Guidelines, measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could include avoidance or capping, incorporation of the project site in green space, parks, or open space, or data recovery excavations of the finds.				

Table A: Mitigation Monitoring and Reporting Program

Tubic A: Intigatio	Table A. Miligation Monitoring and Reporting Program						
MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)			
No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these. Any historical artifacts recovered as a result of mitigation shall be provided to a City-approved institution or person who is capable of providing long-term preservation to allow future scientific study.							
Mitigation Measure CUL-2: Subsequent to a preliminary City review of the project grading plans, if there is evidence that a project will include excavation or construction activities within previously undisturbed soils, a field survey and literature search for prehistoric archaeological resources shall be conducted. The following procedures shall be followed. If prehistoric resources are not found during	Prior to and during construction activities	Construction contractor, qualified archaeologist	Planning and Development				
either the field survey or literature search, excavation and/or construction activities can commence. In the event that buried prehistoric archaeological resources are discovered during excavation and/or construction activities, construction shall stop in the immediate vicinity of the find and a qualified archaeologist shall be consulted to determine whether the resource requires							

Table A: Mitigation Monitoring and Reporting Program

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MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)				
further study. The qualified archaeologist								
shall make recommendations to the City on the measures that shall be implemented to								
protect the discovered resources, including								
but not limited to excavation of the finds and								
evaluation of the finds in accordance with								
CEQA Guidelines Section 15064.5.								
If the resources are determined to be unique								
prehistoric archaeological resources as								
defined under Section 15064.5 of the CEQA								
Guidelines, mitigation measures shall be identified by the monitor and recommended to								
the Lead Agency. Appropriate measures for								
significant resources could include avoidance								
or capping, incorporation of the project site in								
green space, parks, or open space, or data								
recovery excavations of the finds. No further								
grading shall occur in the area of the discovery until the Lead Agency approves the								
measures to protect these resources. Any								
prehistoric archaeological artifacts recovered								
as a result of mitigation shall be provided to a								
City-approved institution or person who is								
capable of providing long-term preservation to allow future scientific study.								
to allow future scientific study.								
If prehistoric resources are found during the								
field survey or literature review, the resources								

Table A: Mitigation Monitoring and Reporting Program

	ir Monitoring and			
MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
shall be inventoried using appropriate State record forms and submit the forms to the Southern San Joaquin Valley Information Center. The resources shall be evaluated for significance. If the resources are found to be significant, measures shall be identified by the qualified archaeologist. Similar to above, appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the project site in green space, parks, or open space, or data recovery excavations of the finds. In addition, appropriate mitigation for excavation and construction activities in the vicinity of the resources found during the field survey or literature review shall include an archaeological monitor. The monitoring period shall be determined by the qualified archaeologist. If additional prehistoric archaeological resources are found during excavation and/or construction activities, the procedure identified above for the discovery of unknown resources shall be followed.				
Mitigation Measure CUL-3: In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease	Prior to and during construction activities	Construction contractor, qualified archaeologist	Planning and Development	

Table A: Mitigation Monitoring and Reporting Program

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Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
	Timing for Mitigation	Timing for Mitigation Responsibility Measure	Timing for Mitigation Responsibility Monitoring/Reporting Agency

Table A: Mitigation Monitoring and Reporting Program

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
options regarding the descendants' preferences for treatment.				

Appendix A – CalEEmod Output Sheets

Plan Amendment-Rezone Application No. P20-00213, Development Permit Application No. P22-03749, and Planned Development Permit Application No. P23-03173

Appendix A

CalEEMod Output Sheets

North Fresno Residential Project - Proposed Project Custom Report

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 - 3.7. Paving (2024) Unmitigated

- 3.9. Architectural Coating (2024) Unmitigated
- 3.11. Architectural Coating (2025) Unmitigated
- 4. Operations Emissions Details
 - 4.1. Mobile Emissions by Land Use
 - 4.1.1. Unmitigated
 - 4.2. Energy
 - 4.2.1. Electricity Emissions By Land Use Unmitigated
 - 4.2.3. Natural Gas Emissions By Land Use Unmitigated
 - 4.3. Area Emissions by Source
 - 4.3.2. Unmitigated
 - 4.4. Water Emissions by Land Use
 - 4.4.2. Unmitigated
 - 4.5. Waste Emissions by Land Use
 - 4.5.2. Unmitigated
 - 4.6. Refrigerant Emissions by Land Use
 - 4.6.1. Unmitigated
 - 4.7. Offroad Emissions By Equipment Type

- 4.7.1. Unmitigated
- 4.8. Stationary Emissions By Equipment Type
 - 4.8.1. Unmitigated
- 4.9. User Defined Emissions By Equipment Type
 - 4.9.1. Unmitigated
- 4.10. Soil Carbon Accumulation By Vegetation Type
 - 4.10.1. Soil Carbon Accumulation By Vegetation Type Unmitigated
 - 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type Unmitigated
 - 4.10.3. Avoided and Sequestered Emissions by Species Unmitigated
- 5. Activity Data
 - 5.1. Construction Schedule
 - 5.2. Off-Road Equipment
 - 5.2.1. Unmitigated
 - 5.3. Construction Vehicles
 - 5.3.1. Unmitigated
 - 5.4. Vehicles
 - 5.4.1. Construction Vehicle Control Strategies

- 5.5. Architectural Coatings
- 5.6. Dust Mitigation
 - 5.6.1. Construction Earthmoving Activities
 - 5.6.2. Construction Earthmoving Control Strategies
- 5.7. Construction Paving
- 5.8. Construction Electricity Consumption and Emissions Factors
- 5.9. Operational Mobile Sources
 - 5.9.1. Unmitigated
- 5.10. Operational Area Sources
 - 5.10.1. Hearths
 - 5.10.1.1. Unmitigated
 - 5.10.2. Architectural Coatings
 - 5.10.3. Landscape Equipment
- 5.11. Operational Energy Consumption
 - 5.11.1. Unmitigated
- 5.12. Operational Water and Wastewater Consumption
 - 5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	North Fresno Residential Project - Proposed Project
Construction Start Date	1/1/2024
Operational Year	2025
Lead Agency	_
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	21.2
Location	36.882635276107706, -119.73917921972142
County	Fresno
City	Fresno
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2434
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.14

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq	Special Landscape	Population	Description
					ft)	Area (sq ft)		

Apartments Low Rise	48.0	Dwelling Unit	3.00	50,880	16,806	_	154	_
Parking Lot	81.0	Space	0.60	0.00	0.00	_	_	_

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.78	19.1	15.8	0.02	0.69	0.21	0.89	0.64	0.05	0.69	_	2,680	2,680	0.11	0.04	1.03	2,696
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	18.2	39.9	28.9	0.05	1.12	7.76	8.88	1.02	3.96	4.98	_	5,392	5,392	0.22	0.05	0.03	5,412
Average Daily (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.82	13.6	11.0	0.02	0.49	0.30	0.79	0.46	0.12	0.57	_	1,891	1,891	0.08	0.03	0.30	1,901
Annual (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.15	2.49	2.01	< 0.005	0.09	0.06	0.14	0.08	0.02	0.10	_	313	313	0.01	< 0.005	0.05	315

2.2. Construction Emissions by Year, Unmitigated

Year	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2024	0.78	19.1	15.8	0.02	0.69	0.21	0.89	0.64	0.05	0.69	_	2,680	2,680	0.11	0.04	1.03	2,696
Daily - Winter (Max)	_		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2024	18.2	39.9	28.9	0.05	1.12	7.76	8.88	1.02	3.96	4.98	_	5,392	5,392	0.22	0.05	0.03	5,412
2025	18.2	1.11	1.17	< 0.005	0.07	0.04	0.10	0.06	0.01	0.07	_	171	171	0.01	< 0.005	< 0.005	172
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2024	0.58	13.6	11.0	0.02	0.49	0.30	0.79	0.46	0.12	0.57	_	1,891	1,891	0.08	0.03	0.30	1,901
2025	0.82	0.05	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	7.74	7.74	< 0.005	< 0.005	< 0.005	7.79
Annual	_	_	-	_	_	_	_	_	_	_	_	_	_	_	-	_	_
2024	0.11	2.49	2.01	< 0.005	0.09	0.06	0.14	0.08	0.02	0.10	_	313	313	0.01	< 0.005	0.05	315
2025	0.15	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	1.28	1.28	< 0.005	< 0.005	< 0.005	1.29

2.4. Operations Emissions Compared Against Thresholds

Un/Mit.	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	3.90	1.83	21.2	0.06	1.62	1.22	2.84	1.56	0.31	1.87	284	2,668	2,952	3.67	0.10	6.13	3,079
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	3.50	1.93	17.9	0.05	1.62	1.22	2.84	1.56	0.31	1.87	284	2,531	2,815	3.68	0.10	0.51	2,939

Average Daily (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	2.70	1.44	10.5	0.03	0.39	1.22	1.62	0.38	0.31	0.69	81.5	2,180	2,261	2.72	0.10	2.86	2,362
Annual (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.49	0.26	1.92	< 0.005	0.07	0.22	0.29	0.07	0.06	0.13	13.5	361	374	0.45	0.02	0.47	391

2.5. Operations Emissions by Sector, Unmitigated

Sector	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	1.24	0.89	7.37	0.02	0.01	1.22	1.23	0.01	0.31	0.32	_	1,581	1,581	0.08	0.08	5.77	1,614
Area	2.64	0.60	13.7	0.04	1.58	_	1.58	1.52	_	1.52	261	513	773	1.23	< 0.005	_	805
Energy	0.02	0.34	0.14	< 0.005	0.03	_	0.03	0.03	_	0.03	_	570	570	0.06	< 0.005	_	573
Water	_	_	_	_	_	_	_	_	_	_	3.71	4.64	8.35	0.38	0.01	_	20.6
Waste	_	_	_	_	_	_	_	_	_	_	19.2	0.00	19.2	1.92	0.00	_	67.1
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.36	0.36
Total	3.90	1.83	21.2	0.06	1.62	1.22	2.84	1.56	0.31	1.87	284	2,668	2,952	3.67	0.10	6.13	3,079
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	1.09	1.02	6.72	0.01	0.01	1.22	1.23	0.01	0.31	0.32	_	1,451	1,451	0.09	0.09	0.15	1,481
Area	2.40	0.57	11.0	0.04	1.58	_	1.58	1.52	_	1.52	261	505	766	1.23	< 0.005	_	797
Energy	0.02	0.34	0.14	< 0.005	0.03	_	0.03	0.03	_	0.03	_	570	570	0.06	< 0.005	_	573
Water	_	_	_	_	_	_	_	_	_	_	3.71	4.64	8.35	0.38	0.01	_	20.6
Waste	_	_	_	_	_	_	_	_	_	_	19.2	0.00	19.2	1.92	0.00	_	67.1
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	<u> </u>	_	0.36	0.36

Total	3.50	1.93	17.9	0.05	1.62	1.22	2.84	1.56	0.31	1.87	284	2,531	2,815	3.68	0.10	0.51	2,939
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	1.11	0.96	6.56	0.01	0.01	1.22	1.23	0.01	0.31	0.32	_	1,488	1,488	0.09	0.09	2.49	1,518
Area	1.57	0.14	3.81	0.01	0.36	_	0.36	0.34	_	0.34	58.6	117	176	0.28	< 0.005	_	183
Energy	0.02	0.34	0.14	< 0.005	0.03	_	0.03	0.03	_	0.03	_	570	570	0.06	< 0.005	_	573
Water	_	_	_	_	_	_	_	_	_	_	3.71	4.64	8.35	0.38	0.01	_	20.6
Waste	_	_	_	_	_	_	_	_	_	_	19.2	0.00	19.2	1.92	0.00	_	67.1
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.36	0.36
Total	2.70	1.44	10.5	0.03	0.39	1.22	1.62	0.38	0.31	0.69	81.5	2,180	2,261	2.72	0.10	2.86	2,362
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.20	0.18	1.20	< 0.005	< 0.005	0.22	0.23	< 0.005	0.06	0.06	_	246	246	0.01	0.01	0.41	251
Area	0.29	0.03	0.70	< 0.005	0.06	_	0.06	0.06	_	0.06	9.70	19.4	29.1	0.05	< 0.005	_	30.2
Energy	< 0.005	0.06	0.03	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	94.4	94.4	0.01	< 0.005	_	94.8
Water	_	_	_	_	_	_	_	_	_	_	0.61	0.77	1.38	0.06	< 0.005	_	3.41
Waste	_	_	_	_	_	_	_	_	_	_	3.18	0.00	3.18	0.32	0.00	_	11.1
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.06	0.06
Total	0.49	0.26	1.92	< 0.005	0.07	0.22	0.29	0.07	0.06	0.13	13.5	361	374	0.45	0.02	0.47	391

3. Construction Emissions Details

3.1. Site Preparation (2024) - Unmitigated

Ontona	Onatant	5 (ID/Gay	ioi daily,	torn yr ro	i dililidal)	ana On	05 (1b) ac	ay ioi dai	iy, ivi i / y i	ioi aiiiia	uij						
Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	<u> </u>	<u> </u>	_	_	<u> </u>	<u> </u>	_	<u> </u>	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment		39.9	28.3	0.05	1.12	_	1.12	1.02	_	1.02	_	5,296	5,296	0.21	0.04	_	5,314
Dust From Material Movement		_	_	_	_	7.67	7.67	_	3.94	3.94	_	_	_	_	_	_	_
Onsite truck	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
Average Daily	_	_	_	_	_	_	_	_	-	_	_	_	_	_	-	-	_
Off-Road Equipment		0.55	0.39	< 0.005	0.02	_	0.02	0.01	_	0.01	_	72.5	72.5	< 0.005	< 0.005	_	72.8
Dust From Material Movement		-	_	_	_	0.11	0.11	_	0.05	0.05	_	_	_	-	_	_	_
Onsite truck	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
Annual	_	_	_	_	_	_	_	_	Ī	_	_	_	_	_	_	_	_
Off-Road Equipment	< 0.005	0.10	0.07	< 0.005	< 0.005	-	< 0.005	< 0.005	-	< 0.005	_	12.0	12.0	< 0.005	< 0.005	-	12.1
Dust From Material Movement	_		_	_	_	0.02	0.02	_	0.01	0.01	_	_	_	_	_	_	_
Onsite truck	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
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	-	_	_	_	_	_	_	_	_	-	_	-	_	_	_	_

Daily, Winter (Max)	_	_	_	_	_	-	_	_	_	_	-	_	_	_	_	_	_
Worker	0.07	0.06	0.57	0.00	0.00	0.10	0.10	0.00	0.02	0.02	_	96.2	96.2	< 0.005	< 0.005	0.01	97.6
Vendor	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
Hauling	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
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_			_	_
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.36	1.36	< 0.005	< 0.005	< 0.005	1.39
Vendor	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
Hauling	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
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.23	0.23	< 0.005	< 0.005	< 0.005	0.23
Vendor	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
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2024) - Unmitigated

		()	ioi dairy,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	/				<i>y</i> , - <i>y</i>		,						
Location	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		23.2	17.8	0.03	0.75	_	0.75	0.69	_	0.69	_	2,958	2,958	0.12	0.02	_	2,969

Dust	_	_	_	_	_	2.76	2.76	_	1.34	1.34	_	_	_	_	_	_	
From Material Movement																	
Onsite truck	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
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.02	0.51	0.39	< 0.005	0.02	_	0.02	0.02	_	0.02	_	64.8	64.8	< 0.005	< 0.005	_	65.1
Dust From Material Movement	_	_	_	_	_	0.06	0.06	_	0.03	0.03	_	_	_	_	_	_	_
Onsite truck	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
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	< 0.005	0.09	0.07	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	10.7	10.7	< 0.005	< 0.005	_	10.8
Dust From Material Movement	_	_	_	_	_	0.01	0.01	_	0.01	0.01	_	_	_	_	_	_	_
Onsite truck	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
Offsite	_	_	<u> </u>	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_		_	_	_	_	_	_	_	_	_		_	_	_
Worker	0.06	0.05	0.49	0.00	0.00	0.08	0.08	0.00	0.02	0.02	_	82.4	82.4	< 0.005	< 0.005	0.01	83.7
Vendor	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
Hauling	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

Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.87	1.87	< 0.005	< 0.005	< 0.005	1.90
Vendor	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
Hauling	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
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.31	0.31	< 0.005	< 0.005	< 0.005	0.32
Vendor	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
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2024) - Unmitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	_	0.69	0.64	_	0.64	_	2,398	2,398	0.10	0.02	_	2,406
Onsite truck	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
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment		18.9	14.3	0.02	0.69	_	0.69	0.64	_	0.64	_	2,398	2,398	0.10	0.02	_	2,406
Onsite truck	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
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Off-Road Equipment		11.9	9.01	0.01	0.43	_	0.43	0.40	_	0.40	_	1,511	1,511	0.06	0.01	_	1,516
Onsite truck	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
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.07	2.17	1.64	< 0.005	0.08	-	0.08	0.07	_	0.07	_	250	250	0.01	< 0.005	_	251
Onsite truck	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
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Worker	0.16	0.09	1.40	0.00	0.00	0.19	0.19	0.00	0.04	0.04	_	214	214	0.01	0.01	0.86	218
/endor	< 0.005	0.11	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	_	68.7	68.7	< 0.005	0.01	0.18	71.9
Hauling	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
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.14	0.11	1.14	0.00	0.00	0.19	0.19	0.00	0.04	0.04	_	190	190	0.01	0.01	0.02	193
Vendor	< 0.005	0.12	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	_	68.9	68.9	< 0.005	0.01	< 0.005	71.9
Hauling	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
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.09	0.06	0.73	0.00	0.00	0.12	0.12	0.00	0.03	0.03	_	124	124	0.01	0.01	0.23	126
Vendor	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	43.3	43.3	< 0.005	0.01	0.05	45.3
Hauling	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
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.02	0.01	0.13	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	_	20.5	20.5	< 0.005	< 0.005	0.04	20.9
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	7.18	7.18	< 0.005	< 0.005	0.01	7.50
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Paving (2024) - Unmitigated

Location	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment		11.2	8.87	0.01	0.48	_	0.48	0.45	_	0.45	_	1,351	1,351	0.05	0.01	_	1,355
Paving	0.09	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	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
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.02	0.55	0.44	< 0.005	0.02	_	0.02	0.02	_	0.02	_	66.6	66.6	< 0.005	< 0.005	_	66.8
Paving	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	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
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	< 0.005	0.10	0.08	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	11.0	11.0	< 0.005	< 0.005	_	11.1
Paving	< 0.005	_	_	_	_	_	_	_	_	_	_	_		_	_	_	_
Onsite truck	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
Offsite	_	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.08	0.06	0.66	0.00	0.00	0.11	0.11	0.00	0.03	0.03	_	110	110	0.01	0.01	0.01	112
Vendor	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
Hauling	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
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	5.61	5.61	< 0.005	< 0.005	0.01	5.71
Vendor	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
Hauling	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
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.93	0.93	< 0.005	< 0.005	< 0.005	0.95
Vendor	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
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Architectural Coating (2024) - Unmitigated

Location	ROG		CO	SO2		PM10D		PM2.5E		PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment		1.09	0.96	< 0.005	0.07	_	0.07	0.06	_	0.06	_	134	134	0.01	< 0.005	_	134
Architectu ral Coatings	18.1	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Onsite truck	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
Average Daily	_	_	_	_	_	_	_	_	-	_	_	_	_	_	_	_	_
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	-	< 0.005	< 0.005	_	< 0.005	_	0.26	0.26	< 0.005	< 0.005	_	0.26
Architectu ral Coatings	0.04	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Onsite truck	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
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.04	0.04	< 0.005	< 0.005	_	0.04
Architectu ral Coatings	0.01	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	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
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.03	0.02	0.23	0.00	0.00	0.04	0.04	0.00	0.01	0.01	_	38.0	38.0	< 0.005	< 0.005	< 0.005	38.6
Vendor	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
Hauling	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
Average Daily	_	-	-	-	-	-	_	_	-	_	_	_	_	_	-	_	_
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.08	0.08	< 0.005	< 0.005	< 0.005	0.08
Vendor	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

Hauling	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
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	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
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2025) - Unmitigated

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Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment		1.09	0.96	< 0.005	0.07	_	0.07	0.06	_	0.06	_	134	134	0.01	< 0.005	_	134
Architectu ral Coatings	18.1	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	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
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	< 0.005	0.05	0.04	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	6.01	6.01	< 0.005	< 0.005	_	6.03
Architectu ral Coatings	0.81	_	_	_	_	_	_	_	_	_	_	_	_		_	_	_
Onsite truck	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

Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	-	< 0.005	< 0.005	_	< 0.005	_	0.99	0.99	< 0.005	< 0.005	_	1.00
Architectu ral Coatings	0.15	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	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
Offsite	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.03	0.02	0.21	0.00	0.00	0.04	0.04	0.00	0.01	0.01	_	37.2	37.2	< 0.005	< 0.005	< 0.005	37.8
Vendor	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
Hauling	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
Average Daily		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.73	1.73	< 0.005	< 0.005	< 0.005	1.76
Vendor	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
Hauling	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
Annual	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.29	0.29	< 0.005	< 0.005	< 0.005	0.29
Vendor	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
Hauling	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

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

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Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartmen ts Low Rise	1.24	0.89	7.37	0.02	0.01	1.22	1.23	0.01	0.31	0.32	_	1,581	1,581	0.08	0.08	5.77	1,614
Parking Lot	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
Total	1.24	0.89	7.37	0.02	0.01	1.22	1.23	0.01	0.31	0.32	_	1,581	1,581	0.08	0.08	5.77	1,614
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartmen ts Low Rise	1.09	1.02	6.72	0.01	0.01	1.22	1.23	0.01	0.31	0.32	_	1,451	1,451	0.09	0.09	0.15	1,481
Parking Lot	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
Total	1.09	1.02	6.72	0.01	0.01	1.22	1.23	0.01	0.31	0.32	_	1,451	1,451	0.09	0.09	0.15	1,481
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartmen ts Low Rise	0.20	0.18	1.20	< 0.005	< 0.005	0.22	0.23	< 0.005	0.06	0.06	_	246	246	0.01	0.01	0.41	251
Parking Lot	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
Total	0.20	0.18	1.20	< 0.005	< 0.005	0.22	0.23	< 0.005	0.06	0.06	_	246	246	0.01	0.01	0.41	251

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartmen ts Low Rise	_	_	_	_	_	_	_	_	_	_	_	132	132	0.02	< 0.005	_	133
Parking Lot	_	_	_	_	_	_	_	_	_	_	_	12.8	12.8	< 0.005	< 0.005	_	12.9
Total	_	_	_	_	_	_	_	_	_	_	_	145	145	0.02	< 0.005	_	146
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartmen ts Low Rise	_	_	_	_	_	_	_	_	_	_	_	132	132	0.02	< 0.005	_	133
Parking Lot	_	_	_	_	_	_	_	_	_	_	_	12.8	12.8	< 0.005	< 0.005	_	12.9
Total	_	_	_	_	_	_	_	_	_	_	_	145	145	0.02	< 0.005	_	146
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartmen ts Low Rise	_	_	_		_	_	_	_	_	_		21.8	21.8	< 0.005	< 0.005		22.0
Parking Lot	_	_	_	_	_	_	_	_	_	_	_	2.12	2.12	< 0.005	< 0.005	_	2.14
Total	_	_	_	_	_	_	_	_	_	_	_	23.9	23.9	< 0.005	< 0.005	_	24.2

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Land Use	POG	NOv	CO	502	DM10E	PM10D	DM10T	DM2.5E	DM2 5D	PM2.5T	BCO2	NBCO2	CO2T	CHA	N2O	D	CO2e
Lanu Use	ROG	INOX		302	FINITUE	FINITOD	FINITOT	FIVIZ.SE	FIVIZ.SD	FIVIZ.51	BCOZ	INDCOZ	0021	O1 14	INZU	I.	COZE

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartmen ts Low Rise	0.02	0.34	0.14	< 0.005	0.03	_	0.03	0.03	_	0.03	-	425	425	0.04	< 0.005	-	427
Parking Lot	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
Total	0.02	0.34	0.14	< 0.005	0.03	_	0.03	0.03	_	0.03	_	425	425	0.04	< 0.005	_	427
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	-	_
Apartmen ts Low Rise	0.02	0.34	0.14	< 0.005	0.03	_	0.03	0.03	_	0.03	_	425	425	0.04	< 0.005	-	427
Parking Lot	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
Total	0.02	0.34	0.14	< 0.005	0.03	_	0.03	0.03	_	0.03	_	425	425	0.04	< 0.005	_	427
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartmen ts Low Rise	< 0.005	0.06	0.03	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	-	70.4	70.4	0.01	< 0.005	-	70.6
Parking Lot	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
Total	< 0.005	0.06	0.03	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	70.4	70.4	0.01	< 0.005	_	70.6

4.3. Area Emissions by Source

4.3.2. Unmitigated

^	ROG	I NIO.	100		DMAGE	DIMAGE	DIMAGE	DMO FE	DMO ED	I DMO ET	BCO2	LIDOO	LOCOT		NICO	D	CO2e
SOURCE	I R()(-	I NIC IY	10.0	1802							IBCOZ	INBUID	11.021	I (.H4	INDO	I R	I
Jource	1100	INOX	100	002	I IVI I O L	I IVI I O D		I IVIZ.OL	1 1012.00	11 1412.01	10002	INDOOL	10021	OI IT	11420	118	0020

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	1.22	0.57	11.0	0.04	1.58	_	1.58	1.52	_	1.52	261	505	766	1.23	< 0.005	_	797
Consume r Products	1.09	_	_	_	_	_	_	_	_	_	-	_	_	_	_	-	_
Architectu ral Coatings	0.09	_	_	_	_	_	_	_	_	_	-	-	_	_	_	-	_
Landscap e Equipme nt	0.24	0.03	2.72	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	7.28	7.28	< 0.005	< 0.005	_	7.31
Total	2.64	0.60	13.7	0.04	1.58	_	1.58	1.52	_	1.52	261	513	773	1.23	< 0.005	_	805
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	1.22	0.57	11.0	0.04	1.58	_	1.58	1.52	_	1.52	261	505	766	1.23	< 0.005	_	797
Consume r Products	1.09	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_
Architectu ral Coatings	0.09	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_
Total	2.40	0.57	11.0	0.04	1.58	_	1.58	1.52	_	1.52	261	505	766	1.23	< 0.005	_	797
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.05	0.02	0.45	< 0.005	0.06	_	0.06	0.06	_	0.06	9.70	18.8	28.5	0.05	< 0.005	_	29.7
Consume r Products	0.20	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_
Architectu ral Coatings	0.02	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	-

Landscap e	0.02	< 0.005	0.24	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.59	0.59	< 0.005	< 0.005	_	0.60
Total	0.29	0.03	0.70	< 0.005	0.06	_	0.06	0.06	_	0.06	9.70	19.4	29.1	0.05	< 0.005	_	30.2

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartmen ts Low Rise	_	_	_	_	_	_	_	_	_	_	3.71	4.64	8.35	0.38	0.01	_	20.6
Parking Lot	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	3.71	4.64	8.35	0.38	0.01	_	20.6
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartmen ts Low Rise	_	_	_	_	_	_	_	_	_	_	3.71	4.64	8.35	0.38	0.01	_	20.6
Parking Lot	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	3.71	4.64	8.35	0.38	0.01	_	20.6
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartmen ts Low Rise	_	_	_	_	_	_	_	_	_	_	0.61	0.77	1.38	0.06	< 0.005	_	3.41
Parking Lot	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00

Total	_	 _	_	_	_	_	_	_	_	0.61	0.77	1.38	0.06	< 0.005	_	3.41
																(-

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

Land Use		NOx	со	SO2	PM10E	PM10D	PM10T		PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartmen ts Low Rise	_	_	_	_	_	_	_	_	_	_	19.2	0.00	19.2	1.92	0.00	_	67.1
Parking Lot	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	19.2	0.00	19.2	1.92	0.00	_	67.1
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartmen ts Low Rise	_	_	_	_	_	_	_	_	_	_	19.2	0.00	19.2	1.92	0.00	_	67.1
Parking Lot	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	19.2	0.00	19.2	1.92	0.00	_	67.1
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartmen ts Low Rise	_	_	_	_	_	_	_	_	_	_	3.18	0.00	3.18	0.32	0.00	_	11.1
Parking Lot	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	3.18	0.00	3.18	0.32	0.00	_	11.1

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

O 11101101	C 11 C. C.	· (, c.c.)	,	torn yr ro		aa •	C () a.c	,	· y , · · · · · / y ·		α.,						
Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartmen ts Low Rise	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.36	0.36
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.36	0.36
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartmen ts Low Rise	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.36	0.36
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.36	0.36
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartmen ts Low Rise	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.06	0.06
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.06	0.06

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Equipme	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
nt																	
Туре																	

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipme nt Type	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipme nt Type	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)			_	_	_	_	_	_	_	_	_		_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetatio					PM10E			PM2.5E				NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Total																	
lotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	СО						PM2.5D			NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	ROG	NOx	CO	1			1					NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	<u> </u>	_	_	<u> </u>	<u> </u>	_	_	_	_	_	_	_
Sequeste red	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Removed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	-	_	_	<u> </u>	_	_	<u> </u>	_	_	_	_	_	_	_	_

Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequeste red	_	_	_	_	_	_	_	_	_		_	_		_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Removed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequeste red	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Removed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/1/2024	1/5/2024	5.00	5.00	_
Grading	Grading	1/8/2024	1/17/2024	5.00	8.00	_
Building Construction	Building Construction	1/18/2024	12/4/2024	5.00	230	_

Paving	Paving	12/5/2024	12/30/2024	5.00	18.0	_
Architectural Coating	Architectural Coating	12/31/2024	1/23/2025	5.00	18.0	_

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 2	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backh oes	Diesel	Tier 2	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 2	1.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 2	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 2	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backh oes	Diesel	Tier 2	3.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 2	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 2	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 2	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backh oes	Diesel	Tier 2	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 2	1.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Tier 2	2.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Tier 2	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 2	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Tier 2	2.00	6.00	36.0	0.38
Paving	Tractors/Loaders/Backh oes	Diesel	Tier 2	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Tier 2	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	_	_	_	_
Site Preparation	Worker	17.5	7.70	LDA,LDT1,LDT2
Site Preparation	Vendor	_	4.00	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	_	_	HHDT
Grading	_	_	_	_
Grading	Worker	15.0	7.70	LDA,LDT1,LDT2
Grading	Vendor	_	4.00	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	_	_	HHDT
Building Construction	_	_	_	_
Building Construction	Worker	34.6	7.70	LDA,LDT1,LDT2
Building Construction	Vendor	5.13	4.00	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	_	_	HHDT
Paving	_	_	_	_
Paving	Worker	20.0	7.70	LDA,LDT1,LDT2
Paving	Vendor	_	4.00	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	_	_	HHDT
Architectural Coating	_	_	_	_
Architectural Coating	Worker	6.91	7.70	LDA,LDT1,LDT2
Architectural Coating	Vendor	_	4.00	HHDT,MHDT

Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	_	_	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	103,032	34,344	0.00	0.00	1,568

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	_	_	7.50	0.00	_
Grading	_	_	8.00	0.00	_
Paving	0.00	0.00	0.00	0.00	0.60

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Low Rise	_	0%
Parking Lot	0.60	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	204	0.03	< 0.005
2025	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Low Rise	324	324	324	118,260	1,727	1,727	1,727	630,479
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	_
Wood Fireplaces	0

Gas Fireplaces	24
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	24
Conventional Wood Stoves	0
Catalytic Wood Stoves	2
Non-Catalytic Wood Stoves	2
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
103032	34,344	0.00	0.00	1,568

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

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Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Low Rise	235,915	204	0.0330	0.0040	1,327,175
Parking Lot	22,895	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Low Rise	1,934,208	281,966
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Low Rise	35.6	_
Parking Lot	0.00	_

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type Fuel Type Number Boiler Rating (MMBtu/hr) Daily Heat Input (MMBtu/day) Annual Heat Input (MMBtu/s	Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Type	Fuel Type
_	_

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

N/ / C	N	1. 202. 1. 6	E. 1.A	
Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres	
regetation Earla 555 Type	regetation con 1900	Titlai 7 toroo	T man / toroo	

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

8. User Changes to Default Data

Screen	Justification
Land Use	The proposed project would develop 48 multi-family residences and would provide 81 parking spaces.
Construction: Construction Phases	Default construction schedule, except removal of the demolition phase as the project site is currently vacant and undeveloped.
Construction: Off-Road Equipment	Assuming the use of Tier 2 construction equipment.
Operations: Vehicle Data	The proposed project is expected to generate approximately 324 average daily vehicle trips.

Appendix B – Biological Resources

Plan Amendment-Rezone Application No. P20-00213, Development Permit Application No. P22-03749, and Planned Development Permit Application No. P23-03173

Appendix B

Biological Resources Assessment



CARLSBAD
FRESNO
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: September 2, 2020

To: Bahadar Johal, Property Owner and Project Applicant

FROM: Amy Fischer, Principal

Kelly McDonald, Assistant Biologist

Subject: Biological Resources Assessment for the proposed North Fresno Residential Project

The purpose of this Biological Resources Technical Memorandum is to describe and document potential impacts to biological resources—including special-status species—associated with a proposed multi-family residential development project (project) on vacant land (Assessor's Identification Number 578-020-13, 570-020-16, and 587-020-17) in Fresno, Fresno County, California. This technical information is provided for project review under the City of Fresno's environmental review for rezoning, the California Environmental Policy Act (CEQA), and other pertinent environmental regulations. This document provides a biological resources impact analysis that reflects the current environmental setting, project design, and regulatory context.

PROJECT DESCRIPTION

The proposed project would develop 56 multi-family residences, including 16 one bedroom/one bathroom units, 27 two bedroom/two bathroom units, and 12 3 bedroom/3 bathroom units. The proposed project would also include a clubhouse, pool, play lot, and dog park. The proposed project would be designed with pathways and drought tolerant landscaping throughout the site. The proposed project would provide 56 carport parking stalls and 30 open parking stalls, for a total of 86 parking spaces. The project would require a rezone from Office (O) to Residential Multi-Family, Medium High Density (RM-1).

The project site is 3.58 acres; however, for the purposes of this assessment, the study area was 5.51-acres to account for potential indirect impacts that would be disturbed/developed during proposed grading and construction activities.

PROJECT SETTING

The approximately 5.51-acre project site is located northwest of the intersection between North Chestnut Avenue and East Behymer Avenue in Fresno, California (Figure 1; all figures are provided in Attachment A). The site is located in Section 13 of Township 12 South and Range 20 East on the 7.5-minute series United States Geological Survey (USGS) *Friant, California* quadrangle map. Elevations on the project site range from approximately 381 to 387 feet above mean sea level. Primary land uses in the project vicinity include residential developments and schools, along with commercial

uses and agriculture. The City of Fresno Surface Water Treatment Plant is located across North Chestnut Avenue, east of the project site. The project site is strictly upland in nature; no natural drainage features or wetlands are located within the project site or in the immediate vicinity.

METHODS

Literature Review and Records Search

LSA Biologist Kelly McDonald conducted a literature review and records search on July 31, 2020, to identify the existence and potential for occurrence of sensitive or special-status plant and animal species¹ in the project vicinity. Federal and State lists of sensitive species were also examined. Current electronic database records reviewed included the following:

- California Natural Diversity Data Base information (CNDDB RareFind 5), which is administered by the California Department of Fish and Wildlife (CDFW), formerly known as the California Department of Fish and Game. This database covers sensitive plant and animal species, as well as sensitive natural communities that occur in California. Records from nine USGS quadrangles surrounding the project site (Friant, Millerton Lake East, Millerton Lake West, Lane's Bridge, Academy, Clovis, Little Table Mtn., Round Mountain, and Fresno North), along with a query of records within a 5-mile radius of the project site, were obtained from this database to inform the field survey.
- California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants, which utilizes four specific categories or "lists" of sensitive plant species to assist with the conservation of rare or endangered botanical resources. All of the plants constituting California Rare Plant Ranks (CRPR) 1A, 1B, 2A, and 2B are intended to meet the status definitions of "threatened" or "endangered" in the California Endangered Species Act (CESA) and the California Department of Fish and Game Code, and are considered by CNPS to be eligible for State listing. At the discretion of the CEQA Lead Agency, impacts to these species may be analyzed as such, pursuant to the CEQA Guidelines Sections 15125(c) and 15380. Plants in Rank 3 (limited information; review list), Rank 4 (limited distribution; watch list), or that are considered Locally Unusual and Significant may be analyzed under CEQA if there is sufficient information to assess potential significant impacts. Records from the nine USGS quadrangles surrounding the project site were obtained from this database to inform the field survey.
- United States Fish and Wildlife Service's (USFWS) Information for Planning and Conservation (IPaC) Online System, which lists all proposed, candidate, threatened, and endangered species managed by the Endangered Species Program of the USFWS that have the potential to occur on

For the purposed of this report, the term "special-status species" refers to those species that are listed or proposed for listing under the CESA and/or Federal Endangered Species Act (FESA), California Fully Protected Species, plants with a CRPR of 1, 2, or 3, and California Species of Special Concern. It should be noted that "Species of Special Concern" is an administrative designation made by the CDFW and carries no formal legal protection status. However, Section 15380 of the CEQA Guidelines indicates that these species should be included in an analysis of project impacts if they can be shown to meet the criteria of sensitivity outlined therein.

or near a particular site. This database also lists all designated critical habitats, national wildlife refuges, and migratory birds that could potentially be impacted by activities from a proposed project. An IPaC Trust Resource Report was generated for the project site.

eBird: eBird is a real-time, online checklist program launched in 2002 by the Cornell Lab of
Ornithology and National Audubon Society. It provides rich data sources for basic information
on bird abundance and distribution at a variety of spatial and temporal scales. eBird occurrence
records for burrowing owl (Athene cunicularia) from a 5 mile radius around the project site were
reviewed in July 2020.

In addition to the databases listed above, historic and current aerial imagery along with previously prepared environmental reports and land use policies related to biological resources were reviewed.

Field Survey

LSA Biologist Kelly McDonald conducted a general biological survey of the project site on August 4, 2020. The entirety of the project site was surveyed on foot, and all biological resources observed were noted. Suitable habitat for any species of interest or concern was duly noted, and general site conditions were photographed (see Attachment B).

RESULTS

Vegetation

The project site mainly consists of ruderal (e.g., disturbed, weedy) annual grassland vegetation and bare ground. Ongoing soil disturbance (e.g., vegetation control, foot traffic, and off-road vehicles) and the resulting competitive exclusion by invasive nonnative plants limit the potential for native flora to occur within most of the project site. Figure 2 in Attachment A shows a map of vegetation and land cover types existing on the project site at the time of the August 2020 site survey. The acreages of each vegetation community and land cover type occurring on the project site are shown in Table A, below.

Table A: Vegetation and Land Cover Types within the Project Site

Vegetation/Land Cover Type	Acreage ¹
Developed (F.I.D. riser)	0.0005
Ruderal	4.03
Disturbed/Bare Ground	1.08
Total Project Site	5.51

¹All presented acreages are approximate and based on geographic information system measurements.

A total of 28 vascular plant species were identified within the project site during the August 2020 field survey. A total of 20 (approximately 70 percent) of these plant species represent nonnative taxa, reflecting a high level of disturbance within the project site. Multiple ornamental tree species border the western perimeter of the project site along the fenced residential properties. A majority of the trees are nonnative such Chinese Tallow (*Triadica sebifera*) and Tasmania blue gum (*Eucalyptus globulus*). One native valley oak (*Quercus lobata*) sapling native was also observed. See

Attachment D for a complete list of plant species identified on the project site. The following describes the vegetation and land cover types occurring within the project site:

- Ruderal: Areas classified as ruderal consist of early successional grassland dominated by pioneering herbaceous plants that readily colonize disturbed ground. Ruderal grassland is dominated by many grassland species, including² slender wild oat (*Avena barbata*)*, sterile brome (*Bromus sterilis*)*, ripgut grass (*Bromus diandrus*)*, and wild oat (*Avena fatua*)*. Other weedy or pioneering species include: common horseweed (*Erigeron canadensis*), shortpod mustard (*Hirschfeldia incana*)*, telegraph weed (*Heterotheca grandiflora*), and longbeak stork's bill (*Erodium botrys*)*. Annual vegetation growing within the site appears to be regularly maintained.
- **Developed:** Developed sites consist of paved areas, buildings, and other areas that are cleared or graded for anthropogenic purposes. A small portion (approximately 21 square feet) of the project site contains an existing riser pipe, which is mapped as developed.
- Disturbed/Bare Ground: The eastern perimeter of the project site and the southern portion of
 the project site appeared to be disturbed by off-road vehicles (as evinced by tire tracks, ruts,
 etc.). These disturbed areas lacked vegetation or supported a sparse cover of ruderal
 vegetation, with annual nonnative grasses being the most frequently encountered plant species.

Wildlife

The ruderal vegetation occurring on the project site is considered low quality habitat for most native wildlife species. A total of five wildlife species were observed on or near the project site during the August 2020 field survey: house finch (*Haemorhous mexicanus*), mourning dove (*Zenaida macroura*), northern mocking bird (*Mimus polyglottos*), rock pigeon (*Columba livia*),* and California ground squirrel (*Otospermophilus beecheyi*). Each of these species commonly occur in and around developed areas throughout California.

Based on field observations and the location of the project site, which is surrounded by residential uses and roads, there are no indications that the site functions as a wildlife movement corridor or an important stopover point for migratory species.

Special-Status Species

Attachment D contains tables that identify special-status species known to occur or that potentially occur in the vicinity of the project site and includes detailed information about each species' habitat and distribution, activity period, listing/status designations, and probability of occurrence within the project site boundaries. These species were compiled from the CNPS, CNDDB, and IPaC records search from a 5-mile radius around the project site and from LSA's extensive knowledge and experience in the region.

² An asterisk denotes nonnative species.

Historic anthropogenic disturbances have greatly altered the natural hydrologic regimes and have either eliminated or greatly impacted the pre-settlement habitats needed to support the special-status plant species identified in the CNDDB and CNPS queries. As such, the specific habitats, soil substrates or "micro-climates" necessary for special-status plant species to occur are absent within the boundaries of the project site. Based on site observations coupled with the habitat suitability analysis, no special-status plant species are expected to occur within the project site.

There are no known occurrences of any special-status animal species in the project site, and none were observed during the August 2020 field survey. Nonetheless, marginally suitable habitat for one regionally occurring special-status species, burrowing owl, is present in the project site. Several small mammal burrows, including active California ground squirrel burrows and others (likely those of California vole [Microtus californicus], and/or Botta's pocket gopher [Thomomys bottae]), were observed within the project site. None of the mammal burrows observed in the project site exhibited features typical of occupied burrowing owl burrows, although there is some potential for use by this species in the future.

The project site contains suitable foraging habitat for common and special-status birds and raptors; however, due to the lack of perennial shrubs and mature trees in the project site, potential raptor nesting habitat is absent in the project site. Suitable avian nesting habitat in the project site is limited to that which supports ground-nesting species such as horned lark (*Eremophila alpestris*) and other birds that may nest in the annual herbaceous cover. Suitable nesting habitat for a variety of bird species occurs adjacent to the site within the ornamental trees on nearby residential properties. Birds and raptors are protected while nesting under the California Fish and Game Code and the federal Migratory Bird Treaty Act.

The evaluation of special-status species occurrence within the project site was based on a habitat suitability analysis. It did not include exhaustive surveys to determine their presence or absence, but did include direct observation of on-site and off-site conditions and a review of the available recorded occurrence data from the area to conclude whether or not a particular species could be expected to occur. Based on this analysis, it is unlikely that the remaining special-status wildlife species listed in Attachment D occur within the project site. Significant adverse impacts to special-status wildlife species are not anticipated with the implementation of the recommended impact avoidance measures described in further detail below.

Wetlands and Potential Jurisdictional Drainages

There are no records of wetlands or natural drainage features within the project site. However, as shown on historical topographic maps (see Figure 1) and aerial imagery, an open segment of Enterprise Canal No. 109 (controlled by Fresno Irrigation District) historically ran through the western portion of the project site. The open canal was restructured into a pipeline running underneath the length of the project site and surrounding areas prior to June 2009. Since the undergrounding, there are no longer potential jurisdictional drainage features or open channels existing within the project site. No potentially jurisdictional drainage features, wetlands, or riparian areas were observed on the project site.

Regional Habitat Conservation Plans and Local Policies

The project is not located within a regional Natural Community Conservation Plan or Habitat Conservation Plan area. The project would not conflict with any relevant local policies related to biological resources.

IMPACT FINDINGS

Sensitive Vegetation Communities and Critical Habitat

There is no designated or proposed critical habitat for any federally-listed species within the project site. The project would not result in any adverse impacts to critical habitats or sensitive natural communities. No mitigation is required.

Wetlands and Jurisdictional Aquatic Resources

The project would not impact any jurisdictional wetlands, riparian areas, or drainage features. No mitigation is required.

Special-Status Species

No special-status plant species are expected to occur within the project site or to be adversely affected by the proposed project.

While no special-status animal species (or signs of such species) were observed on site during the August 2020 survey, several small mammal burrows were observed within the project site that are considered suitable habitat for burrowing owl, a California Species of Special Concern. None of the small mammal burrows observed in the project site exhibited features typical of burrowing owl burrows at the time of the survey, although there is some potential for use by this species in the future. Potentially significant direct and indirect impacts, including mortality, harassment, or other forms of incidental take, could occur if construction-related ground disturbance occurs in or around an occupied burrow. Implementation of Measure BIO-2 (see below) is recommended to address potential impacts on burrowing owl.

No other special-status species were determined to have a moderate or high probability of occurrence on the project site (refer to Attachment D). The removal of the ruderal habitat documented on the project site is not anticipated to substantially impact the population sizes of any special-status animal species given the context and setting of the project site and additional habitats for such species in the project vicinity.

Nesting Birds

The project site and immediate vicinity contain vegetation that provides suitable nesting habitat for a variety of native and migratory bird species, which are protected while nesting. To ensure compliance with the Federal Migratory Bird Treaty Act and California Fish and Game Code Sections 3500–3516, pre-construction nesting bird surveys are recommended to occur prior to any vegetation clearing or construction activities planned to occur during the nesting bird season

(January 1 through September 30). With successful implementation of the recommended impact avoidance measures (see below), impacts to nesting birds would be avoided.

If unmitigated or not avoided, these potential direct and indirect impacts on special-status wildlife species (burrowing owl) and/or nesting birds could be considered potentially significant. However, implementation of Measures BIO-1 and BIO-2, as summarized below, would effectively avoid, minimize, or mitigate any impacts on special-status species to less-than-significant levels.

Wildlife Movement

The project is surrounded by existing residential developments, roads, and other anthropogenic land uses. The wildlife species that occur in the project vicinity are adapted to the urban-wildland interface. The noise, vibration, light, dust, or human disturbance within construction areas would only temporarily deter wildlife from using areas in the immediate vicinity of construction activities. These indirect effects could temporarily alter migration behaviors, territories, or foraging habitats in select areas. However, because these are temporary effects, it is likely that wildlife already living and moving in close proximity to urban development would alter their normal functions for the duration of the project construction and then re-establish these functions once all temporary construction effects have been removed. The proposed project would not place any permanent barriers within any known wildlife movement corridors or interfere with habitat connectivity. No adverse effects on wildlife movement are anticipated, and no mitigation is required.

RECOMMENDED AVOIDANCE AND MINIMIZATION MEASURES

The following measures are recommended to be implemented to avoid or minimize impacts on burrowing owl and nesting birds.

- Nesting Bird Surveys and Active Nest Avoidance. Any vegetation removal should take place outside of the active nesting bird season (i.e., January 1–September 30), when feasible, to avoid impacts to nesting birds protected under the California Fish and Game Code and Migratory Bird Treaty Act. Should vegetation removal take place during this period, a qualified biologist shall conduct a nesting bird survey no more than 5 days prior to clearing activities. If nesting birds are discovered during preconstruction surveys, the biologist shall identify an appropriate buffer where no clearing, grading, or construction activities with potential to have direct or indirect impacts on the nesting bird(s) are allowed to take place until after the nest is no longer active (e.g., the young birds have fledged), or as otherwise determined by the qualified biologist.
- BIO-2 Conduct Preconstruction Surveys for Burrowing Owl. A preconstruction survey for burrowing owl is required to take place no more than 30 calendar days prior to initiation of any vegetation or ground-disturbing project activities. A qualified biologist will provide the results of the survey to the City of Fresno. If an active burrow of the species is detected on the project site, the applicant must coordinate with CDFW prior to any project activities and specific avoidance, passive relocation, and compensatory mitigation activities shall be performed as required by CDFW.



CONCLUSION

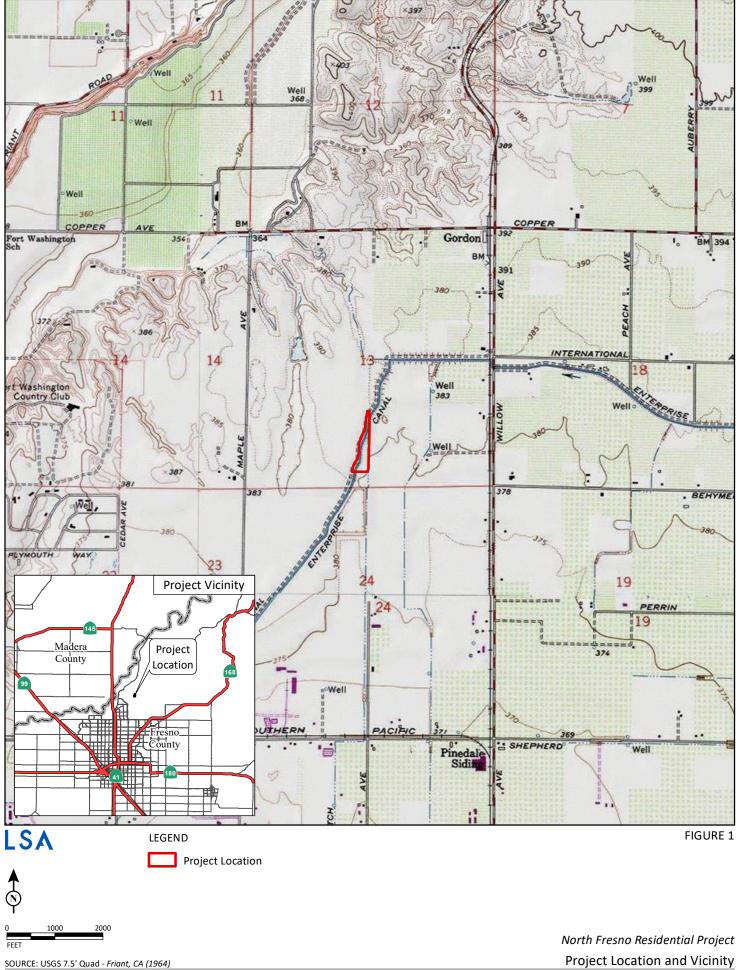
The project site is strictly upland in nature with dominant vegetation consisting of disturbed, ruderal grassland with patches of mixed herbaceous invasive species and bare ground. Based on field observations coupled with the habitat suitability analysis conducted for this assessment, the proposed project has low-to-moderate potential to impact one regionally-occurring special-status wildlife species, but is not anticipated to impact any special-status plant species, natural communities, or other habitats of concern. With implementation of the recommended avoidance, and minimization measures, no significant impacts on biological resources are anticipated.

Attachments: A: Figures

B: Representative Site Photographs C: Vascular Plant Species Observed D: Summary of Special-Status Species



ATTACHMENT A FIGURES





SOURCE: Bing Maps, 2020
I:\BDJ2001\GIS\MXD\VegetationMap.mxd (8/7/2020)

Bare Ground Developed Ruderal

North Fresno Residential Project
Vegetation and Land Cover Type



ATTACHMENT B REPRESENTATIVE SITE PHOTOGRAPHS



View of the property facing north, showing ruderal habitat. August 4, 2020.



View of the property facing south, showing ruderal habitat and tire tracks. August 4, 2020.



Overview of the property facing south, showing bare ground and ruderal habitat. August 4, 2020



Overview of the property facing north showing bare ground and ruderal habitat. August 4, 2020



ATTACHMENT B
Page 1 of 2

Biological Resources Assessment for North Chestnut Avenue Residential Project Representative Site Photographs





View of ruderal vegetation and bare ground at the eastern portion of the property, facing east. August 4, 2020.

View of the southern portion of the property, facing southwest. August 4, 2020.



View of California ground squirrel burrows, facing west. August 4, 2020.



ATTACHMENT B
Page 2 of 2

Biological Resources Assessment for North Chestnut Avenue Residential Project Representative Site Photographs



ATTACHMENT C VASCULAR PLANT SPECIES OBSERVED



VASCULAR PLANT SPECIES OBSERVED - 2020

The following vascular plant species were observed in the specified study area by LSA biologist Kelly McDonald on August 4, 2020.

* introduced species not native to California

GYMNOSPERMS

FagaceaeBeech FamilyQuercus lobatavalley oak

EUDICOTS

AmaranthaceaeAmaranth Family* Amaranthus albustumbleweedAmaranthus blitoidesprocumbent pigweed

AsteraceaeSunflower FamilyAmbrosia acanthicarpaannual bursageCentromadia pungenscommon spikeweed* Lactuca serriolaprickly lettuce* Silybum marianummilk thistle

Boraginaceae Borage Family
Amsinckia mensiesii common fiddleneck

BrassicaceaeMustard Family* Brassica nigraBlack mustard* Hirschfeldia incanashortpod mustard* Sisymbrium irioLondon-rocket

* Spergularia sp. Pink Family sand spurry

Chenopodiaceae
* Salsola tragus

Chenopodiaceae
* Salsola tragus

Russian thistle

EuphorbiaceaeSpurge FamilyCroton setigerturkey-mullein* Triadica sebiferaChinese tallow

Fabaceae

Acmispon americanus var. americanus

* Robinia pseudoacacia

Geraniaceae

* Erodium cicutarium

Lamiacea

Trichostema lanceolatum

Myrtaceae

* Eucalyptus globulus

Polygonaceae

* Rumex crispus

Solanacea

* Datura wrightii

Verbenaceae

* Lantana montevidensis

MONOCOTS

Arecaceae

* Trachycarpus fortunei

Poaceae

* Avena barbata

* Cynodon dactylon

* Bromus diandrus

* Bromus hordeaceus

Legume Family

American bird's foot trefoil

Black locust

Geranium Family

Redstem stork's bill

Mint Family

Vinegarweed

Myrtle Family

Tasmanian bluegum

Buckwheat Family

curly dock

Nightshade Family

Jimsonweed

Verbena Family

trailing lantana

Palm tree Family

Chinese windmill palm

Grass Family

slender wild oat

Bermuda grass

ripgut grass

soft chess



ATTACHMENT D SUMMARY OF SPECIAL-STATUS SPECIES

Table D-1: Special-Status Plant Species Potentially Occurring in the Project Vicinity

Common Name	Scientific Name	Status	General Habitat Description Flowe		Likelihood of Occurrence and Rationale
succulent owl's clover	Castilleja campestris var. succulenta	US: FT CA: CE CNPS: 1B.2	Annual herb occurring in vernal pools, often acidic between 50 and 750 m in elevation. Fresno, Madera, Merced, Mariposa, San Joaquin, and Stanislaus counties.	April- May	Not Expected. There are four known historical records of occurrence in the project vicinity ¹ (1981, 2009, 2017), however suitable habitat is absent from the project site.
dwarf downingia	Downingia pusilla	US: – CA: – CNPS: 2B.2	Annual herb occurring in valley/foothill grasslands and vernal pools between 1 and 445 m elevation. Found in Central Valley counties.	March-May	Low probability of occurrence. There is one known record of occurrence (1979) in the project vicinity and suitable habitat is limited in the project site; the maintained nature of the project site reduces the likelihood of occurrence.
San Joaquin Valley Orcutt grass	Orcuttia inaequalis	US: – CA: – CNPS: 1B.1	Annual herb occurring in vernal pools between 10 and 755 m in elevation. Found in Central Valley counties.	April- September	Not Expected. There are three known records of occurrence (1987, 1992, 2017) in the project vicinity and suitable habitat is absent from project site.
hairy Orcutt grass	Orcuttia pilosa	US: FE CA: CE CNPS: 1B.1	Annual herb occurring in vernal pools between 46 and 200 m in elevation. Found in Central Valley counties.	May- September	Not Expected. There is one known record of occurrence (2010) in the project vicinity and suitable habitat is absent from the project site.
Sanford's arrowhead	Sagittaria sanfordii	US: – CA: – CNPS: 1B.2	Perennial rhizomatous herb associated with marshes and swamps between 0 and 650 m in elevation. Found in Central Valley counties.	May- October	Not Expected. There are two known records of occurrence (1980, 1986) in the project vicinity and suitable habitat is absent from the project site.

¹ Project vicinity = Project site plus a 5 mile buffer

Status: Federal Endangered (FE), Federal Threatened (FT), Federal Candidate (FC), Federal Proposed (FP, FPE, FPT), Federal Delisted (FD), California Endangered (CE), California Threatened (CT), California Species of Special Concern (SSC), California Fully Protected Species (CFP), California Special Plant (CSP), California Special Animal (CSA)

California Native Plant Society Designations:

1B = Rare, threatened, or endangered in California and elsewhere

2B = Rare, threatened, or endangered in California, but not elsewhere

0.1 = seriously endangered

0.2 = fairly endangered

CA = California

CNPS = California Native Plant Society

ft = foot/feet

m = meter/meters

mi = mile/miles

US = United States

Table D-2: Special-Status Animal Species Potentially Occurring or Known to Occur in the Project Vicinity

Common Name Scientific Name Status Listin		Status Listing	Habitat and Comments	Likelihood of Occurrence and Rationale		
			INVERTEBRATES			
Valley elderberry longhorn beetle		US: FT CA: –	Requires elderberry trees, usually in riparian ecosystems, as host sources for breeding and forage.	Not Expected. There is one known record of occurrence (2006) in the project vicinity, but suitable habitat is absent in the project site.		
vernal pool fairy shrimp	Branchinecta lynchi	US: FT CA: –	Occurs only in vernal pools or vernal pool-like habitats and does not occur in riverine, marine, or other permanent bodies of water.	Not expected. Suitable aquatic habitat is absent from the project site.		
Midvalley fairy shrimp	Branchinecta mesovallensis	US: – CA: –	Vernal pools in the Central Valley.	Not Expected. Suitable aquatic habitat is absent from the project site.		
hardhead	Mylopharodon conocephalus	US: FE CA: SSC	Low to mid-elevation streams in the Sacramento-San Joaquin drainage. Also present in the Russian River. Clear, deep pools with sand-gravel-boulder bottoms and slow water velocity. Not found where exotic centrarchids predominate.	Not Expected. Suitable aquatic habitat is absent from the project site.		
California linderiella	Linderiella occidentalis	US: – CA: –	Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions. Water in the pools has very low alkalinity, conductivity, and total dissolved solids.	Not Expected. Suitable aquatic habitat is absent from the project site.		
			AMPHIBIANS			
California tiger salamander	Ambystoma californiense	US: FT CA: CT	Located in riparian woodlands and valley/foothills grasslands. Requires underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	Not expected. There are 12 known records of occurrence in the project vicinity but suitable habitat is absent in the project site.		
Western spadefoot	Spea hammondii	US: – CA: SSC	Occurs primarily in grassland and other relatively open habitats. Found in elevations ranging from sea level to 4,500 ft. Requires temporary pools for breeding.	Not expected. No suitable pool habitat is present in the project site.		
			REPTILES			
Western pond turtle	Emys marmorata	US: – CA: SSC	Occurs in ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Upland habitat is needed for basking and breeding.	Not expected. There are two known records of occurrence (2004,2016) in the project vicinity. Suitable habitat is absent in the project site		
			BIRDS			

Table D-2: Special-Status Animal Species Potentially Occurring or Known to Occur in the Project Vicinity

Common Name Scientific Name		Status Listing	Habitat and Comments	Likelihood of Occurrence and Rationale			
Tricolored blackbird	Agelalus tricolor	US: – CA:CT	Occurs in open country or marshes in large colonies mainly in CA Central Valley. Breeds in freshwater marshes with tall emergent vegetation, feeds on insects.	Not expected. There are three known records (1974, 1975) of occurrence in the project vicinity. Suitable habitat is absent in the project site.			
Burrowing owl	Athene cunicularia	US: – CA: SSC	Burrows in open, dry, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably the California ground squirrel.	Moderate probability of occurrence. There is one known record (2000) of occurrence in the project vicinity and marginally suitable habitat is present in the project site. Several California ground squirrel burrows were observed and occupied during the August 2020 survey. No owl sign was observed.			
Least bell's vireo	Vireo bellii pusillus	US: FE CA: CE	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft.	Not expected. There is one known records of occurrence (1906) in the project vicinity. Suitable habitat is absent in the project site.			

¹Project vicinity = Project site plus a 5 mile buffer

Status: Federal Endangered (FE), Federal Threatened (FT), Federal Candidate (FC), Federal Proposed (FP, FPE, FPT), Federal Delisted (FD), California Endangered (CE), California Threatened (CT), California Species of Special Concern (SSC), California Fully Protected Species (CFP), California Special Animal (CSA)

CA = California

ft = foot/feet

m = meter/meters

mi = mile/miles

US = United States

Appendix C – Cultural Resources

Plan Amendment-Rezone Application No. P20-00213, Development Permit Application No. P22-03749, and Planned Development Permit Application No. P23-03173

Appendix C

Cultural Resources Study



MEMORANDUM

CARLSBAD
FRESNO
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

DATE: August 19, 2020

To: Johal Bahadar, Property Owner and Project Applicant

FROM: Katie Vallaire, RPA 32791044, Senior Cultural Resource Manager, LSA; and

Isaac Younglund, Archaeologist, LSA

Subject: North Fresno Residential Project in Fresno County, California; Cultural Resources

Review (LSA Project No. BJD2001)

This memorandum documents a cultural resources study completed for the North Fresno Residential Project (Project) located on 5.51 acres comprised of Fresno County Assessor Parcel Numbers 578-020-13, 578-020-16, and 578-020-17, herein referred to as the Project Site (see Attachment A for Project Site maps). The County of Fresno is requiring this study in order for the project to comply with their local regulations and environmental review pursuant to the California Environmental Quality Act (CEQA). This study of the Project Site included (1) a records search at the Southern San Joaquin Valley Information Center (SSJVIC); (2) a Sacred Lands File records search at the Native American Heritage Commission (NAHC); (3) a review of historic-period maps and aerial images; and (4) a pedestrian field survey Project Site. The SSJVIC is the official State repository of cultural resources records and studies in Fresno County, and the NAHC is the official State repository of Native American sacred site location records. In addition, relevant environmental and archaeological literature was reviewed for background information and to assess the potential for subsurface archaeological deposits in the vicinity of the Project Site. The results of these tasks are summarized below.

ENVIRONMENT

Based on historic vegetation data collected by A.W. Kuchler of the Conservation Biology Institute in 1964 (and revised by the Bureau of Land Management in 1979), the native vegetation type in this region was California steppe, a dry, grassy plain environment characterized by various bunch grasses (Data Basin 2019). Native Californians would have used the area for hunting large and small game, and for collecting seeds. Potentially, the Valley Yokuts who lived in this area may have managed the grassland by burning and dispersing seeds in order to maintain and increase crops (Natural Resources Conservation Service [NRCS] 2012). Historic settlement, agricultural activities, and modern development have significantly altered this native environment and have reduced the habitat of natural resources once present.

The Project Site is vacant land that was previously used for agriculture situated within an area containing residential and commercial development that occurred in the 1990s and early 2000s. The Enterprise Canal, constructed originally as an open earthen canal between 1870 and 1880 and used to deliver water from the Kings River to non-irrigated land in northern Fresno, is buried underneath the Project Site along its western edge. This likely occurred around the same time that the Fresno

irrigation District dredged, reconstructed portions, and increased the capacity of the canal between 2003 and 2004 (Bureau of Reclamation 2009).

BACKGROUND RESEARCH

Southern San Joaquin Valley Information Center Records Search

On August 3, 2020, LSA requested a records search of the Project Site from the SSJVIC and received results on August 17, 2020. The records search consisted of a review of cultural resource records and studies within the Project Site and a 0.25-mile radius.

The SSJVIC records search resulted in the identification of one previously recorded cultural resource within the Project Site (the Enterprise Canal; P-10-005934) and no cultural resources within 0.25 miles of the Project Site. No reports or previously conducted studies were identified within the Project Site. The Enterprise Canal was previously evaluated as eligible under Criterion A of the National Register of Historic Places by a consensus through the Section 106 process. It is, therefore, considered a historical resource under CEQA.

Native American Heritage Commission Sacred Lands File

On July 30, 2020, LSA submitted a request to the NAHC to review its Sacred Lands File for the proposed project. On August 5, 2020, the NAHC responded with negative results for sacred tribal resources within the Project Site.

Historic Aerial Image Review

LSA reviewed historic-period aerial imagery to determine the previous land use and potential for associated cultural resources on the Project Site, as well as determine when the Enterprise Canal – a cultural resource identified in the Project Site – was buried. Topographic maps depict the Enterprise Canal in its current alignment since at least 1922. Aerial images depict the Project Site as vacant from 1962 to 1972. Between 1972 and 1998, the southern and northern portions of the Project Site were used for agriculture, while the middle portion appears to have a small building and landscaped trees by 1998. By 2002, however, the building is no longer present; and by 2009, the trees are no longer present. Between 2005 and 2009, the Enterprise Canal was buried in the Project Site (National Environmental Title Research 2020).

FIELD SURVEY

On August 7, 2020, LSA Archaeologist Isaac Younglund conducted a pedestrian survey of the Project Site in 5-foot (1.5-meter) interval transects.

The roughly triangular Project Site is bordered on one side by Chestnut Avenue and on the other by raised earthworks covering a canal tunnel. Mr. Younglund identified evidence of considerable earthmoving not only in the covering of the canal, but also throughout the rest of the Project Site. In addition, Mr. Younglund also observed evidence of regular disturbance of the surface due to the use of an unofficial road, 10- and 12-wheeler semi-truck and trailer staging, and fire-prevention soil discing.

The Project Site has been the recipient of illegal dumping for at least the last 15 years (based on Mr. Younglund's observations as a local resident), and this is reflected in the level of surface disturbance. Residential debris consisted of broken roof tiles, concrete fragments, bathroom/kitchen tiles, drywall sections, fence planks, piping, and plaster fragments are scattered across the majority of the Project Site, with a higher concentration along the raised canal way. Vegetation is mostly dead grasses and weeds, which inhibited visibility to about 65 percent. Several instances of half-buried or partially buried concrete slabs and chunks were observed scattered across the Project Site but appear to have been dumped at this location. Ground squirrel burrows dot the Project Site in high concentrations, especially along the slope of the canal way. All were inspected for any sub-surface soil changes that would indicate a potential subsurface archaeological deposit.

The field survey did not identify any cultural resources in the Project Site.

BURIED ARCHAEOLOGICAL SITE POTENTIAL

Assessing the potential for buried archaeological site deposits in the vicinity of the proposed project requires an understanding of landform age and overlying soils. Fundamentally, there is an inverse relationship between landform age and the potential for buried archaeological deposits. Some landforms predate human occupation of the region (e.g., Pleistocene alluvial fan deposits) and, as such, archaeological deposits on these landforms, if present, would be located at or near the surface. In contrast, those landforms that were formed during the Holocene (circa 11,700 years ago to the present) have a potential for containing buried surfaces (paleosols) that would have been available for human habitation during prehistory.

The Project Site is within the Great Valley Geomorphic Province, which encompasses a large alluvial plain in the central part of the state. This 50-mile-wide by 400- mile-long trough is divided into two valleys, each named for the respective rivers that drain them: the Sacramento Valley to the north and the San Joaquin Valley to the south. Sediments eroding from the Coast Ranges to the west and the Sierra Nevada to the east have accumulated in the Great Valley almost continuously since the Jurassic Period (201–145 million years ago). Geologic maps of the area were refined to determine the geological context of the sediments on the Project Site. Because the Project is within the San Joaquin Valley, it has experienced heavy accumulation of redeposited sediments from the weathering of surrounding mountain ranges. The Project Site is at an elevation of approximately 380 feet above mean sea level. Older Quaternary alluvial fan deposits were observed within the Project Site and are composed of San Joaquin sandy loam, hard substratum (NRCS 2020). This soil type is associated with the older Pleistocene Non-marine landform depicted at this location that predates human occupation. Therefore, the Project Site's potential to contain buried archaeological deposits is low and any archaeological artifacts or features would be identified on or near the ground surface (Meyer et al. 2010; Matthews and Burnett 1965).

The Project Site has a low potential for encountering subsurface historic-period archaeological deposits because there is no evidence of former homesteads or buildings at this location and it was used for agricultural purposes throughout the historic period. The Enterprise Canal, a primary feature of the Fresno Irrigation District constructed between 1870 and 1890, is aligned in its historic

location along the western edge of the Project Site but has been buried since its period of significance. Further, no changes or alterations to the canal are proposed as part of the Project.

SUMMARY

One cultural resource – the Enterprise Canal – was identified in the Project Site. Because the project does not propose alteration of this resource, and no excavation will be conducted at the location of this resource, no significant impacts are expected to occur. Although the landform age and soil types present on the Project Site suggest low sensitivity for buried precontact-period archaeological resources, the possibility of encountering subsurface features or human remains cannot be discounted. See recommendations, below, to avoid impacts that may occur from inadvertent disturbances to unknown buried archaeological resources and/or human remains. Should the project plans change to include excavation or alterations within the canal alignment, additional mitigation measures would be necessary.

RECOMMENDATIONS

The potential for encountering previously unidentified buried archaeological cultural resources in the Project Site is low based on the geological landforms and soils present on site; however, if deposits of prehistoric or historical archaeological materials are encountered during project activities, all work within 50 feet of the discovery should be redirected and a qualified archaeologist should be contacted to assess the situation and make recommendations regarding the treatment of the discovery. Project personnel should not collect or move any archaeological materials or human remains and associated materials.

Archaeological cultural resources should be avoided by project activities. If such resources cannot be avoided, they should be evaluated for their California Register of Historical Resources eligibility, under the direction of a qualified professional archaeologist, to determine if they qualify as a historical resource under CEQA. If the deposit is not eligible, a determination should then be made as to whether it qualifies as a unique archaeological resource under CEQA. If the deposit is not a historical, unique archaeological or tribal cultural resource, avoidance is not necessary. If the deposit is eligible for the California Register of Historical Resources or is a unique archaeological resource and cannot be avoided by project actions that may result in impacts, such impacts must be mitigated. Mitigation may consist of, but is not limited to, recording the resource; recovery and analysis of archaeological deposits; preparation of a report of findings; and accessioning recovered archaeological materials at an appropriate curation facility. Public educational outreach may also be appropriate. Upon completion of the study, the archaeologist should prepare a report documenting the methods and results of the investigation, and provide recommendations for the treatment of the archaeological materials discovered. The report should be submitted to the County of Fresno and to the SSJVIC.

HUMAN REMAINS

Although field survey did not indicate presence of cultural resources or human remains, Native American skeletal remains could potentially be identified in the Project Site during construction. In the event of accidental discovery of human remains, the specific protocol outlined by Section 7050.5 of the Health and Safety Code should be followed. If the Coroner determines the remains are not

subject to his or her authority, and if the Coroner recognizes the remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she will contact the NAHC by telephone within 24 hours.

The NAHC shall identify the person or persons it believes to be the most likely descended from the deceased Native American. The most likely descendent may make recommendations to the County or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods, as provided in Public Resources Code §5097.98.

REFERENCES

Bureau of Reclamation

2009 Draft Environmental Assessment: Enterprise Canal at Big Dry Creek Improvement Project Fresno Irrigation District, Fresno County, California. U.S. Department of the Interior Bureau of Reclamation Mid Pacific Region, South Central California Area Office, Fresno, California.

Data Basin

2019 U.S. Potential Natural Vegetation, Original Kuchler Types, v2.0 (Spatially Adjusted to Correct Geometric Distortions). Electronic dataset, http://www.Databasin.org (accessed January 28, 2019).

Matthews, R.A., and J. L. Burnett

1965 *Geologic Map of California: Fresno*. Scale: 1:250,000. California Division of Mines and Geology, Sacramento, California.

Meyer, Jack, D. Craig Young, and Jeffrey Rosenthal

2010 A Geoarchaeological Overview and Assessment of Caltrans Districts 6 and 9. Far Western Anthropological Research Group, Inc., Davis, California.

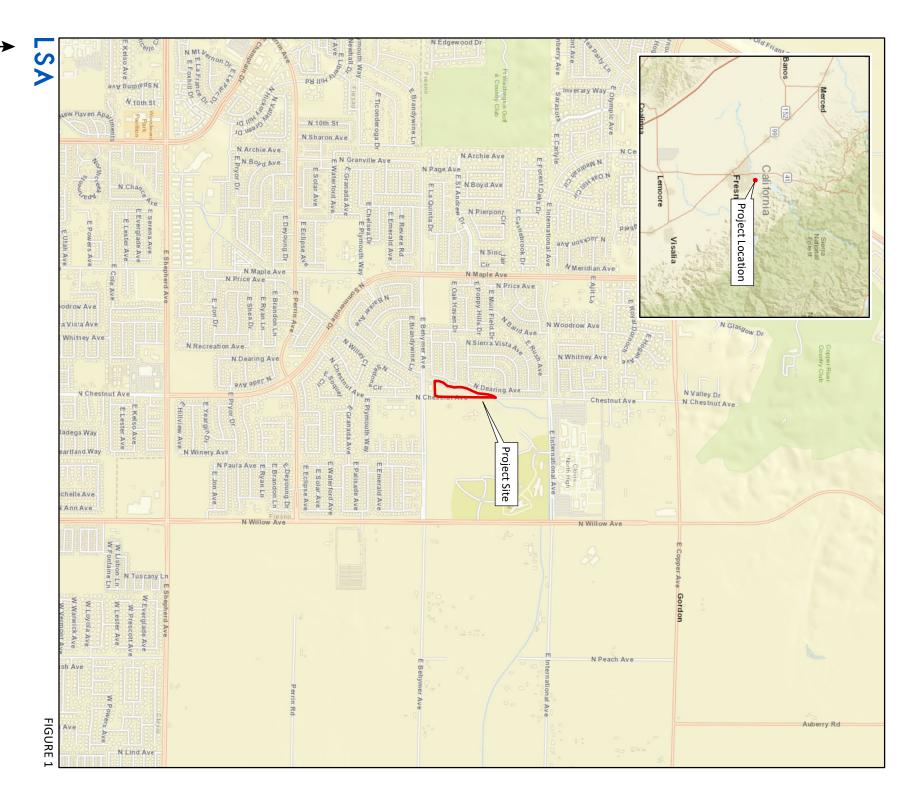
National Environmental Title Research

2020 "Historic Aerials." Available at National Environmental Title Research Web Site, http://www.historicaerials.com/ (accessed August 5, 2020).

Natural Resources Conservation Service (NRCS)

- Edible Seeds and Grains of California Tribes and the Klamath Tribe of Oregon in the Phoebe
 Apperson Hearst Museum of Anthropology Collections, University of California, Berkeley.
 Authored by M. Kat Anderson, Jim Effenberger, Don Joley, and Deborah J. Lionakis Meyer.
 National Plant Data Team, United States Department of Agriculture, Washington, D.C.
- Web Soil Survey. United States Department of Agriculture. Electronic dataset, https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx (accessed July 30, 2020).

ATTACHMENT A



SOURCE: ESRI World Street Maps (02/2020).

North Fresno Residential Project Fresno, Fresno County, California Regional Location

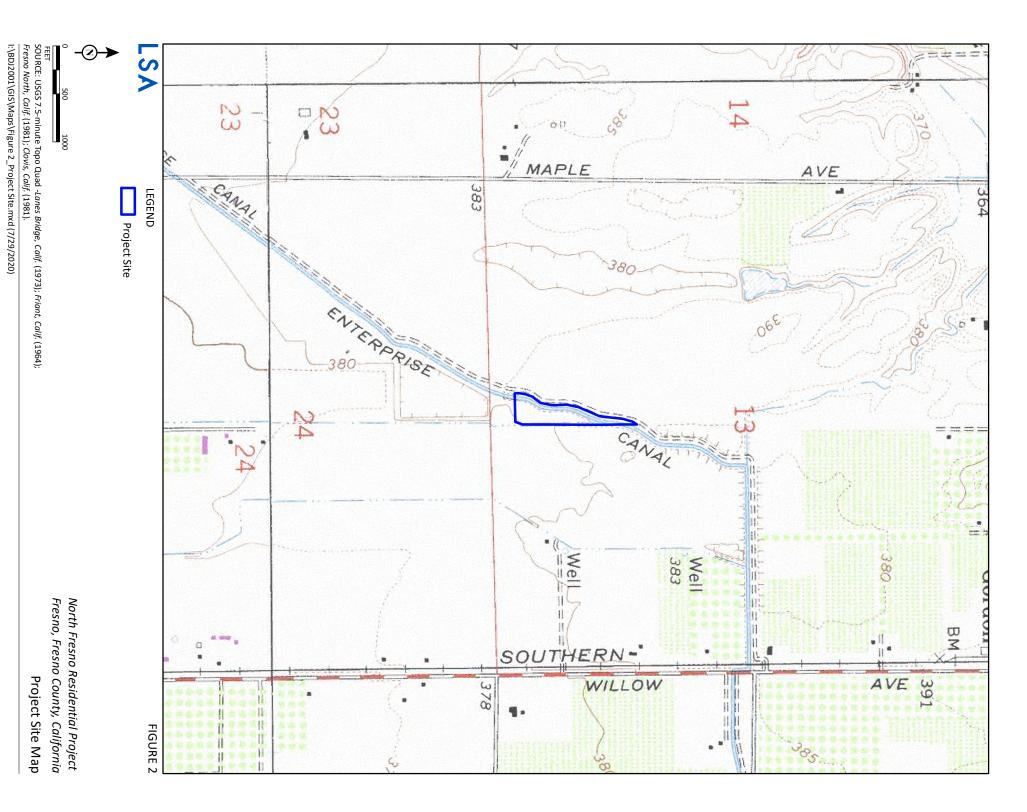


Exhibit D – GHG Reduction Plan Checklist

Plan Amendment-Rezone Application No. P20-00213, Development Permit Application No. P22-03749, and Planned Development Permit Application No. P23-03173

Appendix D

Greenhouse Gas Reduction Plan Project Consistency Checklist



Fresno Greenhouse Gas (GHG) Reduction Plan Update – CEQA Project Consistency Checklist

INTRODUCTION

The City of Fresno updated its 2014 Greenhouse Gas (GHG) Reduction Plan (the Plan) in the year 2021 to conform with existing applicable State climate change policies and regulations. The GHG Plan Update outlines strategies that the City will undertake to achieve its proportional share of GHG emission reductions. The purpose of this GHG Reduction Plan Update Consistency Checklist (Checklist) is to help the City provide a streamlined review process for new development projects that are subject to discretionary review pursuant to the California Environmental Quality Act (CEQA) Guidelines Section 15183.5.

This Checklist has been developed as part of the GHG Plan Update implementation and monitoring process and will support the achievement of individual GHG reduction strategies as well as the City's overall GHG reduction goals. In addition, this Checklist will further the City's sustainability goals and policies that encourage sustainable development and aim to conserve and reduce the consumption of resources, such as energy and water. Projects that meet the requirements of this Checklist will be deemed to be consistent with the Fresno GHG Reduction Plan Update and will be found to have a less than significant contribution to cumulative GHG (i.e., the project's incremental contribution to cumulative GHG effects is not cumulatively considerable), pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b). Projects that do not meet the requirements in this Checklist will be deemed to be inconsistent with the Fresno GHG Reduction Plan Update and must prepare a project-specific analysis of GHG emissions, including quantification of existing and projected GHG emissions and incorporation of the measures in this Checklist to the extent feasible. This GHG Checklist can be updated to reflect adoption of new GHG reduction strategies or to comply with any changes and updates in the Plan or local, State or federal regulations. Note that not all the measures in the checklist are applicable to all projects. The projects should comply with applicable measures from the checklist.



1. Project Information								
Contact Information								
Project No./Name:	North Fresno Residential Project							
Address:	10047 North Chestnut Avenue							
Applicant Name/Co:	Bahadar Johal							
Contact Information:	2607 Lake Van Ness Circle, Fresno, CA 93711							
	bj@vbhomes.net							
Project Information	n							
1. What is the Site acreage of the Project?	3.58							
2. Identify all Applicable Proposed Land uses:	multi-family residential							
a. Residential (Indicate number of single-family units)								
b. Residential (Indicate number of multi-family units)	48 units							
c. Commercial (total square footage)								
d. Industrial (total square footage)								
e. Other (describe)								
3. Is the project or a portion of the project located in a transit priority area? (Y/N)	No							
4. Provide a brief description of the project proposed:	The proposed project would develop 48 multi-family residences. The project would require a rezone from Office (O) to Residential Multi-Family, Medium High Density (RM-1).							



2. Determining Land Use Consistency

Checklist Item

As the first step in determining the consistency with the GHG Reduction Plan for discretionary development projects, this section allows the City to determine the project's consistency with the land use assumptions used in the GHG Reduction Plan.

	Yes	No
1. Is the proposed project consistent with the approved General Plan, Specific Plan, and Community Plan planned land use and zoning designations?		X
If the answer is Yes , then proceed to the GHG Plan Update Consistency Checklist.		
If the answer is No , then proceed to question 2.		

2. If the proposed project is not consistent with the approved planned land use and zoning designation(s), then provide estimated GHG project emissions under both existing and proposed designation(s) for comparison. Compare the maximum buildout of the existing designation with the maximum buildout of the proposed designation.

If the estimated project emissions at maximum buildout of the proposed designation(s) is equivalent to or less than the estimated project emissions at maximum buildout of the existing designation(s), then in accordance with the City's Significance Determination Thresholds, the project's GHG impact is less than significant. If there is a proposed development project associated with this plan amendment and or rezone then complete the GHG Plan Update Consistency Checklist and incorporate applicable measures, otherwise there is no further step required.

If the estimated project emission at maximum buildout of the proposed designation(s) is **greater than** the estimated project emissions at maximum buildout of the existing designation(s), then in accordance with the City's Significance Determination Thresholds, the project's GHG impact is significant. The project must either show consistency with applicable GP objectives and policies (provide applicable GP objectives and policies here) or provide analysis and measures to incorporate into the project to bring the GHG emissions to a level that is less than or equal to the estimated project emission at maximum buildout of the existing designation(s) unless the decision-maker finds that a measure is infeasible in accordance with CEQA Guidelines Section 15091. If there is a proposed development project associated with this plan amendment and or rezone then complete the GHG Plan Update Consistency Checklist and incorporate applicable measures, otherwise there is no further step required.

The proposed project would require a rezone from Office (O) to Residential Multi-Family, Medium High Density (RM-1). The proposed project's emissions were estimated using the California Emissions Estimator Model, which estimates that the proposed project would result in approximately 390.5 metric tons of CO2e per year. The maximum buildout of the existing office designation would result in approximately 3,469.5 metric tons of CO2e per year. Therefore, the proposed project would result in less emissions than the existing designation.



3. Greenhouse Gas (GHG) Reduction Plan Update - CEQA Project Consistency Checklist

GHG Reduction Plan Update consistency review involves the evaluation of project consistency with the applicable strategies of the GHG Reduction Plan Update. The GHG reduct ton Plan Update related strategies to reduce GHG measures as the basis of the development related strategies to reduce GHG emissions. This checklist is developed based on the key local GHG reduction strategies and actions identified in the GHG Reduction Plan Update that are applicable to proposed emissions. This checklist is developed based on the key local GHG reduction strategies and actions identified in the GHG Reduction Plan Update that are applicable to proposed emissions. This checklist is developed based on the Key local GHG reduction strategies and actions identified in the GHG Reduction Plan Update that are applicable to proposed emissions. This checklist is development projects. For example, not all projects will meet mixed-use related policies of the General Plan, because not all projects are required to be mixed use.

Explanation The proposed project is	eldspildqA foN (AN)	oN	səд	Relevant General Plan Policy Policy UF-1-c, LU-3-b,	Check the appropriate box and provide an explanation for your answer) 1. Land Use and Transportation Demand Strategies a. Does the project include mixed-use, development? For GHG Reduction Plan
not mixed-use development.	х			Objective-UF 12, UF-12-a, UF-12-b, UF-12-d, Policy RC-2-a	consistency, mixed-use development is defined as pedestrian-friendly development that blends two or more residential, commercial, cultural, or institutional, uses, one of which must be residential
The project would include 48 unit on 3.58 acres (13 units per acre).			Х	ĵ-S-UJ	b. Is the project high density? For GHG Reduction Plan consistency, is the project developed at 12 units per acre or higher?
The project would include resident a project would include the C			Х	LU-2-a, Objective-12, UF-12-a, UF-12-b, UF-12-d	c. Is the project infill development, pursuant to the General Plan definition of location within the City limits as of December 31, 2012?
The project would provide complete streets for all roadway improvements.			х	Policy UF-1-c, UF-12-e, Policy RC-2-a, Objective MT-4,5,6, Policy MT-4-c, Policy MT-6-a, Policy POS5- 7-h Objective MT 8, Policies MT-8-a, MT-8-b	d. Does the project implement pedestrian bicycle, and transit linkages with surrounding land uses and neighborhoods? For GHG Reduction Plan consistency, the project must include all sidewalks, paths, trails, and facilities required by the General Plan and Active Transportation Plan, as implemented through the Fresno Municipal Code and project conditions of approval.
The proposed project is not located within 1/2 mile of a High Quality Transit Area and is not with 500 feet of a transit stop.	х			Policy UF-12-a, UF-12-b, LU-3-b, Objective MT 8, Policies MT-8-a, MT-8-b	e. If the project includes mixed-use or high density development, is it located within ½ mile of a High Quality Transit Area as defined in the City's CEQA Guidelines for Vehicle Miles Traveled? Or, is the project located within 500 feet of an existing or planned transit stop?
The project would not have any employees.	х			Policy MT-8-b, Objective MT-9, Policy MT-10-c, San Joaquin Valley Air Pollution Control District Rule 9410	f. Will the project accommodate a large employer (over 100 employees) and will it implement trip reduction programs such as increasing transit use, carpooling, vanpooling, bicycling, or other measures to reduce vehicle miles traveled pursuant to San Joaquin Valley Air Pollution Control District Rule 9410? See the SJVAPCD website for details: https://www.valleyair.org/rules/ Cee the SJVAPCD website for details: https://www.valleyair.org/rules/ Corrntrules/r9410.pdf



					source and capacity in explanation.
					Mark WA if project will be permitted before 2030. Mark Yes if voluntary. Add
permitted before 2030.	х			8-DA əvitəəjdO stroqqus	
commercial uses and would be	^			GHG Plan Measure,	electricity?
The project does not include				bebnemmosea IsnoitibbA	b. For commercial projects, does the project achieve net zero emissions
GreenPoint ratings.					feldsoilgqs if munitald
would not follow other					Energy Star or others? If yes, indicate level of certification-Silver, gold,
atest CalGreen standards but			Х	RC-8, Policy RC 8-a	yes, does the project follow any other GreenPoint ratings such as LEED,
The project would meet the				Policy RC-5-c, Objective	a. Does the project meet or exceed mandatory state building energy codes? If
					3: Energy Conservation Strategies
					11), Section 5.106.5.3
					per 2019 California Green Building Standards Code (CALGREEN, Title 24, Part
include commercial uses.	Χ				capable of supporting EV capable spaces at 4% to 10% of the parking spaces
The proposed project would not				Policy RC-8-j	b. For new commercial buildings, does project provide EV charging spaces
					Standards Code (CALGREEN, Title 24, Part 11), Section 4.106.4
					capable) at 10% of the parking spaces per 2019 California Green Building
latest CalGreen standards.			Χ		charging spaces capable of supporting future EV supply equipment (EV
The project would meet the				Policy RC-8-j	a. For new multi-family dwelling units with parking, does the project provide EV
111 11 12				: 8 3d reiled	2: Electric Vehicle Strategies
					Final-Adopted-Version.pdf
					content/uploads/sites/10/2021/01/CEQA-Guidelines-for-Vehicle-Miles-Traveled-
					See City of Fresno website for details: https://www.fresno.gov/darm/wp-
			V		, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
			Х		adopted VMT thresholds?
than significant VMT impact.					satisfying screening criteria or mitigating VMT impacts, pursuant to the City's
The proposed project has a less				o-2-TM ,d-2-TM	h. Does the project have a less than significant VMT impact, either through
					<u>ibq.etf1e0-staests-otalqmo2\01\eta0\2012\71\2013\pquad (content\upper) </u>
					See City of Fresno website for details: https://www.fresno.gov/publicworks/wp-
					network.
					function and context of the facility while connecting to a larger transportation
					pedestrians, transit vehicles, trucks, and motorists - appropriate to the
			Х		
			^		maintained to provide safe mobility for all users - including bicyclists,
					street is a transportation facility that is planned, designed, operated, and
roadway improvements.					Streets Policy, adopted in October 2019? According to the policy, a complete
complete streets for all				= (0	improvements meet the requirements of the City of Fresno's Complete
The project would provide	()			л-1-ТМ ,8-1-ТМ	g. If the project includes modifications to the transportation network, do those
noitenslqx3	eldsoilggA toN (AN)	οN	səд	Relevant General Plan Policy	(Check the appropriate box and provide an explanation for your answer)
					Checklist Item



noitenslqx3	eldsoilggA toM (AN)	οN	хәд	Relevant General Plan Policy	Check the appropriate box and provide an explanation for your answer)
					4: Water Conservation Strategies
The project would meet the atest CalGreen standards. Orought tolerant landscaping] 			Objective RC-7, Policy RC-7-a, RC-7-h	a. Does the project meet or exceed the mandatory outdoor water use measures of the 2019 California Green Building Standards Code (CALGREEN, Title 24, Part 11), Section 4.304?
would be installed throughout :he project site.			х		If the project exceeds CalGreen Code mandatory measures provide methods in excess of requirements in the explanation.
					Examples include outdoor water conservation measures such as; drought tolerant landscaping plants, compliant irrigation systems, xeriscape, replacing turf etc. Provide the conservation measure that the project will include in the explanation.
The project would meet the latest CalGreen standards.			х	Objective RC-7, Policy RC-7-a, RC-7-e	b. Does the project meet or exceed the mandatory indoor water use measures of the 2019 California Green Building Standards Code (CALGREEN, Title 24, Part 11), Section 4.303? If the project exceeds CalGreen Code, mandatory measures provide methods in excess of requirements in the explanation. Examples may include water conserving devices and systems such as water leak detection system, hot water pipe insulation, pressure reducing valves, energy efficient appliances such as Energy Star Certified dishwashers, washing machines, dual flush such as Energy Star Certified dishwashers, washing machines, dual flush toilets, point of use and/or tankless water heaters.
	•	1	ı		5: Waste Diversion and Recycling Strategies
The proposed project would be consistent with the CalRecycle Waste Diversion and Recycling Mandate.			х	Policy PU-9-a, RC-11-a	a. Does the project implement techniques of solid waste segregation, disposal and reduction, such as recycling, composting, waste to energy technology, and/or waste separation, to reduce the volume of solid wastes that must be sent to landfill facilities?
The proposed project would recycle construction waste.			х	Policy RC-11-a	b. During construction will the project recycle construction and demolition waste?
The proposed project would provide recycling canisters.		,	х	Policy RC-11-a	c. Does the project provide recycling canisters in public areas where trashcans are also provided?

Note: The GHG reduction strategies included in this checklist are based on the GHG reduction strategies identified in the Chapter 5 of the GHG Reduction Plan Update.

Exhibit E – Trip Generation/VMT Memo

<u>Plan Amendment-Rezone Application No. P20-00213, Development Permit Application No. P22-03749, and Planned Development Permit Application No. P23-03173</u>

Appendix E

Trip Generation and Vehicle Miles Traveled Analysis Memorandum



CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: May 25, 2023

To: Harmanjit Dhaliwal, City of Fresno

FROM: Ambarish Mukherjee, P.E., AICP

Subject: North Fresno Residential Project Trip Generation and Vehicle Miles Traveled (VMT)

Analysis Memorandum (LSA Project # BDJ2002)

LSA has prepared this Trip Generation and Vehicle Miles Traveled (VMT) Analysis Memorandum (Memo) for the proposed North Fresno Residential Project (project) in the City of Fresno (City). The project includes development of 48 multifamily dwelling units and will be located at the northwest corner of East Behymer Avenue and North Chestnut Avenue within the City.

The objectives of this Memo are as follows:

- To estimate the trip generation for the proposed project and determine whether a Levels of Service based Traffic Impact Study (TIS) will be required for the project; and
- To determine whether the project will have any VMT impact.

TRIP GENERATION ANALYSIS

Trip generation for the project was developed using rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition) for Land Use 220 – "Multifamily Housing (Low Rise) Not Close to Rail Transit", Setting/Location - "General Urban/Suburban." Table A summarizes the project trip generation and shows that the proposed project is anticipated to generate 19 trips in the a.m. peak hour, 24 trips in the p.m. peak hour, and 324 gross daily trips.

As recommended in the City of Fresno *Traffic Impact Study Report Guidelines*, dated February 2009, a detailed LOS based Traffic Impact Study (TIS) shall not be required for a project if it generates less than 100 peak hour trips. Since the anticipated number of peak hour trips generated by the proposed project is lower than the 100-trip threshold established by the City's Guidelines, a TIS may not be required for this project.

VEHICLE MILES TRAVELED ANALYSIS

On December 28, 2018, the California Office of Administrative Law cleared the revised California Environmental Quality Act (CEQA) guidelines for use. Among the changes to the guidelines was removal of vehicle delay and level of service from consideration under CEQA. With the adopted guidelines, transportation impacts are to be evaluated based on a project's effect on vehicle miles traveled (VMT).



As mentioned above, the project is located within the jurisdiction of City of Fresno. Therefore, The project VMT evaluation was conducted according to the *City of Fresno CEQA Guidelines for Vehicle Miles Traveled Thresholds* (VMT Guidelines) dated June 25, 2020, which includes the screening criteria, VMT analysis methodology, VMT impact thresholds, and VMT mitigation measures. One of the screening criteria recommended in the City's guidelines include screening based on project's daily trip generation. As such, projects generating less than 500 daily trips could be screened out from a detailed VMT analysis. As shown in Table A, the project is anticipated to generate 324 daily trips. Since the anticipated number of daily trips generated by the proposed project is lower than the 500 daily-trip threshold established by the City's VMT Guidelines, the project could be screened out and a detailed VMT analysis may not be required for the project.

Attachment:

Table A: Project Trip Generation



Table A - Project Trip Generation

		A.M. Peak Hour			P.M. Peak Hour			Deile
Land Use	Units	In	Out	Total	In	Out	Total	Daily
Multifamily Housing (Low Rise) Trips/Unit ¹ Trip Generation	48 DU	0.10	0.30 14	0.40 19	0.32 15	0.19 9	0.51 24	6.74 324

Notes:

DU = Dwelling Units

¹ Rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition), Land Use 220 - "Multifamily Housing (Low Rise) Not Close to Rail Transit", Setting/Location - "General Urban/Suburban."