Initial Study/Mitigated Negative Declaration (IS/MND) For the KART Transit Station Project

Prepared for:

KINGS COUNTY AREA PUBLIC TRANSIT AGENCY



Kings County Area Public Transit Agency (CEQA Lead Agency)

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PROJECT INFORMATION SHEET

1.	Project Title	KART Transit Project
2.	CEQA Lead Agency and Address	Kings County Area Public Transit Agency (KCAPTA) (CEQA Lead Agency) 610 W. 7th Street Hanford, CA 93230
3.	Responsible Agency	City of Hanford 401 N. Douty Street Hanford, CA 93230
4.	Contact and Phone Number	Angie Dow, Executive Director (559) 852-2691 angie.dow@co.kings.ca.us
5.	Project Applicant	Kings County Area Public Transit Agency (KCAPTA) 610 W. 7th Street Hanford, CA 93230
6.	Project Location	East of Harris Street, west of Brown Street, north of East 7th Street, and south of the alley located between 9th Street and 8th Street.
7.	Assessor's Parcel Numbers	APNs: 010-275-008 010-275-011-000, 010-275-010-000; 010-275-009-000; 012-042-015-000; 012-042-004-000; 012-042-017-000; 012-042-017-000; 012-042-013-000; 012-042-013-000; 012-042-011-000; 012-042-010-000; and 012-042-009-000.
8.	Project Site General Plan Designation(s)	Downtown Mixed Use (City of Hanford General Plan Land Use Map, 2017)
9.	Project Site Zoning Designation(s)	MX-D, Downtown Mixed Use (City of Hanford Zoning Map, 2017)
10. Surrounding Land Uses and Setting		Land uses surrounding the project site include a variety of uses including commercial and



11. Description of Project

residential, and share the same land use designation as the project site; Downtown Mixed Use (MX-D). Single-family and multi-family homes are located north of the project site. Single-family homes and commercial land uses are located to the east. Commercial land uses are located on the west and south.

The KART project would include the demolition of existing structures and construction of a new transit station and commercial development. The approximately four-acre project site is located in the downtown area of the City of Hanford, CA, and has been previously developed. The project site borders other commercial land uses and is located in the Downtown Mixed-Use Zoning District (MX-D). The City's General Plan land use designation for the project site is Downtown Mixed

The proposed project would consist of an approximately 19,000-square-foot transit station building, offsite parking, and onsite bus parking. The transit building includes 6,900 square feet on the first floor, 5,516 square feet on the second, and 6,557 square feet on the third floor, totaling approximately 19,000 square feet for the entire building.

Additionally, the proposed project includes 21 sawtooth bus bays, 19 staff parking spaces, eight secure staff parking spaces, and 114 public parking spaces for transit users. Additionally, two electric bus chargers and two electric car chargers would be constructed onsite.

Existing area constraints limits KART service to one-hour headways¹ for each route. As the existing transit center is not able to serve the expansion and improvement plans of KART, a new site has been identified that would allow KART to increase service frequency to provide 30-minute headways for local Hanford routes to better serve the transit needs of the community. The proposed project would increase service by decreasing headways. The traffic report conducted for the proposed project assumed that the headways for each fixed

Use.

¹ A headway is the amount of time between transit vehicle arrivals at a stop. For example, route that has a bus arrive once per hour would have a 60-minute headway.



route would be halved, meaning that the number of buses accessing the relocated transit center could double. This is a "worst case" analysis of potential project impacts. The number of riders using the park-and-ride facilities could also increase.

Internal access onto the project site would occur from either 7th Street or 8th Street.

Regional access to the site of the proposed project is provided by California State Route (SR) 198 via N. Douty Street to East 7th Street or 10th Avenue to East 7th Street.

Pacific Gas & Electric Company Southern California Edison

Letters were sent by the Kings County Area Public Transit Agency (the Lead Agency) to local Native American tribes asking if they wished to participate in AB 52 consultation concerning the KART project in the City of Hanford. The letters were sent on May 23, 2019 by certified mail.

City of Hanford Building Division City of Hanford Fire Department City of Hanford Public Works Department San Joaquin Valley Air Pollution Control District

- 12. Selected Agencies whose Approval is Required
- 13. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code § 21080.3.1? If so, has consultation begun?
- 14. Other Public Agencies whose Approval is Required



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- Appendix L Information Request Letters
 - **L1** Fire Department
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 - **L3** Kings County Library
 - L4 Hanford Parks and Recreation Department
 - L5 Hanford Elementary School District
 - L6 Hanford Joint Union High School District



ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Term
Α	areawide
AB	Assembly Bill
AB 32	California Global Warming Solutions Act of 2006
AB 939	California Integrated Waste Management Act (CIWMA)
ACBM	asbestos-containing building material
ACM(s)	asbestos-containing material(s)
AF	acre-feet
AGR	Agricultural Supply water designation
amsl	above mean sea level
AP	aggregated point
APE	area of potential effect
AQP(s)	air quality plan(s)
ARB	Air Resources Board
BAU	business as usual
bgs	below ground surface
BMPs	Best Management Practices
BNSF	Burlington Northern Santa Fe Railway Company
b.p.	before present
BPS	Best Performance Standards
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalGreen Code	California Green Building Standards Code
CAL FIRE	California Department of Forestry and Fire Protection
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAO(s)	cleanup and abatement order(s)
CAP	Climate Action Plan
САТ	Climate Action Team
CBC	California Building Code
ССАР	Climate Change Action Plan
CDO(s)	cease and desist order(s)
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and
	Liability Act
CFC(s)	chlorofluorocarbon(s)
CFR	Code of Federal Regulations
CH ₄	methane
CHRIS	California Historic Resources Inventory System
CIWMA	State of California Integrated Waste Management Act of 1989 (AB
	939)
CIWMB	California Integrated Waste Management Board
City	City of Hanford
CNEL	Community Noise Equivalent Level
CNRA	California Natural Resources Agency



Acronym/Abbreviation	Term
СО	Carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CRHR	California Register of Historic Places
СТІ	California Toxic Inventory
CUP	conditional use permit
DAU	Detailed Analysis Unit
dB	decibel
dBA	A-weighted decibel scale
DHS	California Department of Health Services
DOC	California Department of Conservation
DOSH	California Division of Safety and Health
DPM	diesel particulate matter
EA	Environmental Assessment
EI	Emission Inventory
EIR	Environmental Impact Report
EMS	Emergency Medical Service
EMT-D	Emergency Medical Technician Defibrillator
FSRI	Farth System Research Laboratory
°F	degrees Fahrenheit
FCAA	Federal Clean Air Act
FHS7	Fire Hazard Severity Zone
FMMP	Farmland Manning and Monitoring Program
FRAD	CAL FIRE Fire Resource and Assessment Program
FTΔ	Federal Transit Administration
CHC	greenhouse gas
	gallons per day
GV	Great Valley
GWP	dobal warming notential
HaS	hydrogen sulfide
	Habitat Conservation Plan
HESD	Hanford Elementary School District
ншнер	Hanford Loint Union School District
HECs	hydrofluorocarhons
HHWE	Household Hazardous Waste Flement
НПТИЕ	Hanford Police Department
	Hydrologic Unit
<u>но</u> Ца	hortz
IIZ	International Fire Code
	Industrial Service Supply water designation
	Intergovernmental Danel on Climate Change
	Initial Study / Mitigated Negative Declaration
	Indiract Source Deview
	Institute of Transportation Engineers
	Institute of Fransportation Engineers
	Integrated Waste Management Plan
KART	Kings Area Kural Transit



Acronym/Abbreviation	Term
KCAG	Kings County Association of Governments
КСАРТА	Kings County Area Public Transit Agency
КСЕНД	Kings County Environmental Health Department
KCWD	Kings County Water District
kV	kilo-volt
KWRA	Kings Waste Recycling Authority
L ₉₀	noise level that is exceeded 90% of the time
LEP	limited English proficiency
L _{eq}	equivalent noise level
LBP	lead-based paint
L _{dn}	day-night average noise
L _{max}	root mean square maximum noise level
LOS	Level of Service
LRA	local responsibility area
LSTs	Localized Significance Thresholds
LUST	leaking underground storage tank
Map Act	California Subdivision Map Act
MAS	California Fire Service Mutual Aid System
MBTA	Migratory Bird Treaty Act
MCMs	Minimum Control Measures
mgd	million gallons per day
$\mu g/m^3$	micrograms per cubic meter
MLD	Most Likely Descendant
MM(s)	mitigation measure(s)
MMRP	Mitigation, Monitoring and Reporting Program
MND	Mitigated Negative Declaration
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer Systems
MtCO ₂ e	million tonnes of carbon dioxide equivalent
MUN	Municipal and Domestic Supply water designation
MX-D	Downtown Mixed-Use Zoning District zoning designation
N	natural sources
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Communities Conservation Plan
ND	Negative Declaration
NHPA	National Historic Preservation Act
NO ₂	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NO _x	Nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSR	New Source Review



Acronym/Abbreviation	Term	
03	Ozone	
OD	onroad diesel	
OG	onroad gasoline	
OMD	offroad mobile diesel	
OMG	offroad mobile gasoline	
ОМО	offroad mobile other	
OPR	Governor's Office of Planning and Research	
OSHA	Occupational Safety and Health Administration	
РСВ	polychlorinated biphenyls	
PFCs	perfluorocarbons	
PG&E	Pacific Gas and Electric Company	
PM	narticulate matter	
PM ₂₅	fine narticulate matter	
PM ₁₀	respirable particulate matter	
nnm	narts per million	
PPV	neak narticle velocity	
PRO	Industrial Process Supply water designation	
RCRA	Resource Conservation and Recovery Act	
DEC	recognized environmental condition	
RM3	Poortive organic gases	
	Reactive of galific gases	
KP5	Renewables Portiolio Standard	
RWQLB	Regional Water Quality Control Board	
SB		
SCAQMD	South Coast Air Quality Management District	
SCE	Southern California Edison	
	Sustainable Communities Strategy	
SF ₆	sulfur hexafluoride	
SIP	State Implementation Plan	
SJV	San Joaquin Valley	
SJVAB	San Joaquin Valley Air Basin	
SJVAPCD	San Joaquin Valley Air Pollution Control District	
SLF	Sacred Lands File	
SMP	soil management plan	
SO ₂	sulfur dioxide	
SO ₄	sulfate	
SoCalGas	Southern California Gas Company	
SP	Southern Pacific	
SP	stationary point	
SR	State Route	
SRAs	state responsibility areas	
SRAs	source receptor areas	
SSC	California Seismic Safety Commission	
SSJVIC	Southern San Joaquin Valley Information Center	
SSRE	Source Reduction and Recycling Element	
SWMP	Storm Water Management Plan	



Acronym/Abbreviation	Term
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	California State Water Resources Control Board
TAC(s)	Toxic Air Contaminant(s)
tCO ₂ e	tonnes of carbon dioxide equivalent
TCRs	tribal cultural resources
TIA	Traffic Impact Assessment
TLHSA	Tulare Lake Hydrologic Study Area
tonne(s)	metric ton(s)
TULARG	Tulare Lake Archaeological Research Group
UNFCCC	United Nations Framework Convention on Climate Change
USGS	United States Geological Survey
USEPA	United States Environmental Protection Agency
UST(s)	underground storage tank(s)
UWMP	Urban Water Management Plan
VdB	vibration decibels
VHFHSZs	very high fire hazard severity zones
VMT	vehicle miles traveled
VOC(s)	volatile organic compound(s)
WRI	World Resources Institute



EXECUTIVE SUMMARY

Introduction

This Initial Study/Mitigated Negative Declaration (IS/MND) analyzes the potential environmental impacts of the proposed project. Kings County Area Public Transit Agency (KCAPTA) is the Lead Agency under the California Environmental Quality Act (CEQA) and is responsible for preparing the Project Initial Study/Mitigated Negative Declaration for the Kings Area Rural Transit station (KART) project (hereby referred to as the "proposed project" or the "project"). The City of Hanford is the Responsible Agency for the KART project.

Overview of the Proposed Project

The proposed project would ultimately allow for the development of a multimodal transit station built to better serve the surrounding community, located in the City of Hanford, California.

CEQA Purpose and Need

The purpose of this IS/MND is to evaluate the potential impacts resulting from the implementation of the proposed project, including the construction and operation of the proposed transit station project. All "projects" within the State of California are required to undergo an environmental review to determine the environmental impacts associated with implementation of the project in accordance with the *California Environmental Quality Act of 1970 (CEQA)*. Some projects are determined to be statutorily and categorically exempt from CEQA and no further environmental documentation is needed for them.

Project Synopsis

Location

The project site is located on several parcels in the City of Hanford, in Kings County, California. The approximately four-acre project site is bounded by E. 7th Street to the south, N. Harris Street to the west, N. Brown Street to the east, and the alley between E. 8th Street and E. 9th Street to the north.

Project Characteristics

The Kings County Area Public Transit Agency is processing a request to implement a series of discretionary actions that would allow for the construction of the KART Transit Project. The proposed project would include the demolition of existing structures and construction of a new transit station and commercial development. The approximately four-acre project site is located in the downtown area of the City of Hanford, CA, and has been previously developed.

The proposed project would consist of an approximately 19,000-square-foot Transit Station Building, offsite parking, and onsite bus parking. The transit building includes 6,900 square feet on the first floor, 5,516 square feet on the second, and 6,557 square feet on the third floor, totaling approximately 19,000 square feet for the entire building. A detailed floor plan for the ground floor of the transit building was developed, as shown in Figure 7-4 of the KART Transit Station Site Selection Study, as well as an overview of second floor where KART and KCAPTA offices would be located. The ground floor includes space for KART bus operators, a training room, a large central waiting area with an information kiosk, and additional meeting spaces with movable walls to accommodate events of



varying sizes. The open atrium in the center waiting area would extend to the second floor. The third floor would be similar to the second without the open atrium, and would contain office space leasable to tenants. The modern exterior design of the building reflects the goals and objectives of KCAPTA (Mott MacDonald, 2018, pp. 60-61).

Project Objectives

Below is a list of objectives for the proposed project:

- 1. To improve transit service efficiency.
- 2. To expand transit service.
- 3. To enhance access to social services.
- 4. To encourage revitalization and economic development in the City of Hanford.

Summary of Significant Effects

As detailed in this document, after the implementation of mitigation the project would result in less than significant environmental impacts.

Areas of Controversy Known to the Lead Agency

There are no areas of controversy known to the Lead Agency.

Summary of Environmental Impacts and Mitigation Measures

Refer to **Section 7.0**, Mitigation Monitoring and Reporting Program (MMRP), for a MMRP table that lists impacts, mitigation measures in connection with approval of the proposed project, level of significance after mitigation, responsible and monitoring parties, and the project phase in which the measures are to be implemented.



1.0 INTRODUCTION

1.1 Proposed Project

The Kings County Area Public Transit Agency (KCAPTA) is processing a request to implement a series of discretionary actions that would allow for the development of the Kings Area Rural Transit (KART) system (hereby referred to as the "proposed project" or "project"). The proposed project site is in the City of Hanford, and is located east of Harris Street, west of Brown Street, north of East 7th Street, and south of the alley located between 9th Street and 8th Street.

This Initial Study/Mitigated Negative Declaration (IS/MND) examines all elements and potential environmental impacts, in accordance with the California Environmental Quality Act (CEQA), regarding the development of a new transit center at the project site, including but not limited to: the demolition of all existing structures and designated pavement areas; the abandonment of public right-of-way; removal of existing utility poles and submersion of underground utilities; construction activities of the transit station, bus bays, parking lots, and commercial/office buildings; and the relocation of the bus system/bus traffic to the project site, including potential tenants and pedestrian/bicycle traffic.

1.1.1 Project Components

The proposed project would consist of an approximately 19,000-square-foot Transit Station Building, offsite parking, and onsite bus parking. The Transit Station Building would include a large central waiting area, break room, training room, in addition to office space leasable to tenants. The proposed project includes 21 sawtooth bus bays, 17 staff parking spaces, eight secure staff parking spaces, and 105 park-and-ride spaces for transit users. Additionally, two electric bus chargers and two electric car chargers would be constructed onsite. Refer to **Section 3.0**, Project Description, of this document for additional details.

1.1.2 Estimated Construction Schedule

Project construction is anticipated to begin in July 2021 and would last approximately 12 months, ending in June 2022.

1.2 Lead Agencies – Environmental Review Implementation

The KCAPTA is the Lead Agency under CEQA for the proposed project. Pursuant to CEQA and its implementing regulations,² the Lead Agency has the principal responsibility for implementing and approving a project that may have a significant effect on the environment.

1.3 CEQA Overview

1.3.1 Purpose of CEQA

All discretionary projects within California are required to undergo environmental review under CEQA. A Project is defined in CEQA Guidelines § 15378 as the whole of the action having the potential

² Public Resources Code §§ 21000 - 21177 and California Code of Regulations Title 14, Division 6, Chapter 3.



to result in a direct physical change or a reasonably foreseeable indirect change to the environment and is any of the following:

- An activity directly undertaken by any public agency including but not limited to public works construction and related activities clearing or grading of land, improvements to existing public structures, enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements.
- An activity undertaken by a person which is supported in whole or in part through public agency contracts, grants, subsidies, loans, or other forms of assistance from one or more public agencies.
- An activity involving the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies.

CEQA Guidelines § 15002 lists the basic purposes of CEQA as follows:

- Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities.
- Identify the ways that environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

1.3.2 Authority to Mitigate under CEQA

CEQA establishes a duty for public agencies to avoid or minimize environmental damage where feasible. Under CEQA Guidelines § 15041 a Lead Agency for a project has authority to require feasible changes in any or all activities involved in the project in order to substantially lessen or avoid significant effects on the environment, consistent with applicable constitutional requirements such as the "nexus"³ and "rough proportionality"⁴ standards.

CEQA allows a Lead Agency to approve a project even though the project would cause a significant effect on the environment if the agency makes a fully informed and publicly disclosed decision that there is no feasible way to lessen or avoid the significant effect. In such cases, the Lead Agency must specifically identify expected benefits and other overriding considerations from the project that outweigh the policy of reducing or avoiding significant environmental impacts of the project.

1.4 Purpose of Initial Study

The CEQA process begins with a public agency making a determination as to whether the project is subject to CEQA at all. If the project is exempt, the process does not need to proceed any further. If the project is not exempt, the Lead Agency takes the second step and conducts an Initial Study to determine whether the project may have a significant effect on the environment.

³ A nexus (i.e., connection) must be established between the mitigation measure and a legitimate governmental interest.

⁴ The mitigation measure must be "roughly proportional" to the impacts of the Project.



The purposes of an Initial Study as listed in § 15063(c) of the CEQA Guidelines are to:

- Provide the Lead Agency with information necessary to decide if an Environmental Impact Report (EIR), Negative Declaration (ND), or Mitigated Negative Declaration (MND) should be prepared.
- Enable a Lead Agency to modify a project to mitigate adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a ND or MND.
- Assist in the preparation of an EIR, if required, by focusing the EIR on adverse effects determined to be significant, identifying the adverse effects determined not to be significant, explaining the reasons for determining that potentially significant adverse effects would not be significant, and identifying whether a program EIR, or other process, can be used to analyze adverse environmental effects of the project.
- Facilitate an environmental assessment early during project design.
- Provide documentation in the ND or MND that a project would not have a significant effect on the environment.
- Eliminate unnecessary EIRs.
- Determine if a previously prepared EIR could be used for the Project.

In cases where no potentially significant impacts are identified, the Lead Agency may issue a ND, and no mitigation measures would be needed. Where potentially significant impacts are identified, the Lead Agency may determine that mitigation measures would adequately reduce these impacts to less than significant levels. The Lead Agency would then prepare a MND for the proposed project. If the Lead Agency determines that individual or cumulative effects of the proposed project would cause a significant adverse environmental effect that cannot be mitigated to less than significant levels, then the Lead Agency would require an EIR to further analyze these impacts.

1.5 Review and Comment by Other Agencies

Other public agencies are provided the opportunity to review and comment on the IS/MND. Each of these agencies is described briefly below.

- A Responsible Agency (14 CCR § 15381) is a public agency, other than the Lead Agency, that has discretionary approval power over the Project, such as permit issuance or plan approval authority.
- A Trustee Agency⁵ (14 CCR § 15386) is a state agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the State of California.
- Agencies with Jurisdiction by Law (14 CCR § 15366) are any public agencies who have authority (1) to grant a permit or other entitlement for use; (2) to provide funding for the project in question; or (3) to exercise authority over resources which may be affected by the project. Furthermore, a city or county will have jurisdiction by law with respect to a project when the city or county having primary jurisdiction over the area involved is: (1) the site of the project; (2) the area in which the major environmental effects will occur; and/or (3) the area in which reside those citizens most directly concerned by any such environmental effects.

⁵ The four Trustee Agencies in California listed in CEQA Guidelines § 15386 are California Department of Fish and Wildlife, State Lands Commission, State Department of Parks and Recreation, and University of California.



1.6 Impact Terminology

The following terminology is used to describe the level of significance of potential impacts:

- A finding of *no impact* is appropriate if the analysis concludes that the project would not affect the particular environmental threshold in any way.
- An impact is considered *less than significant* if the analysis concludes that the project would cause no substantial adverse change to the environment and requires no mitigation.
- An impact is considered *less than significant with mitigation incorporated* if the analysis concludes that the project would cause no substantial adverse change to the environment with the inclusion of environmental commitments, or other enforceable measures, that would be adopted by the lead agency.
- An impact is considered potentially significant if the analysis concludes that the project could have a substantial adverse effect on the environment.

An EIR is required if an impact is identified as *potentially significant*.

1.7 Organization of Initial Study

This IS/MND is organized to satisfy CEQA Guidelines § 15063(d), and includes the following sections:

- **Section 1.0 Introduction**, which identifies the purpose and scope of the IS/MND.
- **Section 2.0 Environmental Setting**, which describes location, existing site conditions, land uses, zoning designations, topography, and vegetation associated with the project site and surrounding area.
- **Section 3.0 Project Description**, which provides an overview of the project, a description of the proposed development, project phasing during construction, and discretionary actions for the approval of the project.
- **Section 4.0 Environmental Checklist**, which presents checklist responses for each resource topic to identify and assess impacts associated with the proposed project, and proposes mitigation measures, where needed, to render potential environmental impacts less than significant, where feasible.
- Section 5.0 References, which includes a list of documents cited in the IS/MND.
- **Section 6.0 List of Preparers**, which identifies the primary authors and technical experts that prepared the Initial Study.
- Section 7.0 Mitigation, Monitoring, and Reporting Program (MMRP), which identifies mitigation measures and level of significance after mitigation.

Technical studies and other documents, which include supporting information or analyses used to prepare the IS/MND, are included in the following appendices:

- Appendix A Project Plan and Title Reports
- Appendix A1 Project Plan
- Appendix A2 Preliminary Title Report
- Appendix B KART Transit Station Site Selection Study
- Appendix C Informational Meeting Documents
- Appendix C1 Informational Meeting Notices English and Spanish
- Appendix C2 Informational Meeting Proof of Publication Affidavit & Tear Sheet



- Appendix C3 Informational Meeting Agenda
- Appendix C4 Informational Meeting PowerPoint Presentation
- Appendix C5 Informational Meeting Sign-in Sheets
- Appendix C6 Informational Meeting Blank Comment Card
- Appendix C7 Informational Meeting Minutes
- Appendix C8 Photos from Informational Meeting
- Appendix C9 Public Comments
- Appendix D Air Quality and Greenhouse Gas Analysis
- Appendix E Biological Resources Records Search
- Appendix F Phase I Cultural Resources Inventory
- Appendix G Geotechnical Feasibility Report
- Appendix H Paleontological Records Search
- Appendix I Phase I Environmental Site Assessment
- Appendix J Noise Technical Report
- Appendix K Transportation Impact Assessment
- Appendix L Information Request Letters
- Appendix L1 Fire Department
- Appendix L2 Police Department
- Appendix L3 Kings County Library
- Appendix L4 Hanford Parks and Recreation Dept.
- Appendix L5 Hanford Elementary School District
- Appendix L6 Hanford Joint Union High School District
- Appendix M KCAPTA Title VI Analysis

1.8 Findings from the Initial Study

1.8.1 No Impact or Impacts Considered Less than Significant

The project would have no impact or a less than significant impact on the following environmental categories listed from Appendix G of the CEQA Guidelines.

- Aesthetics
- Agriculture and Forestry Resources
- Energy
- Greenhouse Gas Emissions
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Utilities and Service Systems
- Wildfire



1.8.2 Impacts Considered Less than Significant with Mitigation Measures

Based on IS findings, the project would have a less than significant impact on the following environmental categories listed in **Appendix G** of the CEQA Guidelines when proposed mitigation measures are implemented.

- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Noise
- Transportation
- Tribal Cultural Resources



2.0 ENVIRONMENTAL SETTING

2.1 **Project Location**

The project site is located on several parcels in the City of Hanford, in Kings County, California. The approximately four-acre project site is bounded by E. 7th Street to the south, N. Harris Street to the west, N. Brown Street to the east, and the alley between E. 8th Street and E. 9th Street on the north. Refer to **Figure 2.1-1**, which shows the project vicinity. See **Figure 2.1-2**, which shows the project's location.

2.2 Project Setting

Currently, the project site is comprised of assessor's parcel numbers, as detailed in **Table 2.2-1** below. The project site is adjacent to parcels with commercial and light industrial uses to the south, east, and west; single-family residential homes are located to the east and north. The project site has an elevation of approximately 249 feet above mean sea level (AMSL), as shown in **Figure 2.2-1**. Photographs depicting the project site are provided in **Figure 2.2-2e**.

2.2.1 Land Use and Zoning

The land use designation and zoning of the project site and surrounding areas are listed in **Table 2.2-1**, and shown in **Figures 2.2-3** and **2.2-4**. The General Plan designation for the project site is Downtown Mixed Use and the site's zoning designation is Downtown Mixed Use (MX-D).

Assessor's Parcel Number	Parcel Location	Existing Use	General Plan ¹	Zoning ²			
Project Site							
010-275-011-000	North of 8th street	Single-family home	Downtown Mixed Use	Downtown Mixed Use (MX-D)			
010-275-010-000	North of 8th street	Vacant lot	Downtown Mixed Use	Downtown Mixed Use (MX-D)			
010-275-009-000	North of 8th street	Vacant lot	Downtown Mixed Use	Downtown Mixed Use (MX-D)			
010-275-008-000	North of 8th street	Single-family home	Downtown Mixed Use	Downtown Mixed Use (MX-D)			
012-042-015-000	Directly South of 8th street	Vacant building (boarded up)	Downtown Mixed Use	Downtown Mixed Use (MX-D)			
012-042-004-000	Directly South of 8th street	Vacant lot	Downtown Mixed Use	Downtown Mixed Use (MX-D)			
012-042-017-000	Directly South of 8th street	King's View Community Services, located at 289 E. 8th Street.	Downtown Mixed Use	Downtown Mixed Use (MX-D)			
012-042-014-000	Directly North of 7th street	Vacant lot	Downtown Mixed Use	Downtown Mixed Use (MX-D)			

<u>Table 2.2-1</u> SUMMARY OF LAND USE AND ZONING



Assessor's Parcel Number	Parcel Location	Existing Use	General Plan ¹	Zoning ²			
012-042-013-000	Directly North of 7th street	Vacant lot with small, boarded-up building	Downtown Mixed Use	Downtown Mixed Use (MX-D)			
012-042-012-000	Directly North of 7th street	American Audio (Business)	Downtown Mixed Use	Downtown Mixed Use (MX-D)			
012-042-011-000	Directly North of 7th street	ProLite Signs (Business)	Downtown Mixed Use	Downtown Mixed Use (MX-D)			
012-042-010-000	Directly North of 7th street	ProLite Signs (Business)	Downtown Mixed Use	Downtown Mixed Use (MX-D)			
012-042-009-000	Directly North of 7th street	ProLite Signs (Business)	Downtown Mixed Use	Downtown Mixed Use (MX-D)			
Surrounding Areas							
North	North of the project site	Single-family and multi-family homes, Apostolic Assembly of the Faith in Christ Jesus	Downtown Mixed Use	Downtown Mixed Use (MX-D)			
East	East of the project site	Single-family homes and commercial land uses	Downtown Mixed Use and Office Residential	Downtown Mixed Use (MX-D) and Office Residential (O-R)			
West	West of the project site	Commercial land uses	Downtown Mixed Use	Downtown Mixed Use (MX-D)			
South	South of the project site	Commercial land uses	Downtown Mixed Use	Downtown Mixed Use (MX-D)			

Notes:

¹(City of Hanford General Plan Land Use Map, 2017) As shown in **Figure 2.2-4** below, the project site is located within the East Downtown Overlay District for the City of Hanford. As shown in **Figure 2.2-5** below, the project is located within the Downtown East Precise Plan Area.

²(City of Hanford Zoning Map, 2017) Source: UltraSystems, 2019.



<u>Figure 2.1-1</u> PROJECT VICINITY





Figure 2.1-2 PROJECT LOCATION







Figure 2.2-1 TOPOGRAPHIC MAP



Figure 2.2-2a PROJECT SITE PHOTOGRAPHS LOCATION MAP



Path: J/Projects/7014_Kings_County_Kart/MXDs/7014_Kings_County_Kart_Photo Key_11x17_2019_08_08 mvd Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community, Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community, Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community, USGS, 2007; Caltrans, 2014; King County, 2016; UltraSystems Environmental, Inc., 2019



Figure 2.2-2b PROJECT SITE PHOTOGRAPHS



PHOTO 1: View from existing homes on the corner of E. Eighth Street and N. Brown Street looking down E. Eighth Street.



 $\ensuremath{\text{PHOTO}}$ 2: View from the intersection of N. Douty Street and W. Eighth Street looking to the northwest.



PHOTO 3: View from the intersection of N. Harris Street and E. Eighth Street, looking northeast towards the project site.



 $\ensuremath{\textbf{PHOTO}}\xspace 4$: View from N. Brown Street between E. Eight Street and E. Seventh Street looking north.



Figure 2.2-2c PROJECT SITE PHOTOGRAPHS



PHOTO 5: View of the south edge of the project site from E. Seventh Street.



PHOTO 6: View towards the project site from the south east corner of the intersection of N. Brown Street and E. Seventh Street.



PHOTO 7: View of the project site from N. Brown Street looking southwest towards the back of the existing ProLite Signs building.



PHOTO 8: View from N. Harris Street, looking east down the alley between E. Eighth Street and E. Seventh Street.



Figure 2.2-2d PROJECT SITE PHOTOGRAPHS



PHOTO 9: View from N. Brown Street looking northwest towards the project site and E. Eighth Street.



 $\ensuremath{\text{PHOTO}}$ 10: View from the alley north of E. Eighth Street, looking southwest towards the project site.



PHOTO 11: View of abandoned building along E. Eighth Street.



PHOTO 12: View from within the project site looking north.



Figure 2.2-2e PROJECT SITE PHOTOGRAPHS



PHOTO 13: View from within the project site facing southwest.



PHOTO 15: View of boarded-up building to the west of the project site.



PHOTO 14: View of E. Eighth Street looking west from the intersection of E. Eighth Street and N. Douty Street.



PHOTO 16: View of E. Eighth Street and project site from the intersection of E. Eighth Street and N. Brown Street, looking west.



Figure 2.2-3 GENERAL PLAN LAND USE DESIGNATION







Figure 2.2-4 PROPOSED PROJECT SITE ZONING DESIGNATION

R-H High Density Residential

C-R Regional Commercial

C-S Service Commercial

C-H Highway Commercial MX-N Neighborhood Mixed Use

C-N Neighborhood Commercial

1,260 Feet

360 Meters

630

180

0

0

R-L-8 Low Density Residential - 8.000 SF min

R-L-5 Low Density Residential - 5,000 SF min. R-M Medium Density Residential

UltraSystems

Historic District Boundary

Project Boundary

Downtown East Overlay District Airport Overlay District

MX-D Downtown Mixed Use

O-R Office Residential

O Office

I-L Light Industrial

I-H Heavy Industrial P-F Public Facilities

AP Airport Protection

CO Conservation





<u>Figure 2.2-5</u> DOWNTOWN EAST PRECISE PLAN



Sources: City of Hanford General Plan – Downtown East Precise Plan, March 2014



KART Transit Station

Zoning – Downtown East Precise Plan



2.3 Existing Characteristics of the Site

2.3.1 Climate and Air Quality

The project site is located within the San Joaquin Valley Air Basin (SJVAB). The SJVAB occupies the southern half of the Central Valley and is the second largest air basin in the state. The San Joaquin Valley Air Pollution Control District is made up of eight counties in California's Central Valley: San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare and the San Joaquin Valley Air Basin port of Kern. The SJVAB is approximately 250 miles long and is shaped like a narrow bowl. The sides and southern boundary of the "bowl" are bordered by mountain ranges. Weather conditions include frequent temperature inversions, long, hot summers, and stagnant, foggy winters, all of which are conducive to the formation and retention of air pollutants. The SJVAB has been attainment for Carbon Monoxide (CO) since 1994 and recently reached attainment for the federal PM₁₀ standard in 2008. However, as a whole, the SJVAB fails to meet national ambient air quality standards for ozone and fine particulate matter (PM_{2.5}), and is classified as a "nonattainment area" for those pollutants (SJVAPCD, 2019a).

2.3.2 Geology and Soils

There are no major active faults within Kings County, though there are areas of minor faulting occurring primarily in the southwestern part of the county. The San Andreas fault is located less than four miles west of the Kings County line (Quad Knopf, 2014, p. 7-6).

Soils in the area are characterized as alluvial fans and floodplain soils in the middle of the San Joaquin Valley (County of Kings, 2010, p. RC-24). The City is underlain by alluvial fan surfaces mantled with very deep, well-drained, saline-alkali soils. These soils include two soil associations: Nord and Kimberlina-Garces (Quad Knopf, 2014, p. 5-2).

2.3.3 Hydrology

Hanford is located in the Tulare Lake Hydrologic Study Area (TLHSA) which encompasses the southern portion of the San Joaquin Valley and adjacent mountain slopes. Most surface water in the TLHSA originates as precipitation in the Sierra Nevada Mountain Range (Quad Knopf, 2014, p. 5-12).

The City has four major watersheds that collect and convey stormwater runoff. The project site is located within the Sand Slough Watershed. The Sand Slough Watershed generally convers the eastern half of the City limits (AKEL Engineering Group, Inc., 2017a, p. 2-3). The nearest major waterway to the City is Kings River which runs southwest about five miles north of the City (Quad Knopf, 2014, p. 6-13). There are two major irrigation ditches that flow through the City; they are the Lakeside Ditch and Peoples Ditch. Peoples Ditch, which is supplied by the Kings River, splits into two parts north of the City. The irrigation ditch closest to the project site is the East Peoples Ditch branch, which flows southward through the center of the city ending at a basin just south of State Highway 198 (Quad Knopf, 2014, p. 6-13). The East Peoples Ditch branch is located approximately 0.5 mile east of the project site (Google Earth, 2019).

The City operates and maintains a storm drainage system that covers the majority of the City limits, including the project site. Currently, stormwater runoff discharges to detention basins and canals that are located throughout the City (AKEL Engineering Group, Inc., 2017a, p. ES-2).



The City is located over the San Joaquin Valley groundwater basin. This basin has an estimated storage of 570 million acre-feet with an estimated useable capacity of 80 million acre-feet (Quad Knopf, 2014, p. 5-12).

2.3.4 Biology

The project site is located in a highly urbanized area, which provides low habitat value for special-status plant and wildlife species. The project site contains structures, sidewalks, multiple paved areas with impervious surfaces, and lacks suitable soils, biological resources, and physical features to support any candidate, sensitive, or special-status plant and animal species. However, the project site contains ornamental vegetation and building structures that could potentially provide cover and nesting habitat for bird species that have adapted to urban areas, such as rock pigeons (*Columba livia*) and mourning doves (*Zenaida macroura*). The vegetation could also be utilized by bats, including the Hoary Bat (*Lasiurus cinereus*) which has been found in urbanized areas, including the central area of the City (Quad Knopf, 2014, p. 5-16).

2.3.5 Public Services

The City is served by a full range of public services. Fire prevention, fire protection and emergency medical service (EMS) for the city of Hanford is provided by the Hanford Fire Department. The department has two fire stations and 27 fire suppression personnel. Station 1 is located at 350 W. Grangeville Boulevard and Station 2 at 10553 Houston Avenue (Quad Knopf, 2014, p. 6-29). The Hanford Police Department (HPD) provides police and law enforcement services from a single station located at 425 North Irwin Street (Quad Knopf, 2014, p. 6-20). Recreational services within the city of Hanford are operated by the City's Recreation Department, which maintains 21 parks and five indoor facilities (Quad Knopf, 2014, p. 5-26). Library services within the city are provided by the Hanford Branch of the Kings County Library system, which is located in downtown Hanford at 401 N. Douty Street (Quad Knopf, 2014, p. 6-39).

2.3.6 Utilities

The City manages the water supply for the city, including the project area. The City maintains 206 miles of main lines and 15,870 service connections (Quad Knopf, 2014, p. 6-6). The City also provides domestic wastewater treatment services for the entire city. Hanford's existing wastewater system includes a treatment facility south of Houston Avenue and east of 11th Avenue, and 21 sanitary sewer lift stations at various locations throughout the city (Quad Knopf, 2014, p. 6-9). Solid waste disposal services for Hanford are provided by Kings Waste Recycling Authority (KWRA), which is managed by the Kings County Waste Management Authority. KWRA operates a solid waste disposal and recycling facility at 7803 Hanford-Armona Road, in the southeastern portion of the city (Quad Knopf, 2014, p. 6-17). Electrical service to the site is provided by Southern California Edison Company via 12 kV and 66 kV lines. Natural gas is provided by Southern California Gas Company, which maintains a local system of transmission lines, distribution lines and supply regulation stations (Quad Knopf, 2014, p. 6-19).

The City operates and maintains a storm drainage system covering the majority of the City, including the project site (AKEL Engineering Group, Inc., 2017a, p. ES-2). The major irrigation ditches that flow through the city are operated and maintained privately by Lakeside Water District and the Peoples Ditch Company (Quad Knopf, 2014, p. 6-13). Stormwater runoff generated on the project site under current conditions generally is carried by building gutters or sheet flow off of the site and onto the adjacent streets where it enters the storm drain collection system.


3.0 **PROJECT DESCRIPTION**

3.1 Project Background

Kings County Area Public Transit Agency (KCAPTA) is the Lead Agency under the California Environmental Quality Act (CEQA). The City of Hanford is the Responsible Agency for the project.

The existing Kings Area Rural Transit (KART) Transit Station is approximately 1.1 acres in size and is located at 504 West 7th Street in the City of Hanford in Kings County, California. The existing station is located adjacent to the Hanford Amtrak station and supports 2,000 daily riders with ten bus bays and one street-side bus shelter. The BNSF Railway Company (BNSF), formerly known as The Burlington Northern and Santa Fe Railway Company (BNSF Railway), commercial businesses, and a major roadway surround the existing transit station. Due to the limited space on the existing site and a desire to add more service, the existing KART Transit Station is no longer able to accommodate the communities' and KART's needs (Mott MacDonald, 2018, p. 1).

In 2018 Mott MacDonald prepared the KART Transit Station Site Selection Study to identify a new multimodal station location that can enhance KART ridership while also ensuring existing riders of Amtrak and future ridership of the Cross Valley Rail Corridor and California High-Speed Rail are supported (Mott MacDonald, 2018, p. 1). Refer to **Appendix A** of this document, which contains the KART Transit Station Site Selection Study.

The KART Transit Station Site Selection Study was completed in three phases (Mott MacDonald, 2018, p. 1):

- Phase 1: Potential Site Identification Identify potential transit facility sites to accommodate KCAPTA's transit and administrative needs.
- Phase 2: Preferred Sites Selection Evaluate the initially identified sites and narrow down the initial sites to three preferred site alternatives to be refined and shared with stakeholders.
- Phase 3: Recommended Site Selection Evaluate the preferred sites and select one recommended site to be carried forward into further design and implementation.

The KART Transit Station Site Selection Study recommended the preferred "Site 7". The project sponsor, KCAPTA, plans to purchase several properties, as a portion of the preferred "Site 7" identified in the 2018 Final KART Transit Station Site Selection Study, for the future construction of a new transit center with commercial/office buildings. Site 7 spans approximately five acress currently divided into 16 separate lots and developed with residences, commercial uses and pavement. Of the 16 lots on Site 7, KCAPTA plans to purchase only 13 lots for the proposed project. As a result, the preliminary site plan for Site 7 has undergone revisions for the proposed transit center. Therefore, the proposed project analyzed in this document differs from the Site 7 project description in the 2018 Final KART Transit Station Site Selection Study.

KCAPTA will be using local, state and federal funding for the project, which is proposed to start construction in fiscal year 2020/2021 and be completed in fiscal year 2021/2022.



3.2 Existing Transit System

KART began operations in June of 1980. The current location of the KART transit hub is at 504 W. 7th Street in Hanford. KART presently uses a fleet of vehicles ranging in size from 9- to 33-passenger buses to provide transit services. An independent contractor provides maintenance and operating services. KCAPTA provides buses, radios, fareboxes, video surveillance system, street furnishings, published information, and fare passes to the public.

KART offers fixed-route and paratransit services. The paratransit services are available daily in Hanford, Lemoore, and Armona. There are regular Hanford Area, Hanford-Lemoore, Hanford-Avenal, Hanford-Corcoran, Hanford-Laton, Hanford-Visalia, and Hanford-Fresno fixed-route services, along with commuter service to Corcoran State Prison.

The fixed route service consists of 17 routes. Operating hours are approximately 6:30 a.m. to 10:00 p.m., Monday through Friday, excluding holidays, and 9:30 a.m. to 5:00 p.m. on Saturdays. Sixteen buses operate during peak level service. This schedule results in an annual total of about 49,000 vehicle revenue hours and 832,912 vehicle revenue miles.

The paratransit service operates up to six vehicles. Operating hours are approximately from 6:30 a.m. to 10:00 p.m., Monday through Friday, excluding holidays, and 9:30 a.m. to 5:00 p.m. on Saturdays. The paratransit service may operate approximately 5,900 revenue vehicle hours and 68,546 vehicle revenue miles. Upon development of the proposed project (described below), the property where the existing transit station is located will be sold.

3.3 **Project Overview**

The Kings County Area Public Transit Agency is processing a request to implement a series of discretionary actions that would allow for the construction of the KART Transit Project. The proposed project would include the demolition of existing structures and construction of a new transit station and commercial development. The approximately four-acre project site is located in the downtown area of the City of Hanford, CA, and has been previously developed. The project site borders other commercial land uses and is located in the Downtown Mixed-Use Zoning District (MX-D). The City's General Plan land use designation for the project site is Downtown Mixed Use.

The proposed project would consist of an approximately 19,000-square-foot Transit Station Building, offsite parking, and onsite bus parking. The transit building includes 6,900 square feet on the first floor, 5,516 square feet on the second, and 6,557 square feet on the third floor, totaling approximately 19,000 square feet for the entire building. A detailed floor plan for the ground floor of the transit building was developed, as shown in Figure 7-4 of the KART Transit Station Site Selection Study, as well as an overview of second floor where KART and KCAPTA offices would be located. The ground floor includes space for KART bus operators, a training room, a large central waiting area with an information kiosk, and additional meeting spaces with movable walls to accommodate events of varying sizes. The open atrium in the center waiting area would extend to the second floor. The third floor would be similar to the second without the open atrium, and would contain office space leasable to tenants. The modern exterior design of the building reflects the goals and objectives of KCAPTA (Mott MacDonald, 2018, pp. 60-61).

The proposed project includes 21 sawtooth bus bays, 17 staff parking spaces, eight secure staff parking spaces, and 105 park-and-ride spaces for transit users. Additionally, two electric bus



chargers and two electric car chargers would be constructed onsite. The project also proposes public restrooms and a drinking fountain.

The existing Transit Center serves as a transfer point for eleven local routes and five regional routes and is located adjacent to the Hanford Amtrak station (HNF) and an at-grade railroad crossing. Existing area constraints limits KART service to one-hour headways⁶ for each route. As the existing transit center is not able to serve the expansion and improvement plans of KART, a new site has been identified that would allow KART to increase service frequency to provide 30-minute headways for local Hanford routes to better serve the transit needs of the community. The proposed project would increase service by decreasing headways. The traffic report conducted for the proposed project assumed that the headways for each fixed route would be halved, meaning that the number of buses accessing the relocated transit center could double. This is a "worst case" analysis of potential project impacts. The number of riders using the park-and-ride facilities could also increase.

Table 3.3-1 summarizes the proposed project features, and **Figure 3.3-1** depicts the proposed project site plan.

New Construction	Proposed Uses/Features	Area (Square Feet)	No. of Stories
	First floor: central waiting area, meeting rooms, break area, training room	6,900	
Transit Station Building	Second floor: office space	5,516	3
	Third floor: leasable office space	6,557	
	Total	18,973	
New offsite parking located north of 8th Street	Public parking spaces: Regular ADA	84 total spaces 79 spaces 5 spaces	Not Applicable
	Sawtooth bus bays	21 total bus bays	
	Staff parking spaces:	19 total spaces	
	Regular	17 spaces	
Onsite bus parking	ADA	2 spaces	Not
located south of 8th Street	Secure employee parking	8 total spaces	Applicable
	Public parking spaces:	30 total spaces	
	Regular	26 spaces	
	ADA	4 spaces	
Electric Charging Stations	Bus Chargers	2 Chargers	Not
	Car Chargers	2 Chargers	Applicable

<u>Table 3.3-1</u> PROJECT SUMMARY

Source: UltraSystems, 2019

⁶ A headway is the amount of time between transit vehicle arrivals at a stop. For example, route that has a bus arrive once per hour would have a 60-minute headway.



<u>Figure 3.3-1</u> PROPOSED SITE PLAN



Sources: Kings County Area Public Transit Agency, July 26, 2018



KART Transit Station

Station Layout

Page 3-4 November 2019



3.4 **Project Objectives**

The project is a design-build project to construct a transit station with indoor wait area and administrative/office space. The underlying purpose of the project is to provide a new multimodal transit station that can enhance KART ridership while also ensuring existing riders of Amtrak and future ridership of the Cross Valley Rail Corridor and California High-Speed Rail are supported. The project applicant has identified the objectives listed below for the project. These objectives will aid decision-makers in their review of the project, the project alternatives, and associated environmental impacts:

- 1. To improve transit service efficiency
- 2. To expand transit service
- 3. To enhance access to social services
- 4. To encourage revitalization and economic development in the City of Hanford

3.5 Proposed Project Features

3.5.1 New Construction

The conceptual rendering in **Figure 3.5-1** provides an illustrative example of the proposed KART transit station. This is a very preliminary conceptual rendering and is subject to change. The existing alley bisects the site from Harris Street to Brown Street, and developing surface parking in this area would not conflict with existing utility lines in the alley (Mott MacDonald, 2018, p. 57).

3.5.2 Employees

KCAPTA has six employees who would work Monday – Friday from 7:30 a.m. to 5:30 p.m. There would be 32 bus operators, who would utilize the break room/lunch area onsite. The bus operators would not park at the project site; they would park at the Bus Yard located at 610 West Davis Street in Hanford. The first shift of bus drivers would drive the bus from the Bus Yard to the proposed station. During shift change, MV Transportation Inc.⁷ would provide a shuttle vehicle from and to the Bus Yard. At the end of the day the bus driver would drive the bus back to the Bus Yard. One security personnel would patrol the project area and utilize the break room onsite. There would be one onsite employee who would sell tickets/concessions and answer questions⁸.

3.5.3 Hours of Operation

Hours of operation for the transit facility and for bus operation would be from 5:30 a.m. to 11:00 p.m., Monday through Friday and from 9:30 a.m. to 5:00 p.m. on Saturday. Administrative operations would be from 7:30 a.m. to 5:30 p.m. Monday through Friday (Dow, 2019a).

⁷ MV Transportation, Inc. is the contractor for the bus operations (bus driver, dispatch staff, and maintenance staff).

⁸ There would only be one security person on site at a time and there would only be one person selling tickets/concessions at a time.



Figure 3.5-1 PRELIMINARY CONCEPTUAL RENDERING





KART Transit Station

KART Transit Project Conceptual Rendering



3.5.4 Site Access, Circulation and Parking

A public plaza that could be programmed with drought-tolerant landscaping and additional seating areas would be located near the separate kiss-and-ride drop-off area just southwest of the transit building (Mott MacDonald, 2018, p. 58).

3.5.5 Landscaping

The landscaping plan for the project would follow City of Hanford requirements for landscaping and drought-tolerant/resistant plants. The City of Hanford Municipal Code Chapter 17.52, titled Landscape Standards, lists requirements relating to the quality, quantity, and functionality of landscaping for projects (City of Hanford Municipal Code Title 17 - Zoning Ordinance, 2017).

The proposed project would include the following required landscape features:

- Landscaping would be provided in setback areas and open space areas visible from a public right-of-way.
- Landscaping adjacent to driveways and parking would be protected by a minimum of six-inch-high and six-inch-wide concrete curb.
- Trees planted within five feet of sidewalks or curbs would have an 18-inch- by 10-foot-long linear root barrier placed at each edge of the sidewalk or face of curb, centered on the tree.
- A minimum of five percent of the interior square footage of a parking area would be landscaped.
- Parking areas are to have one tree placed at every four lineal parking spaces.

Plant materials would be selected and installed in accordance with the following requirements:

- 1. The size of ten percent of the trees to be planted would be 24-inch box or larger. The remaining trees would be sized 15 gallon or larger.
- 2. The size of 70 percent of plants and shrubs would be at five gallon or larger. The remaining plants and shrubs would be sized one gallon or larger.
- 3. The size of groundcover at planting would be one gallon or larger.
- 4. Groundcover would be designed to have 100 percent coverage within two years.
- **5.** Drought tolerant plant material and climate appropriate species would be emphasized in the design.

3.5.6 Exterior Lighting

The specifics of the exterior lighting are unknown at this time. However, the proposed project would comply with the City of Hanford Zoning Ordinance Section 17.50.140.



- Exterior lighting would be located to minimize light trespassing across property boundaries or skyward.
- All outdoor fixture lighting would be a fully shielded fixture and focused to minimize light trespass and glare.
- Outdoor lighting fixtures would be turned off after close-of-business unless needed for safety or security, in which case the lighting would be activated by motion sensor devices.
- Lighting for signs and decorative effects for building and landscape would be fully shielded fixtures equipped with automatic timing devices and focused to minimize light glare and light trespass.

3.5.7 Vehicle Charging

It is anticipated that the proposed project would include plug-in chargers for the electric buses and plug-in chargers for electric vehicles in the public parking area (Dow, 2019a).

3.5.8 Solar Panels

The proposed project includes use of solar energy which is anticipated via the construction of solar panels on the project site. Solar panels would be constructed on the roof of the proposed building and the covered waiting area.

3.5.9 Perimeter Fencing and Exterior Walls

The type of perimeter fencing and exterior walls is unknown at this time. However, it is anticipated that fencing would be used around the perimeter of the project site.

3.5.10 Offsite Improvements and Potential Future Property Acquisition

Currently, no offsite improvements are anticipated for the proposed project other than potential work to be done in the public right-of-way of adjacent streets for potential installation of utility infrastructure such as water lines, sewer lines, electrical, natural gas, or stormwater improvements. Bus drivers would park offsite at the Bus Yard but no improvements to the offsite Bus Yard would occur. This is an existing Bus Yard, the operation of which would not change with the proposed project⁹.

Three properties located on north 8th street (APNs 010275015000, 010275006000, and 010275007000) would be acquired, if they became available for sale, for future development of additional parking for the proposed project.

3.5.11 Utilities

Upon review of existing utilities and anticipated utilities in the new buildings, a utility plan will be developed in consultation with the project's utility consultant and the local service providers for wet and dry utilities.

⁹ Per email correspondence between Margaret Partridge of UltraSystems and with Angie Dow of KCAPTA on June 12, 2019.



Water

Water to the project site is currently provided by the City of Hanford Public Works Department (City of Hanford, 2017). Offsite mainline water system improvements may be necessary within the street right-of-way to accommodate the project.

Dry Utilities

Electricity is provided to the project site by Pacific Gas and Electric Co. and Southern California Edison (City of Hanford, 2017). Natural gas is provided to the project site by Southern California Gas Company (SoCalGas) (City of Hanford, 2017). Offsite mainline electrical or natural gas improvements may be necessary within the street right-of-way to accommodate the project. It is anticipated that electric upgrades (including but not limited to electrical transformers) will be necessary to accommodate bus charging at the project site.

Storm Water

It is estimated that the project's post development storm water run-off flowing into drainage infrastructure, per regulatory requirements, would not exceed the amount of runoff currently generated on the project site. Some offsite storm drain improvements may be necessary within the street right-of-way to accommodate the project. During the design phase the location and details regarding storm drain improvements would be determined.

3.6 Construction Activities

After environmental analysis for the project has been completed and after property acquisition (all property between 7th & 8th, as well as vacant properties on the north side of 8th street), construction/development activities would occur in the following phases: Phase I- Demolition; Phase II- Design/Build.

3.6.1 Phase I - Demolition

The project would be constructed in two phases. The first phase (demolition) would include the land located north of 7th Street, south of 8th Street, west of Brown Street, and east of Harris Street. The second phase of demolition would include the land located north of 8th Street (up to the existing alley), west of Brown Street, and east of North Harris Street. Construction workers would park their vehicles on the project site during construction (Dow, 2019a).

3.6.2 Phase II - Design Build

This phase involves the design and construction of the proposed KART Transit Station.

3.6.3 Construction Schedule

Construction is scheduled to start in fiscal year 2021 and be completed by 2022. It is estimated that construction would be from July 1, 2021 through June 30, 2022 (Dow, 2019a), although preliminary analysis with the CalEEMod emissions model indicates that the completion date may be late August of 2022.



3.6.4 Construction Equipment

Construction equipment to be used onsite is not known at this time (i.e. the time when the project description was written); however, based on the type of land use and the scope of the proposed project, construction activities would involve demolition of existing buildings, grading, compaction, trenching, cement/asphalt pouring, building foundation, construction of a multi-story (two or three story) building. Additionally, it is assumed as a worst-case analysis, that jackhammers and concrete saws would be used as part of the project construction (Dow, 2019a). Equipment typically used during project construction includes but is not limited to:

- Air Compressors
- Cement & Mortar Mixers
- Concrete/Industrial Saws
- Cranes
- Excavators
- Forklifts
- Generator Sets
- Graders
- Pavers
- Paving Equipment
- Rollers
- Rubber-Tired Dozers
- Tractors/Loaders/Backhoes
- Welders

Details of equipment deployment, including a schedule, are presented in **Section 4.3**.

3.7 Discretionary Actions

The project site's zoning designation is Downtown Mixed-Use Zoning District (MX-D). Professional or commercial offices are permitted in the MX-D zone with a permit and Bus, transit, or train station is a permitted use in the MX-D Zone (City of Hanford Municipal Code Title 17 - Zoning Ordinance, 2017).

The project site's General Plan land use designation is Downtown Mixed Use. Policy L70 (Typical Uses in Downtown Mixed-Use Land Use Designation) "Define the uses allowed in the Downtown Mixed-Use land use designation to include a wide range of retail, financial, governmental, professional, business, service, dining, and entertainment activities, along with high density residential dwellings. Typical uses include small retail shops, eating and drinking establishments, townhomes, apartments, markets, professional services, convenience stores, beauty salons, and other similar uses. Vertical and horizontal mixed-use developments are encouraged" (Quad Knopf, 2017, p. 37).

No general plan amendment or zone change would be required for the project. Approvals and entitlement requests associated with this development are described below.



3.7.1 Other Permits and Approvals

Following Lead Agency approval of the Initial Study, the following permits and approvals would be required prior to construction, as shown in **Table 3.7-1** below.

Agency	Permit or Approval
City of Hanford Building Division	Demolition Permits, Grading Permits, Site Plan review and approval, and Building Permits
City of Hanford Fire Department	Building plan check and approval. Review for compliance with the 2016 California Fire Code, 2016 California Building Code, California Health & Safety Code and Hanford Municipal Code. Plans for fire detection and alarm systems, and automatic sprinklers.
San Joaquin Valley Air Pollution Control District (SJVAPCD)	Permits required by the SJVAPCD for stationary sources of power generation, if applicable.
City of Hanford Public Works Department ¹⁰	Letter of authorization/consent for proposed improvements to provide water supply connection to new development.
Pacific Gas & Electric Company (PG&E) ¹¹	Letter of authorization/consent for proposed improvements to provide natural gas connection to new development.
Southern California Edison ¹²	Letter of authorization/consent for proposed improvements to provide electrical connection to new development, including electric bus inline charging.
California State Water Resources Control Board (SWRCB)	Dischargers whose projects disturb one or more acres of soil are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ).

<u>Table 3.7-1</u> PERMITS AND APPROVALS

¹⁰ City of Hanford Public Works Department, 2017.

¹¹ PG&E provides gas service to the City of Hanford (PG&E, 2014).

¹² Southern California Edison provides power to sites north of Iona Avenue and south of Flint Avenue in the City of Hanford via 12 kilo-volt (kV) and 66kV lines (Quad Knopf, 2014, pp. 6-19 and 6-20).



4.0 ENVIRONMENTAL CHECKLIST

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" or as a "Potentially Significant Unless Mitigation Incorporated," as indicated by the checklist on the following pages.

Aesthetics Biological Resources Geology / Soils Hydrology / Water Quality Noise Recreation	Agricultural and Forest Resources Cultural Resources Greenhouse Gas Emissions Land Use / Planning Population / Housing Transportation		Air Quality Energy Hazards & Hazardous Materials Mineral Resources Public Services Tribal Cultural Resources
Utilities/Service Systems	Wildfire	\boxtimes	Mandatory Findings of Significance

Determination (To Be Completed by the Lead Agency)

On the basis of this initial evaluation:

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

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

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

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

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

Signature

Printed Name

Ctober 17, 2019

Date

Kings County Area Public Transit Agency For



Evaluation of Environmental Impacts

- (1) 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 would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- (2) All answers must take into account the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- (3) 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.
- (4) "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 less than significant level.
- (5) Earlier analyses may be use where, pursuant to the tiering, Program EIR, or other CEQA process, an affect has been adequately analyzed in an earlier EIR or negative declaration. (See Section 15063(c)(3)(D) of the CEQA Guidelines. In this case, a brief discussion should identify the following:
 - (a) Earlier Analyses Used. Identify and state where the earlier analysis 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 that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- (6) 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. A source list should be attached and other sources used or individuals contacted should be cited in the discussion.



- (7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- (8) 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.
- (9) 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



4.1 Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
 a) Have a substantial adverse effect on a scenic vista? 				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
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?			Х	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			Х	

A "visual environment" includes the built environment (development patterns, buildings, parking areas, and circulation elements) and natural environment (such as hills, vegetation, rock outcroppings, drainage pathways, and soils) features. Visual quality, viewer groups and sensitivity, duration, and visual resources characterize views. Visual quality refers to the general aesthetic quality of a view, such as vividness, intactness, and unity. Viewer groups identify who is most likely to experience the view. High-sensitivity land uses include residences, schools, playgrounds, religious institutions, and passive outdoor spaces such as parks, playgrounds, and recreation areas. Duration of a view is the amount of time that a particular view can be seen by a specific viewer group. Visual resources refer to unique views, and views identified in local plans, from scenic highways, or of specific unique structures or landscape features.

a) Except as provided in Public Resources Code Section 21099 would the project have a substantial adverse effect on a scenic vista?

<u>No Impact</u>

Scenic vistas generally include extensive panoramic views of natural features, unusual terrain, or unique urban or historic features, for which the field of view can be wide and extend into the distance, and focal views that focus on a particular object, scene or feature of interest.



The project site is located in an area of Hanford that is characterized by flat topography and urban development. The project site is adjacent to parcels with commercial and light industrial uses to the south, east, and west; single-family residential homes are located to the east and north. No scenic resources or vistas are located in the project site area (Quad Knopf, 2014, p. 5-23); therefore, development of the proposed project would not result in impacts on scenic vistas.

b) Except as provided in Public Resources Code Section 21099, would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

<u>No Impact</u>

The California Department of Transportation (Caltrans) provides information regarding officially designated or eligible state scenic highways, designated as part of the California Scenic Highway Program. According to Caltrans, there are no officially designated scenic highways within or adjacent to the project area; however, SR 198 from Highway 101 to Sequoia National Park is eligible for scenic highway status (Quad Knopf, 2014, p. 5-23). While the project site is located approximately 0.25 mile north of State Route (SR) 198, it is not visible from SR 198 due to intervening topography and structures. Therefore, the project would have no impacts on trees, rock outcroppings and historic buildings within a state scenic highway.

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

Less than Significant Impact

The project site is located in an urban setting characterized by a mix of commercial and light industrial uses and single-family residential homes characterized by low height (one story) buildings. Views of the existing streetscape are characterized by low height buildings that are generally one or two story with a few three-story buildings. As discussed above, there are no scenic views available from public roads in the project area. Refer to **Table 4.1-1** below, which describes the existing visual character in the vicinity of the project site.

Construction of the proposed project would include views associated with construction activities, construction staging areas, grading, excavation, construction equipment, material storage areas, construction debris, exposed trenches, etc. Project construction could temporarily degrade the existing visual character of the project area and its immediate surroundings. This impact would be short term and these elements would be removed following construction; therefore, short term visual impacts during the construction phase would be less than significant.

The proposed project would consist of an approximately 19,000-square-foot, three-story Transit Station Building, offsite parking, and onsite bus parking. The modern exterior design of the building reflects the goals and objectives of KCAPTA, including use of frontage type and exterior construction materials selected from the Downtown East Precise Plan (Mott MacDonald, 2018, pp. 60-61 and 65). The proposed project also includes 21 sawtooth bus bays, 17 staff parking spaces, eight secure staff parking spaces, and 105 park-and-ride spaces for transit users. Additionally, two electric bus chargers and two electric car chargers would be constructed onsite.



Proposed new landscaping would follow City of Hanford requirements for landscaping and drought-tolerant/resistant plants. Landscaping would be provided in all setback areas and open space areas visible from a public right-of-way and would include street and parking lot trees.

While the distribution of parking and building areas would change from the project site's existing conditions, the project would not be out of character with the surrounding area, which contains a mix of land uses including commercial, light industrial and residential uses.

While the project would involve the demolition of existing commercial, light industrial, and residential buildings, it would involve the development of a new three-story building, and would not represent an adverse impact or degradation in the existing visual character of the site and its surroundings.

In addition, the proposed project land use and design would be consistent with applicable zoning and land use designations and design guidelines for the project site. As discussed above, the project was designed to be consistent with the development regulations of the Downtown East Precise Plan (Mott MacDonald, 2018, pp. 65). Downtown East Precise Plan development regulations include allowed buildings and uses within the Plan Area; frontage type standards; building materials; and landscaping (Zumwalt-Hansen/Quad Knopf, Inc, 2013). The project site's zoning designation is Downtown Mixed-Use Zoning District (MX-D). Professional or commercial offices are permitted in the MX-D zone with a permit and bus, transit, or train station is a permitted use in the MX-D Zone (City of Hanford Municipal Code Title 17 - Zoning Ordinance, 2017).

The Frontage Type Standards for the Plan area ensure that proposed development is consistent with the City's objectives for building form, physical character, and quality (Zumwalt-Hansen/Quad Knopf, Inc, 2013, pg. 4-19). The project will utilize one of the Downtown East Precise Plan's frontage types (Mott MacDonald, 2018, pp. 65), such as the forecourt frontage shown in the preliminary conceptual rendering; see **Figure 3.4-1**. The project will also use one or more of the building materials identified in the Downtown East Precise Plan (Zumwalt-Hansen/Quad Knopf, Inc, 2013, pg.4-15) for the exterior of buildings (Mott MacDonald, 2018, pp. 65). The project will use drought-tolerant landscaping and will install street trees within the street rights of way; they are as follows: Chinese Pistache (*Pistacia chinensis*) within 7th Street and Brown Street; and, Maidenhair Tree (*Gingko biloba*) within Harris Street (Mott MacDonald, 2018, pp. 65), consistent with the requirements of the Downtown East Precise Plan (Zumwalt-Hansen/Quad Knopf, Inc, 2013, pg.4-32).

Based on the above analysis, the proposed project is in an urbanized area and would not conflict with applicable zoning and other regulations governing scenic quality, resulting in a less than significant impact.



Table 4.1-1EXISTING VISUAL CHARACTER AND LAND USES IN THE PROJECT AREA

Location	General Characteristics	Existing Lighting	Building Height and Design	Landscaping
Project Site	Commercial and residential land uses	Exterior lighting associated with the commercial development and street lighting	One-story buildings	Few street trees adjacent to commercial land uses; trees, ornamental vegetation, and grass around residential land uses.
Surrounding	Areas			
North	Single-family and multi-family homes, Apostolic Assembly of the Faith in Christ Jesus	Exterior lighting associated with the residential and place of worship land uses, and street lighting	One- and two-story buildings	Trees, ornamental vegetation, and grass.
East	Single-family homes and commercial land uses	Exterior lighting associated with the residential and commercial land uses, and street lighting	One- and two-story buildings	Few street trees adjacent to commercial land uses; trees, ornamental vegetation, and grass around residential land uses.
West	Commercial land uses	Exterior lighting associated with the commercial land uses and street lighting	One to three story buildings	Few street trees adjacent to commercial land uses.
South	Commercial land uses	Exterior lighting associated with the commercial land uses and street lighting	One- and two-story buildings	Few street trees adjacent to commercial land uses.

Source: UltraSystems, 2019 and Google Earth Pro, 2019.

Shadow-sensitive uses include all residential uses and routinely usable outdoor spaces associated with recreational or institutional uses, commercial uses such as pedestrian-oriented outdoor spaces or restaurants with outdoor eating areas, nurseries, and existing solar collectors. These uses are considered sensitive because sunlight is important to function, physical comfort, or commerce. Shade sensitive uses in the project vicinity are limited to the residential uses to the north and east of the project site (refer to **Table 4.1-1** above).

The project would increase shade and shadows, both on and offsite, compared to existing conditions. However, the portion of the project that would lead to this increase would be the three-story structure proposed in the southern portion of the site, north of 7th street. There are no shade sensitive uses located adjacent to this portion of the site, that would be affected by the increased



shade and shadows that would be cast by the proposed building. The shade sensitive residential uses located to the north and east would be adjacent to the proposed surface parking lots and bus bays. Therefore, the proposed project would have a less than significant impact regarding shade and shadow on adjacent residences.

For the reasons listed above, the proposed project would have a less than significant impact on the visual character or quality of the site and its surroundings.

d) Except as provided in Public Resources Code Section 21099, would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant Impact

The project site is located in an urban area, which is characterized by low to medium nighttime ambient light levels. Street lights, traffic on local streets and exterior lighting in surrounding developments are the primary sources of light that contribute to the ambient light levels in the project area. Light-sensitive uses in the project vicinity are limited to residential uses located to the north and east of the project site.

The proposed project would involve installation of lighting on the building exterior and parking lot lighting necessary for safety and nighttime visibility throughout the project site. The new project lighting would be visible from the surrounding area. Therefore, the project's proposed exterior lighting is expected to contribute to ambient nighttime illumination in the project vicinity.

The specifics of the exterior lighting are unknown at this time. However, the proposed project would be required to comply with the City of Hanford Zoning Ordinance Section 17.50.140 (City of Hanford Zoning Outdoor Lighting Standards, 2017) as follows:

- Exterior lighting would be located to minimize light trespassing across property boundaries or skyward
- All outdoor fixture lighting would utilize a fully shielded fixture and focused to minimize light trespass and glare.
- Outdoor lighting fixtures would be turned off after close-of-business unless needed for safety or security, in which case the lighting would be activated by motion sensor devices.
- Lighting for signs and decorative effects for building and landscape would be fully shielded fixtures equipped with automatic timing devices and focused to minimize light glare and light trespass.

Outdoor lighting fixtures would be installed in accordance with the City of Hanford Zoning Ordinance § 17.50.140 to ensure that the light does not illuminate nearby and adjacent properties and residences.

The proposed project would introduce new outdoor artificial lighting elements, which have the potential to result in glare if the main beams of proposed lighting elements (i.e., the portion of the lamp with the greatest illuminance) are visible from offsite locations, resulting in excessive, uncontrolled brightness. However, many of the same design features described above that would



minimize light trespass also would minimize glare impacts. Glare could be produced from highly reflective building materials; however, the project would not result in significant glare impacts because it would use building materials identified in the Downtown East Precise Plan which do not include highly reflective building materials (Zumwalt-Hansen/Quad Knopf, Inc, 2013, pg.4-15).

Adherence to this ordinance would ensure that new sources of light or glare would not adversely affect day or nighttime views in the area. Therefore, impacts from a new source of substantial light or glare would be less than significant.



4.2 Agriculture and Forestry Resources

	Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
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?				X
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 § 12220(g)), timberland (as defined by Public Resources Codes § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g))?				X
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				x
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

a) Would the project 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?

<u>No Impact</u>

The California Department of Conservation (DOC) established the Farmland Mapping and Monitoring Program (FMMP) in 1982 to identify critical agricultural lands and track the conversion of these lands to other uses. The FMMP is a non-regulatory program and provides a consistent and impartial analysis of agricultural land use and land use changes throughout California. The project site is located east of Harris Street, west of Brown Street, north of East 7th Street, and south of the alley located between 9th Street and 8th Street in the City of Hanford, CA. As shown in **Figure 4.2-1**, the project site and surrounding uses are designated by the FMMP as "Urban and Built-Up Land," which means that no agricultural uses occupy the site (California Department of Conservation, 2016a). The proposed project is located within an urbanized area, and all construction activities and



improvements would occur within the site or the adjacent streets. Therefore, no farmland would be converted to non-agricultural use and no impact would occur.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

<u>No Impact</u>

As shown in **Figure 4.2-2**, according to the 2015/2016 Kings County Williamson Act Contract Land Map, the project site is identified as "Urban and Built-Up Land" and does not contain land enrolled in a Williamson Act contract (California Department of Conservation, 2016a). Under the City of Hanford General Plan, the project site and surrounding areas are designated as Downtown Mixed Use (MX-D). There are no current agricultural operations existing on or in the vicinity of the project site (Google Earth Pro, 2019). Therefore, the project would not conflict with existing zoning for agriculture uses or any Williamson Act contracts and no impact would occur.

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code § 12220(g)), timberland (as defined by Public Resources Codes § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g))?

<u>No Impact</u>

The project site is located in a highly-urbanized setting and is zoned as MX-D. The MX-D land use designation aims to create a pedestrian-oriented area of shopping, entertainment, restaurants, high-density housing, and office spaces (Quad Knopf, 2017). The site's existing zoning of "MX-D" does not support the definitions provided by PRC § 42526 for timberland, PRC § 12220(g) for forestland, or California Government Code § 51104(g) for timberland zoned for production. PRC § 12220(g) defines forest land as "land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits." Therefore, the proposed project would not conflict with existing zoning for forest land or timberland, and no impact would occur.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

<u>No Impact</u>

The project site includes parcels with vacant lots, pavement, and buildings. No forest land exists on the project site due to its urban and developed nature. Therefore, project implementation would not result in the loss of forest land or conversion of forest land to non-forest use, and no impact would occur.



e) Would the project 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?

<u>No Impact</u>

The project site is located within an urbanized setting. The site is surrounded by developed land, including commercial and residential uses. No farmland or forest land is located in the vicinity of the project site (Google Earth, 2019). Therefore, implementation of the proposed project would not result in changes to the environment, due to its location or nature, which could result in the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. No impact would occur.



Figure 4.2 -1 IMPORTANT FARMLAND CATEGORIES





<u>Figure 4.2 -2</u> WILLIAMSON ACT LANDS





4.3 Air Quality

Wo	ould the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Conflict with or obstruct implementation of the applicable air quality plan?			х	
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?			Х	
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	
Wh air	ere available, the significance criteria es pollution control district may be relied u	tablished by the upon to make th	e applicable air qua le following deterr	ality management ninations.	t district or

The information in this section is based on the analysis provided in the Air Quality and Greenhouse Gas Technical Report prepared for the proposed project and included as **Appendix D** of this IS/MND.

4.3.1 Pollutants of Concern

<u>Criteria Air Pollutants</u>

As required by the Federal Clean Air Act (FCAA), the U.S. Environmental Protection Agency (USEPA) has identified criteria pollutants and established National Ambient Air Quality Standards (NAAQS) to protect public health and welfare. NAAQS have been established for ozone, carbon monoxide (CO), NO₂, sulfur dioxide (SO₂), suspended particulate matter (PM), and lead. Suspended PM has standards for both PM with an aerodynamic diameter of 10 micrometers or less (respirable PM, or PM₁₀) and PM with an aerodynamic diameter of 2.5 micrometers or less (fine PM, or PM_{2.5}). The California Air Resources Board (ARB) has established separate standards for the state; i.e., the California Ambient Air Quality Standards (CAAQS). The ARB established CAAQS for all the federal pollutants and sulfates, hydrogen sulfide, and visibility-reducing particles. The current list of standards is presented in **Table 4.3-1**.



Air Pollutant	Averaging Time	California Standard	National Standard
Ozone (O ₃)	1-hour 8- hour	0.09 ppm 0.070 ppm	 0.070 ppm
Respirable particulate matter (PM10)	24-hour Annual Arithmetic Mean	50 μg/m³ 20 μg/m³	150 μg/m³ —
Fine particulate matter (PM _{2.5})	24-hour Annual Arithmetic Mean	 12 μg/m³	35 μg/m ³ 12.0 μg/m ³
Carbon monoxide (CO)	1-hour 8-hour	20 ppm 9.0 ppm	35 ppm 9 ppm
Nitrogen dioxide (NO2)	trogen dioxide (O ₂) 1-hour Annual Arithmetic Mean 0.18 ppm 0.030 ppm		100 ppb 0.053 ppm
Sulfur dioxide (SO2)	1-hour 24-hour	0.25 ppm 0.04 ppm	75 ppb
Lead	ead 30-day Average 1.5 µg/m ³ Average —		 0.15 μg/m³
Sulfates	24-hour	25 μg/m ³	
Hydrogen sulfide	1-hour	0.03 ppm	
Vinyl chloride [*] 24-hour		0.01 ppm	No
Visibility-reducing particles	8-hour	Extinction coefficient of 0.23 per kilometer, visibility of ten miles or more due to particles when relative humidity is less than 70%.	National Standard

<u>Table 4.3-1</u>
NATIONAL AND STATE AMBIENT AIR QUALITY STANDARDS ¹³

Abbreviations:

ppm = parts per millionppb = parts per billion30-day = 30-day average $\mu g/m^3$ = micrograms per cubic meterMean = Annual Arithmetic Mean

*The ARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

Nitrogen Oxide (NO_x)

 NO_x is the generic term for a group of highly reactive gases which contain nitrogen and oxygen. While most NO_x is colorless and odorless, highly concentrated NO_2 can often form a reddish-brown layer over many urban areas. NO_x forms when carbon-based fuel is burned at high temperatures, as in a combustion process. A review of the ARB's projected 2020 Emission Inventory (EI) for Kings

¹³ Ambient Air Quality Standards. California Air Resources Board. https://ww3.arb.ca.gov/research/aaqs/aaqs2.pdf. Revision 5/14/16. Accessed July 2019.



County¹⁴ shows that approximately 92% of the total NO_x emissions in Kings County come from onand offroad vehicles (37% from onroad and 55% from offroad). The largest portion of onroad NO_x emissions come from heavy-duty diesel trucks (73% of the total for onroad). The largest contributors from offroad sources are aircraft (52% of total offroad NOx) and farm equipment (33%).

For some of the pollutants, the identified air quality standards are expressed in more than one averaging time in order to address the typical exposures found in the environment. For example, CO standards are based on a one-hour averaging time and an eight-hour averaging time. Regulations have set NAAQS and CAAQS limits in parts per million (ppm) or micrograms per cubic meter (μ g/m³).

 NO_X reacts with other pollutants to form ground-level ozone, nitrate particles, acid aerosols, and NO_2 , all of which cause respiratory problems. NO_X and the pollutants formed from NO_X can be transported over long distances, following the patterns of prevailing winds. Therefore, controlling NO_X is often most effective if done from a regional perspective, rather than focusing on the nearest sources.

Current scientific evidence links short-term NO_2 exposures, ranging from 30 minutes to 24 hours, with adverse respiratory effects, including airway inflammation in healthy people and increased respiratory symptoms in people with asthma. Also, studies show a connection between breathing elevated short-term NO_2 concentrations and increased visits to emergency departments and hospital admissions for respiratory issues, especially asthma.¹⁵

<u>Ozone</u>

Ozone is not usually emitted directly into the air but is created at ground level by a chemical reaction between nitrogen oxides (NO_X) and volatile organic compounds (VOC), or ROG,¹⁶ in the presence of sunlight. Sources of primary NO_X and ROG emissions are discussed below.

Ground-level ozone is the primary constituent of smog. Sunlight and hot weather cause ground-level ozone to form, with the greatest concentrations usually occurring downwind from urban areas. Ozone is consequently considered a regional pollutant.

Breathing ozone can trigger a variety of health problems including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level ozone also can reduce lung function and inflame the linings of the lungs. Repeated exposure may permanently scar lung tissue. Ground-level ozone can also cause substantial damage to vegetation and other physical materials.

Because NO_X and ROG are ozone precursors, the health effects associated with ozone are also indirect health effects associated with significant levels of NO_X and ROG emissions.

Reactive Organic Gases (ROG)

ROG or VOCs are defined as any compound of carbon, excluding CO, carbon dioxide (CO₂), carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric

¹⁴ Almanac Emissions Projection Data. California Air Resources Board. http://www.arb.ca.gov/app/emsinv/. Accessed July 2019.

¹⁵ Health Effects of Nitrogen Dioxide. Environmental Protection Agency.

http://www.epa.gov/oaqps001/nitrogenoxides/health.html. Accessed September 2013.

¹⁶ For the most part, VOC and ROG are synonymous. Both are those portions of organic gases, i.e. hydrocarbons that are reactive enough to be a concern with the formation of ozone.



photochemical reactions. It should be noted that there are no state or national ambient air quality standards for ROG because they are not classified as criteria pollutants. They are regulated, however, because a reduction in ROG emissions reduces certain chemical reactions that contribute to the formation of ozone. ROG are also transformed in the atmosphere into organic aerosols, which contribute to higher PM_{10} and lower visibility. In addition, some compounds that make up ROG are also toxic, such as the carcinogen benzene, and are often evaluated as part of a toxic risk assessment.

ROG emissions result primarily from incomplete fuel combustion and the evaporation of chemical solvents and fuels. The 2020 Kings County EI shows that the miscellaneous processes category is the largest single contributor to ROG emissions, which represents 48% of the total ROG, with the largest component of this category being farming operations (98%). Another 20% are from other mobile sources and 11% is contributed by solvent evaporation.

Carbon monoxide (CO)

CO is a colorless, odorless gas produced by incomplete combustion of carbon-containing fuels (e.g., gasoline, diesel fuel, and biomass). CO levels tend to be highest during the winter months and when meteorological conditions, such as low wind speed, favor the accumulation of pollutants. This occurs when relatively low inversions trap pollutants near the ground and concentrate the CO.

A review of the 2020 Kings County EI shows that the primary source of CO is from "other mobile sources," which contribute 74% of the total CO in Kings County, of which 75% are generated by aircraft. On-road motor vehicles (primarily light duty cars and trucks) contribute another 20%. Higher levels of CO generally occur in areas with heavy traffic congestion.

CO is essentially inert to plants and materials but can have significant effects on human health. CO gas enters the body through the lungs, dissolves in the blood, and creates a solid bond to hemoglobin, not allowing it to form a loose bond with O₂. This firm binding therefore reduces available oxygen in the blood and oxygen delivery to the body's organs and tissues.

Particulate Matter (PM)

PM is a mixture of microscopic solids and liquid droplets suspended in air. This pollution is made up of several components, including acids (such as nitrates and sulfates), organic chemicals, metals, soil or dust particles, and allergens (such as fragments of pollen or mold spores).

A review of the 2020 Kings County EI shows that 88% of the total PM_{10} emissions in Kings County come from the category labeled "miscellaneous processes." The largest portion of the PM_{10} emissions from miscellaneous processes category come from farming operations (39% of the total for miscellaneous processes) and fugitive windblown dust (29%).

Whereas a significant portion of PM_{10} emissions come from soil dislocation processes, $PM_{2.5}$ is smaller and is more often a result of particles coming from combustion sources. Subsequently, miscellaneous processes only represent 60% of the total $PM_{2.5}$, with the same contributing components as for PM_{10} . However, another 33% of Kings County $PM_{2.5}$ emissions come from other mobile sources, predominantly aircraft (90%).

The size of particles is directly linked to their potential for causing health problems. Small particles less than 10 micrometers in diameter, or PM_{10} , pose a big problem, because they can get deep into lungs and the bloodstream. Being even smaller, $PM_{2.5}$ will travel further into the lungs. Exposure to



such particles can affect both lungs and heart. Numerous scientific studies have linked particle pollution exposure to a variety of problems, including:

- Premature death in people with heart or lung disease.
- Nonfatal heart attacks.
- Irregular heartbeat.
- Aggravated asthma.
- Decreased lung function.
- Increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing.¹⁷

Sulfur Dioxide (SO₂)

 SO_2 is one of a group of highly reactive gases known as sulfur oxides (SO_X). SO_2 is a colorless, irritating gas with a pungent smell formed primarily by the combustion of sulfur-containing fossil fuels. Nationwide the largest sources of SO_2 emissions are from fossil fuel combustion at power plants and other industrial facilities; however, in Kings County, 60% comes from miscellaneous processes, of which farming operations and fugitive windblown dust are the major components (37% and 33% respectively). Another 33% of the Kings County SO_X emissions are contributed by "other mobile," which is predominantly from aircraft (90%).

Current scientific evidence links short-term exposures to SO_2 , ranging from 5 minutes to 24 hours, with an array of adverse respiratory effects, including bronchoconstriction and increased asthma symptoms. These effects are particularly important for asthmatics at elevated ventilation rates (e.g., while exercising or playing).¹⁸ SO_x can also react with other compounds in the atmosphere to form small sulfate particles. These particles penetrate deeply into sensitive parts of the lungs and can cause or worsen respiratory disease, such as emphysema and bronchitis, and can aggravate existing heart disease, leading to increased hospital admissions and premature death.

<u>Lead</u>

Lead is a metal that is a natural constituent of air, water, and the biosphere. Lead is neither created nor destroyed in the environment, so it essentially persists forever. The health effects of lead poisoning include loss of appetite, weakness, apathy, and miscarriage. It can also cause lesions of the neuromuscular system, circulatory system, brain, and gastrointestinal tract.

Gasoline-powered automobile engines were a major source of airborne lead through the use of leaded fuels. The use of leaded fuel has been mostly phased out, with the result that ambient concentrations of lead have dropped dramatically. Lead concentrations were last systematically measured in the SJVAB in 1989, when the average concentrations were approximately 5% of the state lead standard. Though monitoring was discontinued in 1990, lead levels are probably well below applicable standards, and the SJVAB is designated in attainment for lead.

¹⁷ Health Effects of Particulate Matter. U.S. Environmental Protection Agency. http://www.epa.gov/airquality/particlepollution/health.html. Accessed September 2013.

¹⁸ Health Effects of Sulfur Dioxide. U.S. Environmental Protection Agency. http://www.epa.gov/airquality/sulfurdioxide/health.html. Accessed September 2013.



Hydrogen Sulfide (H₂S)

 H_2S is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas and can be emitted as the result of geothermal energy exploitation. H_2S is extremely hazardous in high concentrations; especially in enclosed spaces (800 ppm can cause death). The Occupational Safety and Health Administration regulates workplace exposure to H_2S .

Sulfates (SO₄)

Sulfate is one of the fully oxidized ionic forms of sulfur. Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to SO_2 during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO_2 to sulfates takes place comparatively rapidly and completely in urban areas of California due to regional meteorological features.

The state SO_4 standard is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure at levels above the standard include a decrease in ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease. Sulfates are particularly effective in degrading visibility, and, because they are usually acidic, can harm ecosystems and damage materials and property.

Visibility-Reducing Particles

Visibility-reducing particles are a mixture of suspended particulate matter consisting of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size, and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt.

The standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.

<u>Vinyl Chloride</u>

Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is formed when other substances such as trichloroethane, trichloroethylene, and tetrachloroethylene are broken down. Vinyl chloride is used to make polyvinyl chloride (PVC), which is used to make a variety of plastic products, including pipes, wire and cable coatings, and packaging materials. Vinyl chloride is a colorless gas with a mild, sweet odor.

Short-term exposure to high levels of vinyl chloride in air causes central nervous system effects, such as dizziness, drowsiness, and headaches. Long-term exposure to vinyl chloride through inhalation and oral exposure causes liver damage. Cancer is a major concern from exposure to vinyl chloride via inhalation. Vinyl chloride exposure has been shown to increase the risk of angiosarcoma, a rare form of liver cancer in humans.



Toxic Air Contaminants

In addition to the above-listed criteria pollutants, toxic air contaminants (TACs) are another group of pollutants of concern. Assembly Bill (AB) 1807¹⁹ sets forth a procedure for the identification and control of TAC in California. It defines a TAC as an air pollutant which may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. Almost 200 compounds have been designated as TACs in California. The ten TACs posing the greatest known health risk in California, based primarily on ambient air quality data, are acetaldehyde, benzene, 1,3-butadiene, carbon tetrachloride, hexavalent chromium, formaldehyde, methylene chloride, para-dichlorobenzene, perchloroethylene, and diesel particulate matter (DPM). Since no safe levels of TACs can be determined, there are no air quality standards for TACs. Instead, TAC impacts are evaluated by calculating the health risks associated with a given exposure.

Since 2004, the ARB has maintained the California Toxic Inventory (CTI), which provides emissions estimates by stationary point (SP) and aggregated point (AP); areawide (A), onroad gasoline (OG) and onroad diesel (OD); offroad mobile gasoline (OMG), offroad mobile diesel (OMD), and offroad mobile other (OMO), and natural (N) sources. Stationary sources include point sources provided by facility operators and/or districts pursuant to the Air Toxics "Hot Spots" Program (AB 2588), and aggregated point sources estimated by the ARB and/or districts. Areawide sources are those that do not have specific locations and are spread out over large areas, such as consumer products and unpaved roads. Mobile sources consist of onroad vehicles such as passenger cars and trucks, motorcycles, buses, and heavy-duty trucks. Offroad sources include trains, ships, and boats. Natural sources such as wildfires are also included.

The top three contributors of the potential cancer risk in California (DPM, 1,3 butadiene, and benzene) come primarily from motor vehicles. Cleaner motor vehicles and fuels are reducing the risks from these priority toxic air pollutants. The remaining toxic air pollutants, such as hexavalent chromium and perchloroethylene, while not appearing to contribute as much to the overall risks, can present high risks to people living close to a source. The ARB has air toxic control measures that are either already on the books, in development, or under evaluation for most of the remaining top ten, where actions are suitable through local district motor vehicle, consumer products, or industrial source programs. Of these top ten, carbon tetrachloride is unique in that most of the health risk from this toxic air pollutant is not attributable to specific sources, but rather to background concentrations. Emissions of the top ten TACs in Kings County in 2010 are presented in **Table 4.3-2**.

¹⁹ Enacted in September 1983. Health and Safety Code section 39650 et seq., Food and Agriculture Code Section 14021 et seq.



Toxic Air Contaminant	SP	AP	Α	OD	OG	OMG	OMD	ОМО	N	Total
Diesel particulate matter (DPM)	0.760	22.906	0.000	119.64 3			15.622			158.93
1,3-Butadiene	0.020	0.133	1.319	0.420	2.958	0.694	0.415	0.501	0.477	6.94
Benzene	0.767	4.757	0.394	4.426	14.093	3.346	4.371	0.560	1.044	32.76
Acetaldehyde	0.040	5.147	280.17 9	16.265	2.342	0.820	16.064	1.246	782.884	1,397.33
Hexavalent Chromium	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		0.002
para-Dichlorobenzene	0.005		5.004							5.01
Formaldehyde	5.847	11.948	8.092	32.552	7.926	2.509	32.150	3.593		104.62
Methylene Chloride	2.587	2.729	6.772							12.09
Perchloroethylene	1.255	10.286	5.706							17.25
Carbon Tetrachloride	< 0.001									< 0.001

Table 4.3-22010 TAC EMISSIONS20 IN KINGS COUNTY (TONS PER YEAR)

Abbreviations: SP = stationary point OD = onroad diesel AP = aggregated point OG = onroad gasoline

OMD = offroad mobile diesel OMO = offroad mobile other

A = areawide OMG = offroad mobile gasoline

N = natural (sources)

²⁰ California Toxics Inventory – Draft 2010 CTI Summary Table. California Air Resources Board. (November 2013. http://www.arb.ca.gov/toxics/cti/cti.htm. Accessed July 2019.



4.3.2 Climatological/Topographical Factors

The project site is in the San Joaquin Valley Air Basin (SJVAB) and within the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). The San Joaquin Valley (SJV), which is approximately 250 miles long and averages 35 miles wide, is considered a "bowl" open only to the north. Although marine air generally flows into the basin from the north, the region's topographic features restrict air movement through and out of the basin.

These topographic features result in weak airflow, which becomes blocked vertically by high barometric pressure over the SJV. As a result, the SJVAB is highly susceptible to pollutant accumulation over time. Local climatological effects, including wind speed and direction, temperature, inversion layers, and precipitation and fog, can exacerbate the air quality problem in the SJVAB.

The nearest National Weather Stations Cooperative Network weather station to the proposed project is in Hanford, California,²¹ approximately one mile to the southwest.²² The average annual recorded rainfall during the period of record (1899 to 2016) for the Hanford station measured 8.38 inches, with 89 percent occurring between November and April. Normal daily maximum temperatures at this station vary annually by 43 degrees Fahrenheit (°F); where July is the hottest month at 97.8°F and the coldest month is January at 54.7°F. The normal daily minimum temperatures vary by only 28°F annually; where the coldest month is December at 34.6°F and the warmest month is July at 62.5°F.

Solar radiation and temperature are particularly important in the chemistry of ozone formation. Photochemical air pollution (primarily ozone) is produced by the atmospheric reaction of organic substances, such as ROG, and NO_2 under the influence of sunlight. Ozone concentrations are very dependent on the amount of solar radiation, especially during late spring, summer, and early fall. Ozone levels typically peak in the afternoon. After the sun goes down, the chemical reaction between nitric oxide and ozone begins to dominate. This reaction tends to scavenge the ozone in the metropolitan areas through the early morning hours, resulting in the lowest ozone levels, possibly reaching zero at sunrise in areas with high nitrogen oxides (NO_X) emissions. At sunrise, NO_2 tends to peak, partly due to low levels of ozone at that time and due to the morning commuter vehicle emissions of NO_X .

The vertical dispersion of air pollutants in the SJV can be limited by persistent temperature inversions. Air temperature in the lowest layer of the atmosphere typically decreases with altitude. A reversal of this atmospheric state, where the air temperature increases with height, is termed an inversion. The height of the base of the inversion is known as the "mixing height." This is the level to which pollutants can mix vertically. Mixing of air is minimized above and below the inversion base. The inversion base represents an abrupt density change where little air movement occurs. Inversion layers are significant in determining pollutant concentrations. Concentration levels can be related to the amount of mixing space below the inversion. Temperature inversions that occur on summer days are usually encountered 2,000 to 2,500 feet above the valley floor. In winter months, overnight inversions occur 500 to 1,500 feet above the valley floor.

²¹ Western U.S. Climate Historical Summaries. Western Regional Climate Center. http://www.wrcc.dri.edu/Climsum.html. Accessed July 2019.

^{22 900} Foggy Bottom Road, Hanford, CA 93230-5236. https://www.weather.gov/hnx/.



4.3.3 Local Air Quality

California's ambient air monitoring network is one of the most extensive in the world, consisting of over 250 sites where air pollution levels are monitored, and more than 700 monitors are used to measure the pollutant levels. The monitoring network needs to be large to cover the diverse range of topography, meteorology, emissions, and air quality in California, while adequately representing a large population. Existing levels of ambient air quality and historical trends and projections in the project area are best documented by measurements made by these monitoring sites. The nearest monitoring station to the proposed project site is located approximately 0.8 mile south at 807 South Irwin Street. The Hanford-South Irwin Street Site monitors for ozone, PM₁₀, PM_{2.5}, and NO₂. There has been no CO monitoring activity in the SJV since 2012. Data presented in **Table 4.3-3** summarize 2016 through 2018 published monitoring data from the ARB's Aerometric Data Analysis and Management System for the Hanford station.

The monitoring data shows the general air quality problems of Kings County in that both federal and state ozone standards were exceeded numerous times each year monitored. While the state PM_{10} standard was exceeded in all three years, the federal PM_{10} standard was exceeded only on days in which ambient concentrations were believed to be increased by wildfires. The federal $PM_{2.5}$ standard was also exceeded numerous times each year but the federal and state CO and NO₂ standards were <u>never exceeded</u>.

Air Pollutant	2016	2017	2018
Ozone – Hanford			
Max 1 Hour (ppm) Days > CAAQS (0.09 ppm)	0.097 2	0.106 7	0.108 1
Max California 8 Hour (ppm) Days > NAAQS (0.075 ppm) Days > CAAQS (0.070 ppm) Inhalable Particulate Matter (PM ₁₀) – Hanfor	0.088 49 53 r d	0.094 38 42	0.082 29 30
Max Daily National Measurement Days > NAAQS (150 μg/m³) Days > CAAQS (50 μg/m³)	152.2 0 20	299.4 ²⁴ 2 20	174.2 ²⁵ 1 19
Fine Particulate Matter (PM _{2.5}) – Hanford			
Max Daily National Measurement Days > NAAQS (35 μg/m³)	59.7 25	113.4 33	107.8 31

Table 4.3-3 AMBIENT AIR QUALITY MONITORING SUMMARY FOR NEAREST MONITORING STATION²³

²³ ADAM Air Quality Data Statistics. California Air Resources Board. http://www.arb.ca.gov/adam/welcome.html. Accessed August 2019.

²⁴ Probably exacerbated by numerous wildfires burning upwind from the Hanford Monitoring Station on the day of highest PM₁₀ (September 3, 2017) including the Salmon August Complex, Eclipse Complex, and Orleans Complex in Siskiyou County; South Fork Fire in Mariposa County; Railroad and Mission Fires in Madera County; and the Ponderosa Fire in Butte County. The second highest reading was 158.0.

²⁵ Probably exacerbated by numerous wildfires burning upwind from the Hanford Monitoring Station on the day of highest PM₁₀ (November 16, 2018) including the Camp Fire, in Butte County, which was the most destructive fire in California history and started November 8, 2018. The second highest reading was 131.3.



Air Pollutant	2016	2017	2018	
Nitrogen Dioxide (NO ₂) - Hanford				
2 nd Highest Max Hourly (ppb)	48.1	52.3	53.2	
Days > NAAQS (100 ppb)	0	0	0	
Days > CAAQS (0.18 ppm)	0	0	0	
Abbreviations:	·			
> = exceed	Mean = Annual Arithmetic Mean			
ppm = parts per million	Bold = exceedance			
ppb = parts per billion	N/A = not available			
μg/m ³ = micrograms per cubic meter	CAAQS = California Ambient Air Quality Standa			
NAAQS = National Ambient Air Quality Standard	d			

4.3.4 Regulatory Environment

4.3.4.1 State Strategies

Mobile Source Strategy (State Strategy)

As part of the 2016 State Implementation Plan (SIP), the State included a comprehensive strategy to reduce emissions from mobile sources to meet critical air quality and climate goals over the next 15 years.²⁶ The state strategy is proposed to achieve multiple goals, such as an 80% reduction in smog-forming emissions, a 45% reduction in GHG emissions, a 50% reduction in petroleum usage, and a 45% reduction in DPM emissions statewide. Actions to deploy both zero-emission and cleaner combustion technologies will be essential to meet these multiple goals.

Near-term focused electrification and progress towards zero-emission technologies is critical to continue to reduce near-source exposure to air toxics, especially around freight hubs such as ports, rail yards, and distribution centers.

For passenger vehicles, the strategy calls for increasing the penetration of plug-in hybrid electric vehicles and non-combustion zero-emission vehicles including battery-electric and hydrogen fuel cell electric vehicles by over 50 percent compared to current programs and the electrical grid and hydrogen supply supporting these electric vehicles will need to represent 50% renewable energy generation. A large portion of the liquid fuels for combustion engine vehicles will also need to be sourced from renewable feedstock. For heavy-duty vehicles, the ARB is laying the groundwork for reducing emissions on multiple fronts; cleaner internal combustion engines, renewable fuels, and zero-emission technology. Along with the widespread use of cleaner technologies and fuels, the strategy calls for ongoing improvements in community design and efficiency improvements to the freight transport system. These efforts will make our communities and cities more sustainable and enhance the benefits of investments in cleaner technologies by reducing growth in vehicle miles traveled (VMT).

²⁶ Revised Proposed 2016 State Strategy for the State Implementation Plan. California Air Resources Board. March 7, 2017.


4.3.4.2 Local Regulations and Plans

SIVAPCD Rules and Regulations

All projects are subject to SJVAPCD rules and regulations in effect at the time of construction. Specific rules applicable to the construction of the proposed project may include, but are not limited to, the following:

- **Rule 4002 (National Emission Standards for Hazardous Air Pollutants)** requires that, if any portion of an existing building will be renovated, partially demolished or removed, the project will be subject to SJVAPCD Rule 4002. Prior to any demolition activity, an asbestos survey of existing structures on the project site may be required to identify the presence of any asbestos-containing building material (ACBM). Any identified ACBM having the potential for disturbance must be removed by a certified asbestos contractor in accordance with CAL-OSHA requirements.
- **Rule 4102 (Nuisance)** applies to any source operation that emits or may emit air contaminants or other materials. If the project or construction of the project creates a public nuisance, it could be in violation and be subject to SJVAPCD enforcement action.
- **Rule 4601 (Architectural Coatings)** limits volatile organic compounds from architectural coatings. This rule specifies architectural coatings storage, clean up and labeling requirements and is applicable to any person who supplies, sells, offers for sale, applies, or solicits the application of any architectural coating or who manufactures, blends or repackages any architectural coating for use within the District. Aerosol coating products, architectural coatings from outside of the District, and most architectural coating containers with a volume of one liter or less are exempt. VOC contents, restrictions, directions for thinning, and a table of standards are all supplied in the requirements section of the rule (5.0).
- **Regulation VIII (Fugitive PM₁₀ Prohibitions)** reduces ambient concentrations of PM₁₀ by requiring actions to prevent, reduce or mitigate anthropogenic fugitive dust emissions.
- **Rule 8021** limits fugitive dust emissions from construction, demolition, excavation, extraction, and other earthmoving activities and applies to any construction, demolition, excavation, extraction, and other earthmoving activities, including, but not limited to, land clearing, grubbing, scraping, travel on site, and travel on access roads to and from the site.
- **Rule 8031** limits fugitive dust emissions from the outdoor handling, storage, and transport of bulk materials and applies to the outdoor handling, storage, and transport of any bulk material.
- **Rule 8041** prevents or limits fugitive dust emissions from carryout and trackout and applies to all sites that are subject to any of the following rules where carryout or trackout has occurred or may occur on paved public roads or the paved shoulders of a paved public road.
- **Rule 8051** limits fugitive dust emissions from open areas and applies to any open area having 0.5 acre or more within urban areas, or 3.0 acres or more within rural areas; and contains at least 1,000 square feet of disturbed surface area.
- **Rule 8061** limits fugitive dust emissions from paved and unpaved roads by implementing control measures and design criteria.
- **Rule 8071** limits fugitive dust emissions from unpaved vehicle and equipment traffic areas and applies to any unpaved vehicle/equipment traffic area.



• **Rule 9510 (Indirect Source Review [ISR])**, which went into effect March 1, 2006, requires developers of larger residential, commercial, and industrial projects to reduce smog-forming and particulate emissions generated by their projects. The ISR rule seeks to reduce the growth in NO_X and PM₁₀ emissions associated with construction and operation of new development projects in the SJV.

The ISR rule requires developers to reduce construction NO_X and PM_{10} exhaust emissions by 20% and 45%, respectively, and reduce operational NO_X and PM_{10} emissions by 33.3% and 50%, respectively, as compared to the unmitigated baseline. Although transportation and transit station development are exempt from operational ISR requirements, Section 2.4 of the ISR Rule states:

"Effective on and after March 1, 2006, this rule shall apply to any transportation or transit development project where construction exhaust emissions equal or exceed two (2.0) tons of NO_X or two (2.0) tons of PM_{10} ."

<u>Asbestos Program</u>

The purpose of the SJVAPCD's Asbestos Program²⁷ is to protect the public from uncontrolled emissions of asbestos through enforcement of the federal National Emission Standard for Hazardous Air Pollutants for asbestos.²⁸ The Program covers most renovations and demolition projects in the San Joaquin Valley Air Basin. Elements of the program include survey and notification requirements prior to beginning a project, as well as work practice standards and disposal requirements.

If asbestos is expected, a Certified Asbestos Consultant (CAC) will need to perform an asbestos survey prior to the demolition of a regulated facility. Following the completion of an asbestos survey, the proponent would submit the asbestos survey, Asbestos Notification, Demolition Permit Release, and the proper fees to the SJVAPCD ten working days prior to the removal of regulated asbestos containing material and the demolition when no asbestos is present.

In addition to the total destruction of a structure, demolitions include "the removal of any load-supporting structural member from a facility together with any related handling operations or the intentional burning of a building" (training burns conducted by a fire fighting agency). Also, the separation of a structure from its foundation prior to relocation is a demolition.

SJVAPCD Air Quality Plans

There are currently three different air quality plans (AQPs) for the attainment and maintenance of air quality in the SJVAB. These include the 2016 Ozone Plan,²⁹ the 2018 PM_{2.5} Plan,³⁰ and the 2007

²⁷ Asbestos Requirements for Demolitions and Renovations. San Joaquin Valley Air Pollution Control District. http://www.valleyair.org/busind/comply/asbestos-0514.htm. Accessed August 2019.

^{28 40} CFR Part 61 – National Emission Standards for Hazardous Air Pollutants, Subpart M—National Emission Standard for Asbestos. Available online at https://www.ecfr.gov/cgi-bin/textidx?SID=d1cb7551b7d66a7b8955d3fa83ae2c14&mc=true&node=sp40.9.61.m&rgn=div6. Accessed on August 27, 2019.

^{29 2016} Ozone Plan for the 2008 8-Hour Ozone Standard. San Joaquin Valley Air Pollution Control District. Adopted June 16, 2016.

^{30 2018} Plan for the 1997, 2006, and 2012 PM_{2.5} Standards. San Joaquin Valley Air Pollution Control District. Adopted November 15, 2018.



PM₁₀ Maintenance Plan.³¹ Plans that receive final approval from the USEPA have special status under the FCAA; however, once SJVAPCD approves a plan, implementation must proceed immediately to achieve milestones contained in the plans or the air basin will face sanctions. For this document, only air quality plans that have been adopted by SJVAPCD and approved by the USEPA will be considered an "existing" or "current" plan.

2016 Ozone Plan

The deadline for the SJV to attain the 2008 eight-hour ozone standard is December 31, 2031, which will require an additional 207.7 tons per day in NO_X reductions from stationary and mobile sources throughout the SJV. The 2016 Ozone Plan builds upon the SJVAPCD's one-hour ozone, eight-hour ozone, and particulate matter strategies. The attainment strategy for attaining the 2008 eight-hour ozone standard includes control measures that have already been adopted, area source regulations shared with the ARB, and new control measures that require technological feasibility and cost-effectiveness. The 2016 Ozone Plan includes two stationary source control measure commitments that meet federal Reasonable Available Control Technology (RACT) requirements, including a new rule governing flares and a rule governing wine fermentation and storage tanks.

<u>2018 PM_{2.5} Plan</u>

The 2018 PM_{2.5} Plan integrates a comprehensive strategy that contains new stationary source measures that will be applied Valley-wide and measures focused on reducing emissions in areas with the most difficult attainment challenges. Under the FCAA, the entire SJV is designated as not meeting the standard if any area in the SJV is not able to meet the standard. This Plan not only includes a comprehensive suite of regulatory and incentive-based measures for both stationary and mobile sources to be implemented Valley-wide, but also includes a targeted hot-spot strategy that focuses new residential wood burning and commercial underfired charbroiling emission reduction measures in Fresno, Madera, and Kern counties.

2007 PM₁₀ Maintenance Plan

SJVAPCD has adopted and submitted a series of PM_{10} plans to the USEPA for review and approval. In June 2003, SJVAPCD adopted its strategy for attaining the PM_{10} standard. In February 2006 the SJVAPCD adopted another PM_{10} Plan which affirmed that the 2003 Plan's strategy was proving to be successful and was on track to meet the federal standard by the 2010 deadline.

SJVAPCD adopted the 2007 PM_{10} Maintenance Plan (2007 PM_{10} Plan) and requested redesignation as attainment for the federal PM_{10} standard on September 20, 2007. The 2007 PM_{10} Maintenance Plan contains modeling demonstrations that show that the SJVAB will not exceed the federal PM_{10} standard for 10 years after the expected USEPA redesignation, monitoring, and verification measures and contingency plan. The USEPA finalized the determination that the SJVAB is now in attainment for PM₁₀.

^{31 2007} PM₁₀ Maintenance Plan and Request for Redesignation. San Joaquin Valley Air Pollution Control District. Adopted September 20, 2007.



4.3.5 Sensitive Receptors

Sensitive receptors are those people who are more sensitive than others to air pollutants. The reasons for greater than average sensitivity include health problems, proximity to emissions sources, or duration of exposure to air pollutants. Schools, hospitals, and convalescent homes are relatively sensitive to poor air quality because children, elderly people, and the infirm are more susceptible to respiratory distress and other air quality-related health problems than the general public. Residential areas are considered sensitive to poor air quality because people usually stay home for extended periods of time, with associated greater exposure to ambient air. Recreational uses are also considered sensitive because vigorous exercise associated with recreation places a high demand on the human respiratory system.

The project is in downtown Hanford and is adjacent to residential uses. In addition, some schools are within a mile, such as Saint Rose Catholic School (0.6 mile north of the project site) and Woodrow Wilson Junior High School (0.7 mile northwest of the project site).

4.3.6 Response to Checklist Questions

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact

If implemented, the proposed project would generate both temporary (construction) and long-term (operational) emissions. The consistency with the SJVAPCD AQPs is discussed below for construction and operations separately.

Construction

The SJVAPCD's attainment strategy as it relates to growth is directly related to its New Source Review (NSR) rule,³² as implementation of NSR ensures that there is no net increase in emissions above specified thresholds from new and modified stationary sources for all nonattainment pollutants and their precursors. The SJVAPCD thresholds of significance for criteria pollutants are applied to evaluate regional impacts of project-specific emissions of air pollutants and their impact on the SJVAPCD's ability to reach attainment.

<u>Operational</u>

State CEQA Guidelines and the FCAA (§§ 176 and 316) contain specific references to the need to evaluate consistencies between a proposed project and the applicable AQP for the project site. To accomplish this, the ARB has developed a three-step approach to determine project conformity with the applicable AQP:

1. <u>Determination that an AQP is being implemented in the area where the project is being proposed.</u> The SJVAPCD has implemented the current, modified AQP as approved by the ARB. The current AQP is under review by the USEPA.

³² Rule 2201. https://www.valleyair.org/rules/currntrules/r2201.pdf. Accessed September 7, 2019



- 2. <u>The proposed project must be consistent with the growth assumptions of the applicable AQP</u>. The growth assumptions used by the SJVAPCD in its latest air quality plan (2018 PM_{2.5} Plan) were based on the California Division of Finance's March 2017 released revised population growth projections. The population in Kings County is expected to increase by 13.6% between 2015 and 2030. Since the proposed project is a transit/commercial project not specifically designed to attract new permanent residents to the County and does not contain a residential component, it would be considered consistent with the growth assumptions of the applicable AQPs.
- 3. <u>The project must contain in its design all reasonably available and feasible air quality control</u> <u>measures.</u> The proposed project incorporates Regulation VIII dust measures and includes a requirement for construction contractors to use Tier 4 equipment whenever it is commercially available.

Because no significant project-induced growth is anticipated, conclusions may be drawn from the following criteria:

- The proposed emissions from the project are, by definition, below the SJVAPCD's established emissions impact thresholds.
- The primary source of emissions from the project would be traffic from vehicles that are licensed through the State of California and whose emissions are already incorporated into the ARB's SJV Emissions Inventory.

Operation of the proposed project would not exceed any established SJVAPCD thresholds; therefore, implementation of the proposed project would not obstruct implementation of an air quality plan during operation.

Additionally, to assist the implementation of the AQMP, projects must not create regionally significant emissions of regulated pollutants from either short-term construction or long-term operations.

Short-term Construction

Construction is scheduled to begin in July 2021 and conclude before July 2022. Construction activities include demolition, site preparation, grading, building construction, paving, and architectural coating. Construction would result in emissions of the criteria air pollutants ROG, NO_X , CO, PM_{10} , $PM_{2.5}$, and SO_X as a result of fuel combustion and exhaust and entrainment of dust from construction equipment, as well as from vehicle traffic and the evaporation of volatile components of materials such as paints and lubricants.

Criteria pollutant emissions from off-road construction equipment use were estimated using the California Emissions Estimator Model (CalEEMod®), Version 2016.3.2. Default equipment type and activity levels for each activity phase were used. **Table 4.3-4** presents the proposed project's annual emissions from construction activities. (Detailed emissions calculations are included in Attachment 1 of **Appendix D**, Air Quality/Greenhouse Gas Technical Report for the KART Transit Station, Kings County). Note that emissions presented take into account reductions required for compliance with the SJVAPCD's Regulation VIII Fugitive Dust Rules. They also assume that Tier 4 engines will be required for demolition and construction equipment, wherever commercially available.



Table 4.3-4 shows that the SJVAPCD thresholds are not exceeded in either construction year. In addition, the combined construction NO_x exhaust emissions for two years do not exceed the two-ton threshold for applicability of the ISR Rule. The project is therefore exempt from ISR requirements.

Veen Construction Dhees	Criteria Emissions (tons/year)					
rear - construction Phase	ROG	NOx	CO	SO ₂	PM ₁₀	PM _{2.5}
2021 - Demolition	0.009	0.065	0.238	0.000	0.010	0.004
2021 - Site Preparation	0.001	0.005	0.054	0.000	0.018	0.010
2021 - Grading	0.003	0.029	0.068	0.000	0.012	0.006
2021 - Building Construction	0.080	0.688	0.886	0.001	0.039	0.035
2021 Total	0.09	0.79	1.25	0.00	0.08	0.05
2022 - Building Construction	0.081	0.689	0.969	0.002	0.038	0.033
2022 - Paving	0.006	0.056	0.089	0.000	0.005	0.003
2022 - Architectural Coating	0.133	0.010	0.013	0.000	0.001	0.001
2022 Total	0.22	0.76	1.07	0.00	0.04	0.04
SJVAPCD Threshold	10	10	100	27	15	15
Exceed Thresholds any Year?	No	No	No	No	No	No
Project Total*		1.54			0.12	
ISR Rule 9510 Threshold		2			2	
Exceed Thresholds?		No			No	

Table 4.3-4 ESTIMATED ANNUAL CONSTRUCTION EMISSIONS

 \ast ISR Rule 9510 is only concerned with combustion-generated NOx and PM_{10} emissions

Long-term Operational

CalEEMod was also used to estimate the operational emissions, which include emissions from mobile sources associated with the facility, natural gas usage, architectural coatings, consumer products, and landscaping equipment.

Emissions for each operational category are presented in **Table 4.3-5**, which shows that the Project's unmitigated operational emissions would not exceed any SJVAPCD regional operational thresholds. Detailed emissions calculations are included in Attachment 1 of **Appendix D**, Air Quality/Greenhouse Gas Technical Report for the KART Transit Station, Kings County).



Emission Cotogomy	Criteria Emissions (tons/year)					
Emission category	ROG	NOx	CO	SO ₂	PM ₁₀	PM _{2.5}
Mobile	0.242	2.039	71.29	0.005	0.653	0.241
Energy	0.001	0.008	0.006	0.000	0.001	0.001
Area	0.088	0.000	0.003	0.000	0.000	0.000
Operational Total	0.33	2.05	71.3	0.01	0.65	0.24
SJVAPCD Threshold	10	10	100	27	15	15
Exceed Thresholds?	No	No	No	No	No	No

<u>Table 4.3-5</u> ESTIMATED UNMITIGATED OPERATIONAL CRITERIA POLLUTANT EMISSIONS

In summary, construction and operational activities of the proposed project would not violate air quality standards or contribute to an existing or projected air quality violation; therefore, impacts would be less than significant.

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

Less than Significant Impact

In accordance with CEQA Guidelines 15130(b), the analysis of cumulative impacts incorporates a summary of projections. The following three-tiered approach was used to assess cumulative air quality impacts.

- Consistency with the SJVAPCD project-specific thresholds for construction and operation.
- Project consistency with existing air quality plans.
- Assessment of the cumulative health effects of the pollutants.

Project-Specific Thresholds

As established previously in **Section 4.3.6 a)**, emissions are not expected to exceed the SJVAPCD regional significance thresholds. It is assumed that emissions that do not exceed the project-specific thresholds will not result in a cumulative impact.

Air Quality Plans

As established previously in **Section 4.3.6 a)**, the proposed project is consistent with the latest ozone, PM_{10} , and $PM_{2.5}$ attainment plans that were established to document the strategies and measures to be undertaken to reach attainment of ambient air quality standards. While the SJVAPCD does not have direct authority over land use decisions, it was recognized that changes in land use and circulation planning were necessary to maintain clean air. The project is compliant with the air quality plans and would not result in a significant impact.



Cumulative Health Impacts

The area is nonattainment for ozone and $PM_{2.5}$, which means that the background levels of those pollutants are at times higher than the ambient air quality standards. The area is a maintenance area for PM_{10} , which means that the PM_{10} AAQS have been attained, but the measures used to meet the standard must continue to prevent future violations. The air quality standards were set to protect the health of sensitive individuals (i.e., elderly, children, and the sick). Therefore, when the concentration of those pollutants exceeds the standard, it is likely that some of the sensitive individuals of the population experience adverse health effects.

The significance analysis in **Section 4.3.6 a)** demonstrated that no significance threshold was expected to be exceeded; therefore, the emissions from the proposed project would not result in a significant cumulative health impact.

The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard; therefore, impacts would be less than significant.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact with Mitigation Incorporated

Sensitive receptors are defined as land uses where sensitive population groups (e.g., children, the elderly, the acutely ill, and the chronically ill) are likely to be located. These land uses include residences, schools, childcare centers, retirement homes, convalescent homes, medical care facilities, and recreational facilities. Sensitive receptors that may be adversely affected by the proposed project include the surrounding residential land uses.

Impacts to sensitive receptors, particularly from dust, would vary depending on the level and type of activity, the silt content of the soil, and prevailing weather. As mentioned above, the project is in downtown Hanford in a commercial-dominant area; however, it is adjacent and near to residential structures. Therefore, a public display of compliance with Regulation VIII will be important. The proposed project's diligent compliance with Regulation VIII and any requirements due to the ISR Rule will prevent the residences from being exposed to substantial pollutant concentrations.

The proposed project would not expose the public to substantial pollutant concentrations, but the public still may perceive a potential problem. While no mitigation measures are necessary, there is a valid potential expectation for dust complaints being filed due to the proximity of sensitive receptors. To allay potential concerns, mitigation measure **AQ-1**, provided below is recommended.

Level of Significance After Mitigation

With the implementation of mitigation measure **AQ-1**, project-related air quality impacts on sensitive receptors would be less than significant.

Mitigation Measure

MM AQ-1 Prior to commencing and construction activity, the Applicant will provide notices that show a schedule for major construction activities that will occur through the duration



of the construction period. In addition, the notification will include the identification and contact number for a community liaison and designated construction manager that would be available onsite to monitor construction activities. The construction manager shall be responsible for complying with all project requirements related to PM_{10} generation. He or she will be located at the onsite construction office during construction hours for the duration of all construction activities. Contact information for the community liaison and construction manager will be located at the construction office, City Hall, the police department, and on a sign onsite.

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

Less than Significant Impact

The CEQA Guidelines indicate that a significant impact would occur if a project would create objectionable odors affecting a substantial number of people. Because no requirements for odor control are included in state or federal air quality regulations, the SJVAPCD has no rules or standards related to odor emissions, other than its nuisance rule.

Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, there are no quantitative or formulaic methodologies to determine the presence of a significant odor impact. The intensity of an odor source's operations and its proximity to sensitive receptors influences the potential significance of odor emissions. The proposed project is not one of the common types of facilities listed in the SJVAPCD's Guide for Assessing and Mitigating Air Quality Impacts³³ GAMAQI as known to produce odors. Therefore, it would not result in a significant odor impact.

The proposed project would not result in other emissions affecting a substantial number of people; therefore, impacts would be less than significant.

³³ Guide for Assessing and Mitigating Air Quality Impacts. San Joaquin Valley Air Pollution Control District. Revised March 19, 2015. Internet: http://www.valleyair.org/transportation/GAMAQI_3-19-15.pdf.



4.4 Biological Resources

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		Х		
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 Wildlife or U.S. Fish and Wildlife Service?				х
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?				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?				х
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

4.4.1 Methodology

Literature, maps, databases, agency web sites, Geographic Information System (GIS) data, and aerial imagery were obtained from public domain sources to: (1) assess habitats, special-status plant and wildlife species, jurisdictional waters, critical habitats, and wildlife corridors that potentially may



occur in and near the project site; and (2) identify local or regional plans, policies, and regulations that may apply to the project. Plant and wildlife species protected by federal agencies, state agencies, and nonprofit resource organizations, such as the California Native Plant Society (CNPS), are collectively referred to as "special-status species" in this report.³⁴ Some of these plant and wildlife species are afforded special legal or management protection because they are limited in population size, and typically have a limited geographic range and/or habitat. The following data sources were accessed:

- United States Geological Survey (USGS) 7.5-Minute Topographic Map Hanford Quadrangle, Kings County (USGS, 2018), and current aerial imagery (Google Earth, 2019).
- U. S. Fish and Wildlife Service (USFWS) information:
 - Information, Planning and Conservation (IPaC) (USFWS, 2019a).
 - National Wetlands Inventory (NWI) and Wetlands Mapper (USFWS, 2019b).
 - Critical Habitat Portal (USFWS, 2019c).
- California Department of Fish and Wildlife (CDFW) information:
 - California Natural Diversity Database (CNDDB) (CDFW, 2019a).
 - California Natural Community Conservation Plans (CDFW, 2019b).
 - California Wildlife Habitat Relationships System (CDFW, 2019c).
- Inventory of Rare and Endangered Plants of California provided by the CNPS (CNPS, 2019).

A search of the USFWS ECOS-IPaC website (USFWS, 2019a) was conducted for the proposed project site. The literature and data search of the CNDDB (CDFW, 2019a) and of the CNPS Electronic Inventory of Rare and Endangered Plants of California (CNPS, 2019), was conducted for the Hanford quadrangle and surrounding eight quadrangles (Riverdale, Laton, Burris Park, Lemoore, Remnoy, Stratford, Guernsey, and Waukena). The results of these searches are included in **Appendix E**.

Based on the results of these data searches, comprehensive project-specific lists of sensitive habitats, and special-status plants and wildlife, and their potential to occur were prepared. Refer to Tables 1 and 2 in **Appendix E**.

Aerial imagery from the above-mentioned sources was overlaid with geospatial data by utilizing GIS software (ArcGIS 10.1) to identify: (1) the presence and geographic range of candidate, sensitive, or special-status species and potentially suitable habitats, and (2) proposed and final critical habitats, wetlands, Waters of the State (WOS), and Waters of the United States (WOUS), in the vicinity of the project site.

The CNDDB (CDFW, 2019a) known plant and wildlife species occurrences was mapped for the project site. **Figure 4.4-1** depicts the CNDDB known species occurrences within a two-mile radius of the project site.

³⁴ Avian species protected by the Migratory Bird Treaty Act (MBTA) are not considered "special-status species."



Figure 4.4-1 CNDDB SENSITIVE SPECIES KNOWN OCCURRENCES





Of the species listed in **Appendix E**, only one plant species, California alkali grass (*Puccinellia simplex*), and two wildlife species, the hoary bat (*Lasiurus cinereus*) and the San Joaquin kit fox (*Vulpes macrotis mutica*), have known occurrences mapped within two miles of the project site. See **Figure 4.4-1**. However, only the hoary bat (*Lasiurus cinereus*) has a mapped known occurrence within the project site. The following is a description of these species and their habitat requirements.

- <u>California alkali grass (*Puccinellia simplex*).</u> California alkali grass is an annual herb. Its habitat is alkaline, vernally mesic; sinks, flats, and lake margins in chenopod scrub, meadows and seeps, valley and foothill grassland, and vernal pools. It blooms March through May. Threatened by hydrological alterations, urbanization, agricultural conversion, development, and habitat fragmentation, disturbance, alteration, and loss; resulting in extirpation of some occurrences. Potentially threatened by solar energy development. Possibly threatened by grazing and proximity to roads. The CNDDB results contains only one known occurrence near the project site, located approximately two miles east of the City of Hanford. The exact location is unknown and mapped by CNDDB as a best guess (CDFW, 2019a).
- <u>Hoary bat (*Lasiurus cinereus*)</u>. Hoary bat has no state or federal status; however maternal roosting sites are protected during the breeding season. Young are born in June. Like other bats, it forages on insects at night. The bat prefers open habitats or habitat mosaics, with access to trees or cover and open areas or habitat edges for feeding. It roosts on dense foliage of medium to large trees and feeds primarily on moths. This species is solitary, typically roosting in foliage of riparian trees such as cottonwoods and sycamores, though eucalyptus trees are also known to be used as well. Roosting trees can occur at the edge of clearings, heavy forests, open wooded glades, and shade trees along urban streets and in city parks. Threats include loss of roosting habitat, loss of maternity roosts, and illegal extermination during pest control. This species has been found in the urbanized area of Hanford and the Kings County General Plan Update EIR identified the need to avoid disturbing hoary bat breeding colony sites (Quad Knopf, Inc., 2014, p. 5-16). The CNDDB results contains one occurrence record for hoary bat within two miles of the project site. The occurrence was observed in 1991 (CDFW, 2019a).
- San Joaquin Kit Fox (*Vulpes macrotis mutica*). The San Joaquin kit fox is Federally listed as endangered and state-listed as threatened. This species has full protection under the ESA and CESA. This species is mostly nocturnal, and hunts jackrabbits, cottontails, kangaroo rats, ground squirrels, and mice. The availability of suitable den sites is a crucial habitat requirement. They prefer loose, friable soils, often with high clay content, but found on all soil types with sufficient depth in which to make a den. The majority of their dens lie in relatively flat terrain or gently sloping hills, in washes, drainages, and roadside berms. For ease of digging burrows, it has preferred areas on the western side of the Hanford where the soil is loose-textured. During the day it occupies dens; a mated pair may have more than thirty dens over nearly six hundred acres of territory. San Joaquin kit foxes are frequently found on cultivated ground and in pastures (Quad Knopf, Inc., 2014). The loss and modification of habitat due to agricultural conversion, infrastructure construction, and urban development remains the largest threat to the kit fox. There are two occurrences shown located within two miles of the project site (**Figure 4.4-1**). One was documented in 1971 just east of Hanford and the other in 2006 northwest of Hanford (CDFW, 2019a).



The related literature and data source review was conducted by the project's senior biologist. A reconnaissance-level field survey was conducted at the project site on July 31 and August 1, 2019 to document the existing environment and assess potential impacts to biological resources.

4.4.2 Existing Environment

The project is located in the City of Hanford, in the Great Valley Geomorphic Province in the San Joaquin Valley. The project site is located in downtown Hanford, which is a highly developed, urbanized area. The project site is developed with a mix of commercial and light industrial uses and single-family residential homes. It is also surrounded by commercial and light industrial development to the south, east, and west, and single-family residential homes to the east and north.

The project site consists of only one soil map unit, Urban Land. This soil is a human-transported mixture of nine soil types (Soil Survey Staff, 2019). The project geotechnical investigation identified the soils encountered during their site investigation as consisting mainly of an upper layer of Silty Sand, and Sandy or Clayey Silt underlain by layers of Poorly-Graded Sand and occasional layers of Sandy Clay (Soils Engineering, Inc. 2019, p. 4).

Review of the USGS) 7.5-minute series topographic quadrangle maps indicate that the project site and vicinity are generally flat at an elevation of approximately 250 feet AMSL, and slopes gradually to the northeast (Soils Engineering, Inc. 2019, p. 4).

Surface water in the area of the project site is collected by the local storm water drainage system and is discharged into basins and ditches. The project site is located within Zone X, an area located outside of 100- or 500-year Federal Emergency Management Agency (FEMA) floodplains (FEMA Map 06031C0185C, dated June 16, 2009).

The project site is located within the Kings Basin, which is a sub-basin of the San Joaquin Basin Hydrogeologic Study Area. Shallow groundwater is typically encountered in the vicinity of the site at depths of 95 to 132 feet below ground surface (bgs), with regional groundwater flow generally to the northeast (Soils Engineering, Inc. 2019, p. 4).

The vegetation on the project site includes street trees adjacent to commercial land uses; trees, ornamental vegetation, and grass around residential land uses. This is consistent with the urban or non-agricultural vegetation description for the project area in the City of Hanford 2035 General Plan Draft EIR (Quad Knopf, 2016; p.4.4-2), which consists primarily of non-native, ruderal vegetation that has sprouted in previously disked agricultural fields. Patches of non-agricultural vegetation are interspersed though areas of urban development and occur adjacent to city parks, residential neighborhoods, along the boundary of urban sprawl, and on agricultural fields that are in a fallow state.

4.4.2.1 Land Cover Types

The project site consists of two land cover types, developed and ruderal/disturbed, which are described below.

Developed Lands

Developed lands are either non-vegetated features that are occupied by man-made structures or other impermeable surfaces that cannot support vegetation, or are vegetated by ornamental or



landscape vegetation. These developed areas provide virtually no habitat for wildlife species; however, birds may use the ornamental vegetation for foraging and nesting. Developed lands and ornamental vegetation do not have a global or state rank and are not considered sensitive plant communities.

Ruderal/Disturbed Land

Ruderal/disturbed land cover contain areas that are heavily to sparsely vegetated by non-native ruderal weedy species or lack vegetation completely. They provide little to no habitat value for wildlife. Ruderal/disturbed habitats do not have a global or state rank and are not considered sensitive plant communities. Ruderal vegetation is adapted to frequent disturbances, and are persistent in California where habitat has been affected by human activities, resulting in a dominance of weedy annual, non-native species (ruderal plants). Ruderal plants can easily colonize areas that are devoid of vegetation. Ruderal habitats can also include remnant patches of native vegetation.

The characteristic ruderal plant species observed within the project site is Russian thistle (tumbleweed) (*Salsola tragus*). The ruderal/disturbed areas are dominated by invasive non-native vegetation. Disturbed habitat refers to bare areas which have little to no vegetation growing on them. These areas contain compacted soils and are generally the result of severe or repeated mechanical disturbance.

4.4.2.2 Plants

The plant species observed on the project site include lambsquarters (*Chenopodium album*), Russian thistle (*Salsola tragus*), ornamental tree, and two herbaceous annuals. Trees observed onsite include tree of heaven (*Ailanthus altissima*), eucalyptus (*Eucalyptus sp.*), Mexican fan palm (*Washingtonia robusta*), pine sp., oleander (*Nerium*), cypress sp., and crepe myrtle (*Lagerstroemia indica*). None of the plant species observed on the project site are listed or special-status plant species known to occur in the area. No sensitive plant species were observed within the project site during the site visit. Both literature review and field reconnaissance concluded that the listed sensitive species in the plant inventory do not occur within the project site because the site is located outside the plant species' known distribution, elevation range, and/or the project site lacks suitable habitats and/or soils to support the plant species.

4.4.2.3 Wildlife

Only the western scrub jay (*Aphelocoma californica*), mourning dove (*Zenaida macroura*), and pigeon (*Patagioenas* ssp.) were observed on the project site. No federally listed, state-listed, or other sensitive wildlife species were observed on the project site.

4.4.3 Impact Analysis

a) Would the project 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 U.S. Fish and Wildlife Service?



Less Than Significant with Mitigation Incorporated

The approximately four-acre project site is located in the downtown area of the City of Hanford, California, and has been previously developed. The project site borders other commercial land uses and is located in the Downtown Mixed-Use Zoning District (MX-D). The project site is located in an urbanized area, which provides low habitat value for special-status plant and wildlife species. No special-status plants or wildlife were observed within the project area. The project site contains disturbed undeveloped land and developed and/or paved land. The undeveloped patch is vegetated with non-native, ruderal vegetation as discussed previously.

Hoary bats and San Joaquin kit fox are the only special-status mammal species with known occurrences in the vicinity of the project site. Hoary bats are not federally listed or state-listed, but maternal breeding colonies are protected. Hoary bats, which have a low likelihood of occurrence, have the potential to roost in the foliage of trees on the site. No San Joaquin kit fox, dens or potential dens, or sign of San Joaquin kit fox were observed on the project site during field site reconnaissance.

With implementation of the project, the existing buildings on the site would be demolished and replaced with a new transit station and commercial development. Several existing shrubs and trees would be removed prior to redevelopment. None of the existing trees onsite are protected heritage trees. However, trees and shrubs would be planted in the landscaped areas of the project site. The landscaping plan for the project would follow City of Hanford requirements in the City of Hanford Municipal Code Chapter 17.52, titled Landscape Standards, lists requirements relating to the quality, quantity, and functionality of landscaping for projects (City of Hanford, 2017). New buildings and landscaped areas would create new potential roosting habitat for bat species.

Hoary Bats

Removal of trees and removal of buildings containing active bat roosts, particularly during the nesting season (typically April through August), could result in the loss of individual bats, bat colonies, or their habitat. While adult hoary bats may be able to escape during tree removal, if tree and shrub removal is to occur during the maternity season (May 1st through October 1st), young bats that cannot yet fly are likely to be killed or injured during vegetation removal. This would result in take of these species. Loss of individual bats and disruption of maternity roosting bats resulting in the abandonment of young or the loss of young through vegetation removal would be a potentially significant impact. Implementation of mitigation measure **BIO-1** would reduce potential roosting and breeding bat impacts from the project to a less-than-significant level.

Mitigation Measure

MM BIO-1: Identify and protect roosting and breeding bats on the project site and provide alternative roosting habitat. The project applicant shall implement the following measures to protect roosting and breeding bats found in a tree or structure to be removed with the implementation of the project. Prior to tree removal or demolition activities, the project applicant shall retain a qualified biologist to conduct a focused survey for bats and potential roosting sites within buildings to be demolished or trees to be removed. The surveys can be conducted by visual identification and can assume presence of hoary bats or the bats can be identified to a species level with the use of a bat echolocation detector such as an "Anabat" unit. If no roosting sites or bats are found, a letter report confirming absence shall be sent to the California Department of Fish and Wildlife (CDFW) and no further mitigation is required.



If roosting sites or hoary bats are found, then the following monitoring and exclusion, and habitat replacement measures shall be implemented. The letter or surveys and supplemental documents shall be provided to the City of Hanford prior to demolition permit issuance.

- a. If bats are found roosting outside of nursery season (May 1st through October 1st), then they shall be evicted as described under (b) below. If bats are found roosting during the nursery season, then they shall be monitored to determine if the roost site is a maternal roost. This could occur by either visual inspection of the roost bat pups, if possible, or monitoring the roost after the adults leave for the night to listen for bat pups. If the roost is determined to not be a maternal roost, then the bats shall be evicted as described under (b). Because bat pups cannot leave the roost until they are mature enough, eviction of a maternal roost cannot occur during the nursery season. A 250-foot (or as determined in consultation with CDFW) buffer zone shall be established around the roosting site within which no construction or tree removal shall occur.
- b. Eviction of bats shall be conducted using bat exclusion techniques, developed by Bat Conservation International (BCI) and in consultation with CDFW that allow the bats to exit the roosting site but prevent re-entry to the site. This would include, but not be limited to, the installation of one-way exclusion devices. The devices shall remain in place for seven days and then the exclusion points and any other potential entrances shall be sealed. This work shall be completed by a BCI-recommended exclusion professional. The exclusion of bats shall be timed and carried concurrently with any scheduled bird exclusion activities.
- c. Each roost lost (if any) will be replaced in consultation with the CDFW and may include construction and installation of BCI-approved bat boxes suitable to the bat species and colony size excluded from the original roosting site. Roost replacement will be implemented before bats are excluded from the original roost sites. Once the replacement roosts are constructed and it is confirmed that bats are not present in the original roost site, the structures may be removed or sealed.

Nesting Birds

Existing shrubs and trees on the project site could also provide nesting habitat for native migratory birds in the area. All native migratory non-game birds, including raptors, and their active nests are protected by the Migratory Bird Treaty Act (MBTA) of 1918 and Sections 3503, 3503.5, and 3513 of the California Fish and Game Code, which render it unlawful to take native breeding birds, and their nests, eggs, and young.

Project construction could adversely impact birds and potential nests on the project site. The buildings on the project site would be demolished and existing landscaping would be removed prior to construction of the proposed project. Thus, existing shrubs along the perimeter of the property and landscaping around the existing buildings on the project site would be removed. If nesting migratory birds are present (i.e., nests containing eggs or young), tree and shrub removal associated with the redevelopment of the project site could result in the loss of those birds caused by the direct mortality of adult or young birds, nest destruction, or disturbance of nesting native migratory birds species resulting in nest abandonment and/or the loss of reproductive effort. Disruption of nesting birds, resulting in the abandonment of active nests, or the loss of active nests through structure



removal would be a potentially significant impact. Indirect impacts on breeding birds could occur from increased noise, vibration, and dust during construction, which could adversely affect the breeding behavior of some birds, and lead to the loss (take) of eggs and chicks, or nest abandonment. Therefore, without mitigation, the project could have a potentially significant impact.

To maintain compliance with the MBTA and California Fish and Game Code, and to avoid or minimize direct and indirect effects on migratory non-game nesting birds, and their nests, young, and eggs, the following measures shall be implemented. Implementation of mitigation measure **BIO-2** would reduce potential impacts to nesting birds from the project to a less-than-significant level.

Mitigation Measure

- **MM BIO-2:** Preconstruction Nesting Bird Surveys. If project activities begin during nesting bird/raptor season (between January 1 and September 15), no earlier than one week prior to ground-disturbing activities or vegetation trimming or removal, a qualified biologist shall conduct preconstruction nesting bird clearance surveys within the project site and within a 100-foot radius around the project site for nesting birds, and other sensitive species.
 - Project activities that will remove or disturb potential nest sites should be scheduled outside the nesting bird season, if feasible. Migratory bird breeding season is January 15 to August 15, general bird breeding season is February 1 to September 15, and Conduct brush removal, tree trimming, building demolition, or grading activities outside of the nesting season. California Department of Fish and Wildlife biologists have defined the nesting season as February 1st through August 15th.
 - The nesting bird nesting season is typically from February 1 through August 31, but can vary slightly from year to year, usually depending on weather conditions. Raptors are known to begin nesting early in the year and ends late. The raptor nesting bird season begins January 1 to September 15.
 - If project activities that will remove or disturb potential nest sites (e.g., trees and shrubs) cannot be avoided between January 1 and August 31, a qualified biologist shall conduct a pre-construction survey for nesting birds within the limits of project disturbance within seven calendar days prior to mobilization, staging and other project-related disturbance. Preconstruction surveys shall be conducted no more than three days prior to vegetation trimming or removal, grubbing or grading, structure removal, or other construction-related disturbance.
 - If an active bird nest is located during the pre-construction survey and potentially will be affected, a no-activity buffer zone shall be delineated on maps and marked in the field by fencing, stakes, flagging, or other means up to 500 feet for raptors, or 200 feet for non-raptors. Materials used to demarcate the nests shall be removed as soon as work is complete or the fledglings have left the nest. The qualified biologist shall determine the appropriate size of the buffer zone based on the type of activities planned near the nest and the species of the nesting bird. Buffer zones shall not be disturbed until a qualified biologist determines that the nest is inactive, the young have fledged, the young are no longer being fed by the



parents, the young have left the area, or the young will no longer be affected by project activities. Periodic monitoring by a biological monitor will be performed to determine when nesting is complete. After the nesting cycle is complete, project activities may begin within the buffer zone.

• If neither nesting birds nor active nests are observed during the pre-construction survey(s), or if they are observed and would not be affected (i.e., are outside the buffer zone described above), then project activities may begin and no further nesting bird monitoring will be required.

Level of Significance After Mitigation

With implementation of mitigation measures **BIO-1** and **BIO-2** above, the project would result in less than significant impacts on Hoary bats and nesting bird species.

b) Would the project have a substantial adverse impact 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 Wildlife or U.S. Fish and Wildlife Service?

<u>No Impact</u>

The project site is vegetated with mostly non-native species, including Russian thistle. The project site also contains ornamental vegetation and plants. The literature review, results of the CNDDB, and project site reconnaissance survey indicate that riparian habitat or other sensitive natural communities do not exist on or adjacent to the project site. As shown in **Figure 4.4-2**, the closest area designated as critical habitat by the USFWS is critical habitat for vernal pool fairy shrimp, vernal pool tadpole shrimp, and California tiger salamander, located approximately eight miles to the northeast of the project site. For this reason, no direct or indirect impacts on riparian habitat or other sensitive natural communities would occur as a result of the proposed project. Therefore, the project would have no impact in this regard.



Figure 4.4-2 **USFWS** CRITICAL HABITAT



svisstopo, and the GIS User Community, Sources Esri, HERE, DeLorme, USOS, Intermap, Increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kang), Esri (Thailand), TomTom, MapmyIndia, 🕲 Tom, MapmyIndia, © OpenEtroeNap contributors, and the GIS user community, USENS Critical Habitats, Doc. 2016; UttraSystems Environmental, Inc., 2019 d, IGN, IGP



c) Would the project 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?

<u>No Impact</u>

According to the literature review, results of the CNDDB and National Wetlands Inventory data search, and project site reconnaissance, no wetlands occur in or adjacent to the project site. See **Figure 4.4-3**. For this reason, no direct or indirect impacts on federally protected wetlands (as defined by Section 404 of the Clean Water Act) or state-protected wetlands or waters are anticipated through direct removal, filling, hydrological interruption, or other means, as a result of project activities, and therefore, no impacts would result.

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

<u>No Impact</u>

The project site is located within an urbanized and built-out area of the City of Hanford. The project site and surrounding areas do not support resident or migratory fish species or wildlife nursery sites. According to the findings of the literature review, results of the CNDDB, and project site reconnaissance, no established resident or migratory wildlife corridors occur on the project site or in the surrounding areas. See **Figure 4.4-4**. As a result, the project would not interfere substantially with or impede: (1) the movement of any resident or migratory fish or wildlife species; (2) established resident or migratory wildlife corridors; or (3) the use of wildlife nursery sites. Therefore, there would be no impact in this regard.



<u>Figure 4.4-3</u> USFWS NATIONAL WETLANDS INVENTORY



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Figure 4.4-4 CDFW WILDLIFE CORRIDORS





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

<u>No Impact</u>

Heritage trees are defined in the City of Hanford Municipal Code (City of Hanford, 2015) § 12.12.020 Definitions, as follows: "Heritage tree means any of the following: (1) any Oak Tree native to Central California, Valley Oak Tree (*Quercus lobata*), with a diameter greater than ten (10) inches; or (2) any tree or a group of trees specifically designated by the city council for protection because of its historical significance, special character or community benefit." As detailed in sub-section C. of City Municipal Code § 12.12.310, Protection and Preservation of Heritage Trees: "In regard to any heritage tree designated by the city council for protection (hereinafter "protected tree"), any exterior construction work associated with any development project performed within a radius measured from the trunk center equal to ten (10) times the diameter of the trunk measured at four (4) feet above grade shall require the preparation and submittal of a tree protection plan for review and approval by the director and/or the city arborist prior to the issuance of any permit for a development project. The tree protection plan shall be prepared by a certified arborist." Sub-section D. details the required components of tree protection plans.

No heritage trees were observed on the project site. Proposed new landscaping would follow City of Hanford requirements for landscaping and drought-tolerant/resistant plants. Landscaping would be provided in all setback areas and open space areas visible from a public right-of-way and would include street and parking lot trees. The existing trees onsite would be removed but none of the trees onsite are heritage trees. The project would not conflict with any local policies or ordinances protecting biological resources, or any tree preservation policy or ordinance. Therefore, the project would have no impact in this regard.

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

<u>No Impact</u>

The project site is not located in a Natural Communities Conservation Plan (NCCP) (CDFW, 2019b) or near any of the natural communities discussed in the City of Hanford 2035 General Plan Update Draft EIR (Quad Knopf, Inc., 2016, p. 4.4-1). As shown on **Figure 4.4-5**, the project site is located within the Pacific Gas & Electric Company (PG&E) San Joaquin Valley Operation and Maintenance (O&M) HCP plan area.

PG&E's San Joaquin Valley O&M HCP plan area is defined to include PG&E's gas and electrical transmission and distribution facilities, the lands owned by PG&E and/or subject to PG&E easements for these facilities, private access routes to infrastructure associated with O&M activities, minor facility expansion areas, and mitigation areas for impacts resulting from covered activities. The plan area includes portions of nine counties including San Joaquin, Stanislaus, Merced, Fresno, Kings, Kern, Mariposa, Madera, and Tulare, and is approximately 276,350 acres. This HCP covers 23 wildlife and 42 plant species for 33 routine O&M activities for PG&E's electric and gas transmission and distribution systems within nine counties of the San Joaquin Valley. Activities that are covered under the HCP include activities associated with the O&M (including limited minor new construction) of PG&E's gas and electric transmission and distribution system as mandated for public safety. Typical activities include: gas pipeline protection, recoating, repair and replacement; electric line protection,



repair, reconductoring, and replacement; electric pole repair/replacement; vegetation management to maintain clearances around facilities; and minor new gas and electric extensions. Specific information on each activity is provided in the HCP (Jones & Stokes, 2007, p. ES-1). Figure 1-2 in the Plan (Land-Cover Types in Plan Area), the City of Hanford is mapped as an "Urban" land cover type (Jones & Stokes, 2007).

Within Hanford, PG&E provides power to sites that are located south of Iona Avenue and north of Flint Avenue via 12 kilovolt (kV) and 70 kV lines (Quad Knopf, Inc., 2014p. 6-19). The closest PG&E facility is an overhead single-circuit 60 kV electric transmission line that runs north-south on N. Eleventh Avenue, approximately 0.6 mile west of the project site. Neither construction nor operation of the proposed project would impact the PG&E easement or HCP.

Since the project site is not located within any NCCPs and would not impact the PG&E HCP, the project would not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP and therefore, no impacts would result.









4.5 Cultural Resources

Information from the Phase I Cultural Resources Inventory for the Kings Area Rural Transit (KART) Project, City of Hanford, dated June 13, 2019 (see **Appendix F**), prepared by UltraSystems (Gold, O'Neil and Doukakis, 2019), has been included in this section.

4.5.1 Impacts Associated with the Proposed Project

Would the project:		Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
f)	Cause a substantial adverse change		v		
	resource pursuant to § 15064.5?		•		
g)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		х		
h)	Disturb any human remains, including those interred outside of dedicated cemeteries?		X		

4.5.2 Methodology

A cultural resources analysis was conducted for the KART Project site (**Figure 4.5-1**) that included a California Historic Resources Inventory System (CHRIS) records and literature search at the Southern San Joaquin Valley Information Center (SSJVIC) located at California State University, Bakersfield. Additionally, a request was made to the Native American Heritage Commission (NAHC) to conduct a search of its Sacred Lands File (SLF) for potential traditional cultural properties as well as to provide a list of local Native American tribes and tribal representatives to contact. Finally, a pedestrian survey of the project site was completed. The SSJVIC records search was conducted on May 14, 2019. The NAHC request was made on May 17, 2019, and a reply was received on May 28, 2019; letters were sent to the listed tribes on May 29, 2019. The pedestrian field survey was conducted on May 16, 2019.



<u>Figure 4.5-1</u> TOPOGRAPHIC MAP





4.5.3 Existing Conditions

Based on the cultural resources records search, it was determined that no historic cultural resources have been previously recorded within the project site boundary. Within the 0.5-mile buffer zone, there have been no prehistoric archaeological sites and ten previously recorded historic-era cultural resources. Section 4.1 in **Appendix F** of this document describes the cultural resources.

The premier historic feature in the vicinity of the project site is linear in character – the San Joaquin Valley Railroad (CA-KIN-117H), located one block to the south of the project site. The railroad runs east/west and was originally constructed in 1877. The recorded segment retains only its integrity of location and association. Many of the railroad components are new, and with these changes have come a loss of integrity of materials and workmanship. Another historic linear feature is The People's Ditch (CA-KIN-97H) completed in 1879 (refer to Table 4.1-1 in **Appendix F.**)

The surrounding neighborhood contains three residences dating to the 1940s (P-16-000130, P-16-000131 and P-16-000133); the Victory Outreach Church dating to ca. 1920 (P-16-000132) and the Taoist Temple (P-16-000289) on China Alley; two civic structures consisting of the Hanford Carnegie Library constructed in 1905 (P-16-000290) and the Kings County Courthouse built in 1898 (P-16-000291); and the Lacy Milling Company Flour Mill that fills the entire block on West 5th Street built in the late 1880s (P-16-000278). The Taoist Temple, the Carnegie Library and the Kings County Courthouse are all listed in the National Register of Historic Places (see Table 4.1-1 in **Appendix F**).

In the course of the pedestrian survey, a historic trash feature was observed and recorded. This consists of a scatter of domestic elements (dinner ware and bottle glass fragments) and marine shell in vacant lots on both the north and south sides of East 8th Street between North Douty and North Brown Streets, but concentrated on the south side. This scatter has been recorded and submitted to the SSJVIC.

4.5.4 Impacts Assessment

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

Less than Significant Impact with Mitigation Incorporated

A historical resource is defined in § 15064.5(a)(3) of the CEQA Guidelines as any object, building, structure, site, area, place, record, or manuscript determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Historical resources are further defined as being associated with significant events, important persons, or distinctive characteristics of a type, period or method of construction; representing the work of an important creative individual; or possessing high artistic values. Resources listed in or determined eligible for the California Register, included in a local register, or identified as significant in a historic resource survey are also considered as historical resources under CEQA.

Similarly, the National Register criteria (contained in 36 CFR 60.4) are used to evaluate resources when complying with Section 106 of the National Historic Preservation Act (NHPA). Specifically, the National Register criteria state that eligible resources comprise districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that (a) are associated with events that have made a significant contribution to the



broad patterns of our history; or (b) that are associated with the lives of persons significant in our past; or (c) that embody the distinctive characteristics of a type, period, or method of construction, or that possess high artistic values, or that represent a significant distinguishable entity whose components may lack individual distinction; or (d) that have yielded or may be likely to yield, information important to history or prehistory.

A substantial adverse change in the significance of an historical resource as a result of a project or development is considered a significant impact on the environment. Substantial adverse change is defined as physical demolition, relocation, or alteration of a resource or its immediate surroundings such that the significance of the historical resource would be materially impaired. Direct impacts are those that cause substantial adverse physical change to a historic property. Indirect impacts are those that cause substantial adverse change to the immediate surroundings of a historic property, such that the significance of a historical resource would be materially impaired.

With the presence of a historic period trash scatter observed and recorded within the project site boundary during the pedestrian survey (in two lots on the north side of East Eight Street and one lot on the south side of East Eight Street - APN parcels 010-275-01-0000, 010-275-00-9000 and 120-420-04-000), an impact on historic resources would be associated with the development of the project.

Mitigation Measure

MM CUL-1 A historical archaeological resource consisting of a domestic trash deposit is present within the project site. A qualified archaeologist shall be retained to provide monitoring in the area of the trash deposit on three lots on the north and south sides of East 8th Street. If subsurface elements or features of the historic deposit are encountered, the archaeologist shall be afforded the necessary time and funds to recover, analyze, and curate the find(s). Construction activities may continue on other parts of the project site while evaluation and treatment of historical or unique archaeological resources takes place.

Level of Significance After Mitigation

With implementation of mitigation measure **CUL-1** above, potential impacts related to historic archaeological resources would be less than significant.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Less than Significant Impact with Mitigation Incorporated

An archaeological resource is defined in § 15064.5(c) of the CEQA Guidelines as a site, area or place determined to be historically significant as defined in § 15064(a) of the CEQA Guidelines, or as a unique archaeological resource defined in § 21083.2 of the Public Resources Code as an artifact, object, or site that contains information needed to answer important scientific research questions of public interest or that has a special and particular quality such as being the oldest or best example of its type, or that is directly associated with a scientifically recognized important prehistoric or historic event or person. The level elevation of the project site relative to adjacent roads and the older character of building construction in the neighborhood suggest that ground here has been moderately disturbed, with the native surface soil remaining. The cultural resources investigation



conducted by UltraSystems, which included a CHRIS records search of the project site and buffer zone, a search of the SLF by the NAHC, and pedestrian field survey, leads to the conclusion that it is unlikely that undisturbed unique archaeological resources exist on the project site.

The cultural resources records search conducted at the SSJVIC determined that there are no known prehistoric cultural resource sites or isolates recorded within the 0.5-mile radius buffer zone of the area of potential effect (APE) of the project boundary. The result of the pedestrian survey was negative for prehistoric sites and isolates; however, a historic trash scatter was observed and recorded on the project site.

According to records at the SSJVIC, no previous cultural resource surveys have included a portion of the project area. Ten surveys have been conducted within the 0.5-mile radius project buffer but not within the project APE (see Table 4.5-2 in **Appendix F**). As noted above, none of these surveys recorded prehistoric or historic cultural resources within the project boundary.

A NAHC SLF search was conducted on and within a 0.5-mile buffer around the project site. The NAHC letter of May 28, 2019 indicated that no records documenting the presence of traditional cultural properties within this area exist. Six representatives of the five Native American tribes were contacted requesting a reply if they have knowledge of cultural resources in the area that they wished to share, and asking if they had any questions or concerns regarding the project. These tribes are:

- Kings River Choinumni Farm Tribe
- Table Mountain Rancheria
- Santa Rosa Rancheria Tachi Yokut Tribe
- Tule River Indian Tribe
- Wuksache Indian Tribe/Eshom Valley Band

UltraSystems sent letters on May 29, 2019 to each of the six tribal contacts representing five tribes (Kings River Choinumni Farm Tribe, Santa Rosa Rancheria Tachi Yokut Tribe, Table Mountain Rancheria, Tule River Indian Tribe, and Wuksache Indian Tribe / Eshom Valley Band), and emailed identical letters and maps to each of the contacts for which email addresses were known (**Appendix F**, **Attachment C**). The letters requested a reply if they have knowledge of cultural resources in the area, and asked if they had any questions or concerns regarding the project. Mr. Robert Pennell, Cultural Resources Director of the Table Mountain Rancheria sent a letter dated July 1, 2019 stating that the project site is outside the tribe's area of interest (**Appendix F**, **Attachment C**).

Following up the initial letter and email contacts, telephone calls were made by Archaeological Technician Megan Doukakis on July 1, 2019. Three telephone calls were placed with no direct answer and therefore messages were left describing the project and requesting a response. These were to Chairperson Ruben Barrios, Sr., of the Santa Rosa Rancheria Tachi Yokut Tribe; Chairperson Neil Ryan of the Tule River Indian Tribe; Leanne Walker-Grant, Chairperson of the Table Mountain Rancheria; and Chairperson Kenneth Woodrow of the Wuksache Indian Tribe/Eshom Valley Band. The secretary (Sarah) for Mr. Bob Pennell, Cultural Resources Director for the Table Mountain Rancheria, stated that the Hanford Project site is outside the tribe's area of concern. Mr. Stan Alec, speaking for the Kings River Choinumni Farm Tribe, stated that he was not aware of any cultural resources of concern in the project area. On July 3, 2019, Ms. Doukakis again telephoned the Santa Rosa Rancheria Tachi Yokut Tribe, the Tule River Indian Tribe, and the Wuksache Indian Tribe. Chairperson Barrios of the Santa Rosa Rancheria did not answer, but a message was left with the tribe's cultural resources department's secretary. Chairperson Ryan of the Tule River tribe was out of the office, and a message was left on his answering machine. There was no answer to Chairperson



Woodrow's of the Wuksache Indian Tribe telephone and a message was left on his answering machine. There have been no return calls from these three tribes to date. (See **Appendix F**, **Attachment C**.)

The result of the pedestrian survey was negative for both prehistoric sites and isolates on the project site. Based on the results of the records search, tribal consultation, and the onsite field survey, it is unlikely that prehistoric cultural resources or tribal resources would be adversely affected by construction of the project. However, grading activities associated with development of the project would cause new subsurface disturbance and potentially could result in the unanticipated discovery of archaeological resources. A light scatter of historic trash was observed and recorded on both sides of East 8th Street.

Mitigation Measure

MM CUL-2 If prehistorical and/or historical archaeological resources are discovered during construction, the contractor shall halt construction activities in the immediate area and notify the Kings County Area Public Transit Agency (KCAPTA). An on-call qualified archaeologist shall be notified and afforded the necessary time to recover, analyze, and curate the find(s). The qualified archaeologist shall recommend the extent of archaeological monitoring necessary to ensure the protection of any other resources that may be in the area and afforded the necessary time and funds to recover, analyze, and curate the find(s). Construction activities may continue on other parts of the building site while evaluation and treatment of historical or unique archaeological resources takes place.

Level of Significance After Mitigation

With implementation of Mitigation Measure **CUL-2** above, potential impacts related to archaeological resources would be less than significant.

c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Less than Significant with Mitigation Incorporated

As previously discussed in **Section 4.5 b)**, the project would be built within a previously developed urban landscape including existing residential and commercial buildings, as well as vacant lots. No human remains have been previously identified or recorded onsite. It is unlikely that undisturbed unique archaeological resources exist on the project site. The project proposes grading activities for the implementation of infrastructure that includes water, sewer and utility lines. Grading and trenching activities associated with development of the project would cause new subsurface disturbance and could result in the unanticipated discovery of unknown human remains, including those interred outside of formal cemeteries. In the unlikely event of an unanticipated discovery, implementation of **MM CUL-3** and adherence to all applicable codes and regulations would ensure that impacts related to the accidental discovery of human remains would be less than significant.

California Health and Safety Code § 7050.5 identifies procedures for the discovery of human remains. CEQA § 15064.5 indicates the process for determining the significance of impacts on archaeological and historical resources. California Public Resources Code § 5097.98 stipulates the notification



process during the discovery of Native American human remains, descendants, disposition of human remains, and associated artifacts.

Mitigation Measure

MM CUL-3: If human remains are encountered during excavations associated with this project, all work shall stop within a 30-foot radius of the discovery and the Kings County Coroner will be notified (§ 5097.98 of the Public Resources Code). The Coroner will determine whether the remains are recent human origin or older Native American ancestry. If the coroner, with the aid of the supervising archaeologist, determines that the remains are prehistoric, they will contact the NAHC. The NAHC will be responsible for designating the Most Likely Descendant (MLD). The MLD (either an individual or sometimes a committee) will be responsible for the ultimate disposition of the remains, as required by § 7050.5 of the California Health and Safety Code. The MLD will make recommendations within 24 hours of their notification by the NAHC. These recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials (§ 7050.5 of the Health and Safety Code).

Level of Significance After Mitigation

With implementation of mitigation measure **CUL-3** above, potential impacts related to human remains would be less than significant.



4.6 Energy

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

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

and

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less than Significant Impact

According to the CEQA Guidelines, "[u]ses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified." Therefore, the purpose of this analysis is to identify any significant irreversible environmental effects of project implementation that cannot be avoided.

Both construction and operation of the project would lead to the consumption of limited, slowly renewable, and non-renewable resources, committing such resources to uses that future generations would be unable to reverse. The new development would require the commitment of resources that include: (1) building materials; (2) fuel and operational materials/resources; and (3) the transportation of goods and people to and from the project.

During project construction, energy would be consumed in the form of electricity associated with the conveyance of water used for dust control and, on a limited basis, powering lights, electronic equipment, or other construction activities necessitating electrical power. Construction activities, including the construction of new buildings and associated facilities, typically do not involve the consumption of natural gas. Project construction would consume energy in the form of petroleum-based fuels associated with the use of offroad construction vehicles and equipment on the



project site, construction worker travel to and from the project site, and the delivery and haul truck trips hauling solid waste from and to the project site. During project operation, energy would be consumed at the facility for multiple purposes, including heating, air conditioning, appliances, and use of electronics. Energy would also be consumed during project operations related to water usage, solid waste disposal, and vehicle trips. By far, most of the vehicle trips will be those of the buses operated by KART.

For the approximate analysis presented here, it was assumed that the energy consumed at the KART facility (exclusive of consumption by buses) would, without planned energy-saving design features, be about the same as at the present facility. In addition, the vehicle miles traveled (VMT) for buses not serving the city of Hanford would be the same at the new facility as they were at the old. The VMT for trips in the Hanford service area would double because headways would be halved.

Energy use for facility operations was estimated with the CalEEMod program, which is discussed in **Section 4.3** and elsewhere in this document. VMT values were calculated from bus schedule and route mile data provided by KAPCA (Dow, 2019b), and were used as a surrogate for energy from consumption of transportation fuels. While a variety of factors govern the relationship between VMT and fuel energy, in general an increase in VMT results in an increase in motor vehicle energy use.

Table 4.6-1 shows the results of this analysis. Natural gas use would remain the same, while electricity consumption would decrease. The project would expand the use of transit services in the City of Hanford and therefore VMT would increase. The increase shown in **Table 4.6-1** in reality would be lower than shown, because it would be offset to some extent by the elimination of passenger vehicle trips. (See **Section 4.8.4**.) In any event, the project will consume energy, including that from irreplaceable fossil fuels, for a public benefit: increased public transportation services. This energy consumption would not be "wasteful, inefficient, or unnecessary." Under significance criterion **a**), impacts would be less than significant.

The project would comply with all applicable regulations and codes, such as the California Code of Regulations Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings and Title 24 Part 6: California Green Building Standards Code (CalGreen Code). Both of these require achievement of various levels of energy efficiency in building construction, design and operation. In addition, the project will employ several strategies in the spirit of sustainability. It will install energy-efficient lighting; energy-efficient appliances, such as dishwashers, fans, and refrigerators; install solar photovoltaics on building or as parking lot shade (size is unknown at this time); increase transit frequency by 50% or more (e.g., eight routes will be going from hourly service to half-hour service); install low-flow bathroom and kitchen faucets and low flow toilets; and use water-efficient irrigation systems.

Regulations and codes described above limit the amount of energy consumed by new development. Nevertheless, the consumption of such resources would represent a long-term commitment of those resources. The commitment of resources required for the construction and operation of the project would limit the availability of such resources for future generations or for other uses during the life of the project. However, continued use of such resources is consistent with the anticipated growth within the City and would not result in energy consumption requiring a significant increase in energy production for the energy provider. Therefore, the project will not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Under significance criterion **b**, impacts would be less than significant.



<u>Table 4.6-1</u>	
ESTIMATED PROJECT OPERATIONAL ENERGY	USE

Energy Type	Units	Existing	Future	Change	Percent Change
Onroad Motor Vehicle Travel	Vehicle Miles Traveled per Year	3,309,578	5,390,078	2,080,500	62.8
Natural Gas Use	1,000 BTU per year	157,553	157,553	0	0
Electricity Use	Kilowatt- hours per year	110,106	95,587	(14,519)	(13.2)


4.7 Geology and Soils

	Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	 Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. 				X
	ii) Strong seismic ground shaking?			X	
	iii) Seismic-related ground failure, including liquefaction?			X	
	iv) Landslides?				Х
b)	Result in substantial soil erosion or the loss of topsoil?			X	
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			Х	
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			X	
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?				х
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		



- a) Would the project 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.

<u>No Impact</u>

The project is located in the City of Hanford, in the Great Valley Geomorphic Province in the San Joaquin Valley drained by the San Joaquin River. The Great Valley is a trough (basin) in which sediments have been deposited almost continuously since the Jurassic (about 160 million years ago; Wagner, 2002, p. 2). The basin began forming as a low area between the subducting ocean plate on the west, which was diving beneath the North American Plate, and the volcanoes to the east in what are now the Sierra Nevada Mountains. Approximately 20 million years ago, these tectonics changed and, instead of diving beneath the North American Plate, the ocean plate began to slide northward along it and becoming the San Andreas Fault, creating the mountains that parallel the fault. Faults on the east side of the Great Valley are the result of the North American Plate pulling apart. The Great Valley became a basin with different tectonic regimes on either side, neither of which produces faults in the Basin (Stenner, 2019).

The City of Hanford, including the project, is not mapped as being on or proximate to known earthquake faults, including Alquist-Priolo Fault Zones (refer to **Figure 4.7-1** and **Figure 4.7-2** below). The nearest known faults are two sections of the Great Valley (GV) thrust fault system: the Coalinga (GV 13) section (Bryant, 2017a), and the Kettleman Hills-North Dome (GV 14) section (Bryant, 2017b). Both are historic thrust faults with slip rates between 1 to 5 millimeters/year. The GV-13 section is capable of a magnitude 6.5 earthquake with a calculated recurrence interval of 467 years; the GV-14 section is capable of a magnitude 6.4 earthquake with a calculated recurrence interval of 414 years (Peterson et al, 1996, p. A-8). Both of these faults are 31.3 and 28.7 miles (respectively) west/southwest of the project (Soils Engineering, Inc. 2019, p. 4) and generally parallel Interstate 5.

The Nunez Fault is a two-segment fault located between the San Joaquin Ridge and the Anticline Hills, 6.5 to 8.5 miles northwest of the City of Coalinga. The fault begins in Nunez Canyon and continues south toward Salt Canyon, on the north slopes of the Anticline Hills. This fault is associated with several earthquakes that occurred in 1983. A subsequent investigation of the fault by the California Division of Mines and Geology (Hart, 1984) found two principal zones of surface rupture on the northern segment, and on the southern segment found zones of surface fault rupture, west-facing scarps, and an exposed fault in Post Canyon. Post Canyon Creek shows that the drainage has been deflected right-laterally by the movement of the Nunez Fault approximately 0.75 mile upstream of its confluence with Los Gatos Creek. The Nunez Fault was determined to meet the criteria for zoning under the Alquist-Priolo Earthquake Fault Zoning Act and was thus designated in 1984. The Nunez Fault is located approximately 45 miles west of the project.

No known earthquake faults, including Alquist-Priolo Earthquake Fault Zones, are located within 30 miles of the project site. The nearest known earthquake faults are portions of the Great Valley Fault zone (GV-13 and GV-14), west/southwest of the project near Interstate 5. Rupture of these fault segments would have no impact on the project due to their distance from the project site, and no mitigation is proposed.



Figure 4.7-1 REGIONALLY ACTIVE FAULTS





Figure 4.7-2 ALQUIST-PRIOLO FAULT ZONES





ii) Strong seismic ground shaking?

Less than Significant Impact

As discussed in **Section 4.7 i**), the nearest earthquake fault is 28.7 miles west of the project site. The California Seismic Safety Commission (SSC), in conjunction with CGS, the Governor's Office of Emergency Services, and USGS, produced regional maps illustrating earthquake shaking potential, e.g., the relative intensity of ground shaking and damage in the Central Coast Region, including Kings County, from anticipated future earthquakes. The map for the Central Coast of California shows the northeast and southeast third of Kings County as an area that will experience lower levels of shaking, less frequently, from known, active faults; however, very infrequent earthquakes could still cause strong shaking in the regions distant from known active faults (SSC et. al., 2003). For example, the geotechnical report prepared for the proposed project calculated that the project site would experience a peak site acceleration of 0.105g from a magnitude 6.4 earthquake located on GV-14, and a site acceleration of 0.123g from a magnitude 8.8 earthquake located on the San Andreas fault, approximately 54 miles west of the project; however, the ground shaking experienced at the project site from both of these earthquakes would be nearly the same: very strong, with negligible damage in buildings of good design and construction; slight to moderate damage in well-built ordinary structures; considerable damage in poorly built or badly designed structures; and some chimneys would be broken (intensity of VII on the Modified Mercalli Intensity Scale) (Soils Engineering, Inc., 2019, Appendix D, and USGS, 2019a).

The project would also be required to comply with applicable seismic safety standards and codes as set forth by the California Building Standards Commission in the most recent edition of the California Building Standards Code (CBC; CCR Title 24), as well as applicable design requirements and codes required by the City of Hanford.

The absence of known earthquake faults in the Great Basin combined with compliance with applicable seismic design standards and codes would minimize or avoid the potential of the project to directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving strong seismic shaking. Impacts would be less than significant, and mitigation is not proposed.

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact

The soil beneath the project site is a conglomerate of nine soils, only four of which occur within the City and its immediate vicinity. These soils had been imported for past construction on the site; the earliest available topographic map for this area shows existing development on most of the project site and is dated 1926 (USGS, 1926), which indicates that the urban soils may have been imported prior to that date.

The Natural Resources Conservation Service (NRCS) Web Soil Survey has mapped only one soil on the project site: Urban Land. This soil is a human-transported mixture of multiple soil types, in this case, of nine soil types, and has not been evaluated by the Soil Survey Staff for soil erosion factors, for physical properties such as linear extensibility, percent clay or sand, and plasticity index (Soil Survey Staff, 2019). However, the project geotechnical investigation (Soils Engineering, Inc. 2019, p. 4) identified the soils encountered during their site investigation as consisting mainly of an upper layer of Silty Sand, and Sandy or Clayey Silt underlain by layers of Poorly-Graded Sand and occasional



layers of Sandy Clay. These soils are classified as SM, ML, SP and CL respectively in the Unified Soils Classification System (USCS):

- SM silty sands; sand-silt mixtures
- ML Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.
- SP Poorly-graded sands or gravelly sands, with little or no fines, and
- CL Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.

Seismic-related ground failure such as liquefaction occurs when saturated, loose soils (e.g., sand or silty sand) are weakened and transformed from a solid to a near-liquid state as a result of increased pore water pressure caused by the strong ground motion of an earthquake. Seismic-related ground failure can include lateral spreading, ground oscillation, flow failure, loss of bearing strength, subsidence, and buoyancy effects, in addition to liquefaction. Seismic-related ground failure typically occurs in areas underlain by young alluvium where the groundwater table is higher than 50 feet below ground surface (bgs). Available groundwater elevation data shows that, in general, groundwater elevations that underlie the City of Hanford and immediate vicinity range from between approximately 120 feet bgs to 160 feet bgs (Quad Knopf, 2016, p. 4.6-5); however, the geotechnical investigation for the proposed project reported the groundwater was not encountered in the field exploration test borings, which extended to a maximum depth of sixty-one feet bgs (Soils Engineering, Inc. 2019, p. 5).

The California Geological Survey has not evaluated the Hanford Quadrangle or most of the southern portion of the Great Basin for earthquake-induced hazards such as ground failure and liquefaction (CGS, 2019a). Liquefaction analyses conducted on bore samples taken from the project site indicate that liquefaction potential is very low (Soils Engineering, Inc. 2019, p. 6).

The estimated amount of dynamic settlement (i.e., the process of loose to medium-dense granular soils undergo volumetric changes during ground shaking) that would occur at the project site during a major earthquake ranges from approximately 0.26 inch to 0.75 inch based on the lithology encountered. The estimated amount of differential settlement (i.e., the difference in the total settlement between two structure foundations or two points in the same structure foundation) ranges from 0.13 inch to 0.375 inch (Soils Engineering, Inc., 2019, p. 6).

Provided that the maximum allowable soil bearing pressures provided in the geotechnical report (Soils Engineering, Inc., 2019, p. 11) are not exceeded, total settlement should not exceed one inch. A major portion, two-thirds to one-half, of total settlement should occur before the end of construction. Differential settlements should occur before the end of construction. Differential settlements should occur before the end of construction. Differential settlements should occur before the end of construction. Differential settlements should occur before the end of construction. Differential settlements should not exceed on a ninch for a horizontal span of thirty feet (Soils Engineering, Inc., 2019, p. 11).

Due to the absence of a groundwater table higher than 50 feet bgs, the project is unlikely to directly or indirectly result in adverse effects, including the risk of loss, injury, or death, involving seismic-related ground failure, including liquefaction. Additionally, given the absence of known, active earthquake faults within 28 miles of Hanford, as well as compliance with applicable seismic safety standards and codes as set forth by the CBC in the most recent edition of CCR Title 24 and



applicable design requirements and codes required by the City of Hanford and that the recommendations made in the Geotechnical Feasibility Report are followed, potential impacts would be less than significant. Mitigation is not proposed.

iv) Landslides?

<u>No Impact</u>

Landslides occur when the stability of the slope changes from a stable to an unstable condition. A change in the stability of a slope can be caused by a number of factors, acting together or alone. Natural causes of landslides include groundwater (pore water) pressure acting to destabilize the slope, loss of vegetative structure, erosion of the toe of a slope by rivers or ocean waves, weakening of a slope through saturation by snow melt or heavy rains, earthquakes adding loads to barely stable slope, earthquake-caused liquefaction destabilizing slopes, and volcanic eruptions.

Topography within the Great Basin region, including the project site is relatively flat, and the CGS has not evaluated most of the San Joaquin Valley for landslide hazards (CGS, 2019b). The project is approximately 235 feet AMSL. The nearest steep slopes would be Stokes Mountain and Colvin Mountain on the eastern toe of Sequoia National Forest, approximately 28 miles and 29 miles east of the project site, respectively. To the west, the Anticline Ridge and the Kettleman Hills are approximately 39 miles and 32 miles away, respectively (Google Earth, 2019). The potential for the project to directly or indirectly cause potential substantial adverse effects, including loss of life, injury, or death involving landslides is non-existent because there are no steep slopes or any slopes on the project site. As depicted in **Figure 4.7-3** below, the nearest landslide zone is located approximately 118 miles northwest of the project site. No impacts would occur and mitigation is not proposed.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact

Under existing conditions, a majority of the project site is developed and paved (Google Earth, 2019). Construction of the project may result in a small amount of erosion during the demolition and construction phase when the underlying soil is exposed to wind and water. However, implementation of site-specific BMPs as directed by the project SWPPP would minimize or avoid substantial loss of erosion or topsoil during the demolition and construction process, until exposed soils are once again paved over.

Post-construction, the project will be almost entirely paved with the exception of landscaped areas. These areas will be vegetated and the soil stabilized before construction is complete; therefore, the project would not result in substantial soil erosion or the loss of topsoil, and mitigation is not proposed. The project would have a less than significant impact.



Figure 4.7-3 LANDSLIDES AND LIQUEFACTION





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

Less than Significant Impact

Impacts related to liquefaction and landslides are discussed above in **Sections 4.7 iii)** and **4.7 iv)**. Lateral spreading is the downslope movement of surface sediment due to liquefaction in a subsurface layer. The downslope movement is due to gravity and earthquake shaking combined. Lateral spreading of the ground surface during a seismic activity usually occurs along the weak shear zones within a liquefiable soil layer and has been observed to generally take place toward a free face (i.e., retaining wall, slope, or channel) and to lesser extent on ground surfaces with a very gentle slope.

The underlying geologic unit is Quaternary (Pleistocene to Holocene) alluvium and marine deposits, which typically consist of alluvium, lake, playa, and terrace deposits; unconsolidated and semi-consolidated and, in the Great Valley, mostly mon-marine (USGS, 2019b). As discussed in **Section 4.7 iii)**, available groundwater elevation data shows that, in general, groundwater elevations that underlie the City of Hanford and immediate vicinity range from between approximately 120 feet bgs to 160 feet bgs (Quad Knopf, 2016, p. 4.6-5), and bore samples taken to depths of 61 feet bgs did not encounter groundwater (Soils Engineering, Inc. 2019, p. 5).

Liquefaction analyses conducted on bore samples taken from the project site indicate that liquefaction potential is very low (Soils Engineering, Inc. 2019, p. 6). Given the average depth of the groundwater table which underlies the City, including the project site, it is not anticipated that the soil within the project site has a high expansion potential, a high potential for lateral spreading, subsidence, liquefaction, or collapse. Additionally, the project would be constructed in accordance with the current requirements of California Building Code, which are designed to assure safe construction and include building foundation requirements appropriate to site conditions. Therefore, impacts in this regard would be less than significant.

d) Would the project 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?

Less than Significant Impact

Under the California Building Code, soils are considered expansive only if more than 10 percent of the soil particles are less than 5 micrometers in size, have a plasticity index rating of 15 percent or greater, and more than 10 percent of soil particles pass a No. 200 sieve (75 micrometers) (CBC, Title 24, Part 2, California Code of Regulations). Expansive soils shrink and swell with changes in soil moisture. Soil moisture may change from landscape irrigation, rainfall, and utility leakage. The soil on the project site is composed of Urban land (167), which has not been rated by the NRCS Soil Survey for percent clay, percent sand, plasticity index, or other soil properties and qualities (Soil Survey Staff, 2019). According to the Geotechnical Feasibly Report, soils at the project site possess low to no expansion potential (Soils Engineering, Inc. 2019, p. 4). Therefore, the project would have a less than significant impact regarding expansive soils onsite.

e) Would the project 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?



<u>No Impact</u>

The proposed project would not include septic tanks or alternative waste water disposal systems. For this reason, no impacts associated with septic tanks or alternative waste water disposal systems would occur.

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

Less than Significant Impact with Mitigation Incorporated

The soil at the project site is described as alluvial fan deposits "composed of Quaternary deposits that may be referred to as the Modesto Formation in this vicinity (see McLeod, 2019, p. 2 in **Appendix H**). Although no paleontological sites have been documented within the project area, there are "vertebrate localities designated as coming from the Modesto Formation, the underlying Riverbank Formation, or similar deposits." The nearest vertebrate fossil locality to the project site is LACM 1156, approximately 35 miles southwest of the project area near Delano that contained a fossil specimen of horse, *Equus*, at a depth of 45 feet (see McLeod, 2019, p. 1 in **Appendix H**).

Shallow excavations into the soil and upmost strata of the Modesto Formation are unlikely to encounter significant fossils; however, deeper excavation to the Modesto Formation or underlying Riverbank Formation may encounter significant vertebrate fossils. Project implementation could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature and result in a potentially significant impact. Grading and trenching activities associated with development of the project would cause new subsurface disturbance and could result in the unanticipated discovery of unique paleontological resources. In the event of an unexpected discovery, implementation of mitigation measure **GEO-1** would ensure paleontological resources or unique geologic features are not significantly affected.

Mitigation Measure

MM GEO-1 If paleontological resources are uncovered during construction activities, the construction contractor shall halt construction activities in the immediate area and notify the Kings County Area Public Transit Agency. The on-call paleontologist shall be notified and afforded the necessary time and funds to recover, analyze, and curate the find(s). Subsequently, the monitor shall remain onsite for the duration of the ground disturbance to ensure the protection of any other resources that may be in the area.

Level of Significance After Mitigation

With implementation of mitigation measure **GEO-1** above, potential impacts related to paleontological resources would be less than significant.



4.8 Greenhouse Gas Emissions

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

The information in this section is based on the analysis provided in the Air Quality and Greenhouse Gas Technical Report prepared for the proposed project and included as **Appendix D** to this IS/MND.

4.8.1 Background Information on Greenhouse Gas Emissions

Constituent gases that trap heat in the Earth's atmosphere are called GHGs, analogous to the way a greenhouse retains heat. GHGs play a critical role in the Earth's radiation budget by trapping infrared radiation emitted from the Earth's surface, which would otherwise have escaped into space. Prominent GHGs contributing to this process include CO₂, methane (CH₄), nitrous oxide (N₂O), and chlorofluorocarbons (CFCs). Without the natural heat-trapping effect of GHG, the earth's surface would be about 34°F cooler.³⁵ This is a natural phenomenon, known as the "greenhouse effect," and is responsible for maintaining a habitable climate. However, anthropogenic emissions of these GHGs in excess of natural ambient concentrations are responsible for the enhancement of the "greenhouse effect" and have led to a trend of unnatural warming of the Earth's climate, which is known as global warming or climate change, or more accurately global climate disruption. Emissions of these gases that induce global climate disruption are attributable to human activities associated with industrial/manufacturing, utilities, transportation, residential, and agricultural sectors.

The Global Warming Potential (GWP) is the potential of a gas or aerosol to trap heat in the atmosphere. Individual GHG compounds have varying GWP and atmospheric lifetimes. The reference gas for the GWP is CO_2 ; CO_2 has a GWP of one. The calculation of the CO_2 equivalent (CO_2e) is a consistent methodology for comparing GHG emissions since it normalizes various GHG emissions to a consistent metric. CH_4 's warming potential of 25 indicates that CH_4 has a 25 times greater warming effect than CO_2 on a molecular basis and the GWP for sulfur hexafluoride is 22,800. The larger the GWP, the more that a given gas warms the Earth compared to CO_2 over that time period. The time period usually used for GWPs is 100 years. GWPs for the three primary GHGs produced by the project are presented in **Table 4.8-1**. A CO_2e is the mass emissions of an individual GHG multiplied by its GWP. GHGs are often presented in units called tonnes (t) (i.e., metric tons) of CO_2e (t CO_2e).

³⁵ Climate Action Team Report to Governor Schwarzenegger and the California Legislature. California Environmental Protection Agency, Climate Action Team. March 2006.



	GWP for 100-year time horizon			
Pollutant	Second assessment report ³⁷	4 th assessment report (AR4) ³⁸		
Carbon dioxide (CO ₂)	1	1		
Methane (CH ₄)	21	25		
Nitrous oxide (N ₂ O)	310	298		

Table 4.8-1 GLOBAL WARMING POTENTIALS³⁶

Note: Current protocol is to use the 4th assessment values; however, the second assessment report values are also provided since they are the values used by many inventories and public documents.

Carbon Dioxide (CO₂)

Carbon Dioxide is a colorless, odorless gas consisting of molecules made up of two oxygen atoms and one carbon atom. CO_2 is produced when an organic carbon compound (such as wood) or fossilized organic matter (such as coal, oil, or natural gas) is burned in the presence of oxygen. CO_2 is removed from the atmosphere by CO₂ "sinks," such as absorption by seawater and photosynthesis by ocean-dwelling plankton and land plants, including forests and grasslands. However, seawater is also a source of CO_2 to the atmosphere, along with land plants, animals, and soils, when CO_2 is released during respiration. Whereas the natural production and absorption of CO_2 is achieved through the terrestrial biosphere and the ocean, humankind has altered the natural carbon cycle by burning fossil coal, oil, and natural gas; and wood. Since the industrial revolution began in the mid-1700s, each of these activities has increased in scale and distribution. Prior to the industrial revolution, CO₂ concentrations were stable at a range of 275 to 285 parts per million³⁹ (ppm). The National Oceanic and Atmospheric Administration's (NOAA's) Earth System Research Laboratory (ESRL)⁴⁰ indicates that global concentration of CO₂ were 396.72 ppm in April 2013. In addition, the CO₂ levels at Mauna Loa⁴¹ averaged over 400 ppm for the first time during the week of May 26, 2013. These concentrations of CO_2 exceed by far the natural range over the last 650,000 years (180 to 300 ppm). as determined from ice cores.

³⁶ *Global Warming Potentials. Greenhouse Gas Protocol.* World Resources Institute and World Business Council on Sustainable Development. http://www.ghgprotocol.org/files/ghgp/tools/Global-Warming-Potential-Values.pdf. Accessed May 2015.

³⁷ Second Assessment Report. Climate Change 1995: WG I - The Science of Climate Change. Intergovernmental Panel on Climate Change. 1996

³⁸ *Climate Change 2007: The Physical Science Basis.* Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. 2007

³⁹ Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, 2007. Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.). Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

⁴⁰ Trends in Atmospheric Carbon Dioxide. Earth System Research Laboratory. National Oceanic and Atmospheric Administration. http://www.esrl.noaa.gov/gmd/ccgg/trends/global.html. Accessed June 2013.

⁴¹ Ibid.



Methane (CH₄)

Methane (CH₄) is a colorless, odorless non-toxic gas consisting of molecules made up of four hydrogen atoms and one carbon atom. CH₄ is combustible, and it is the main constituent of natural gas, a fossil fuel. CH₄ is released when organic matter decomposes in low oxygen environments. Natural sources include wetlands, swamps and marshes, termites, and oceans. Human sources include the mining of fossil fuels and transportation of natural gas, digestive processes in ruminant animals such as cattle, rice paddies and the buried waste in landfills. Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of CH₄. Other anthropogenic sources include fossil-fuel combustion and biomass burning.

Nitrous Oxide (N₂O)

Nitrous Oxide (N_2O) is a colorless, non-flammable gas with a sweetish odor, commonly known as "laughing gas," and sometimes used as an anesthetic. N_2O is naturally produced in the oceans and in rainforests. Manmade sources of N_2O include the use of fertilizers in agriculture, nylon and nitric acid production, cars with catalytic converters and the burning of organic matter. Concentrations of N_2O also began to rise at the beginning of the industrial revolution.

Chlorofluorocarbons (CFCs)

Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in CH₄ or ethane with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the Earth's surface). They have no natural sources but were first synthesized in 1928. CFCs have been used as refrigerants, aerosol propellants, and cleaning solvents. Because of the discovery that they can destroy stratospheric ozone, an ongoing global effort to halt their production was undertaken and has been extremely successful, so much so that levels of the major CFCs are now remaining steady or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years.

Hydrofluorocarbons (HFCs)

Hydrofluorocarbons (HFCs) are synthesized chemicals that are used as a substitute for CFCs. Out of all the GHGs, HFCs are one of three groups with the highest GWP. HFCs are synthesized for applications such as automobile air conditioners and refrigerants.

Perfluorocarbons (PFCs)

Perfluorocarbons (PFCs) have stable molecular structures and do not break down through chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above Earth's surface are able to destroy the compounds. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. The two main sources of PFCs are primary aluminum production and semiconductor manufacture.

Sulfur Hexafluoride (SF₆)

Sulfur Hexafluoride (SF₆) is an extremely potent greenhouse gas. SF₆ is very persistent, with an atmospheric lifetime of more than a thousand years. Thus, a relatively small amount of SF₆ can have a significant long-term impact on global climate change. SF₆ is human-made, and the primary user of



 SF_6 is the electric power industry. Because of its inertness and dielectric properties, it is the industry's preferred gas for electrical insulation, current interruption, and arc quenching (to prevent fires) in the transmission and distribution of electricity. SF_6 is used extensively in high voltage circuit breakers and switchgear, and in the magnesium metal casting industry.

GHG Emission Levels

Per the World Resources Institute⁴² (WRI) in 2014, total worldwide GHG emissions were estimated to be 44,204 million tonnes of CO₂e (MtCO₂e) and GHG emissions per capita worldwide was 6.13 tCO₂e. These emissions exclude GHG emissions associated with the land use, land-use change and forestry sector, and bunker fuels. The WRI reports that in 2014, total GHG emissions in the U.S. were 6,371 MtCO₂e, with average GHG emissions per capita of 20.00 tCO₂e and total GHG emissions in California were 454.5 MtCO₂e in 2014, with average GHG emissions per capita of 11.75 tCO₂e.

California has a larger percentage of its total GHG emissions coming from the transportation sector (56%) than the U.S. emissions (31%) and a smaller percentage of its total GHG emissions from the electricity generation sector; i.e., California has 13%, but the U.S. has 43%.

Potential Environmental Effects

Worldwide, average temperatures are likely to increase by 3°F to 7°F by the end of the 21st century.⁴³ However, a global temperature increase does not directly translate to a uniform increase in temperature in all locations on the earth. Regional climate changes are dependent on multiple variables, such as topography. One region of the Earth may experience increased temperature, increased incidents of drought, and similar warming effects, whereas another region may experience a relative cooling. According to the International Panel on Climate Change's (IPCC) Working Group II Report,⁴⁴ climate change impacts on North America may include diminishing snowpack, increasing evaporation, exacerbated shoreline erosion, exacerbated inundation from sea level rising, increased risk and frequency of wildfire, increased risk of insect outbreaks, increased experiences of heat waves, and rearrangement of ecosystems, as species and ecosystem zones shift northward and to higher elevations.

California Implications

Even though climate change is a global problem and GHGs are global pollutants, the specific potential effects of climate change on California have been studied. The third assessment produced by the California Natural Resources Agency (CNRA)⁴⁵ explores local and statewide vulnerabilities to climate change, highlighting opportunities for taking concrete actions to reduce climate-change impacts. Projected changes for the remainder of this century in California include:

⁴² CAIT Climate Data Explorer. Historical Emissions. World Resources Institute. http://http://cait2.wri.org/historical/. Accessed August 2019.

⁴³ *Climate Change 2007: Impacts, Adaptation, and Vulnerability.* Intergovernmental Panel on Climate Change. Website http://www.ipcc.ch/ipccreports/ar4-wg2.htm

⁴⁴ Ibid.

⁴⁵ Our Changing Climate 2012: Vulnerability & Adaptation to the Increasing Risks from Climate Change in California. California Natural Resources Agency. July 2012 / CEC-500-2012-007.



- **Temperatures** By 2050, California is projected to warm by approximately 2.7°F above 2000 averages, a threefold increase in the rate of warming over the last century and springtime warming a critical influence on snowmelt will be particularly pronounced.
- **Rainfall** Even though model projections continue to show the Mediterranean pattern of wet winters and dry summers with seasonal, year-to-year, and decade-to-decade variability, improved climate models shift towards drier conditions by the mid-to-late 21st century in Central, and most notably, Southern California.
- Wildfire Earlier snowmelt, higher temperatures, and longer dry periods over a longer fire season will directly increase wildfire risk. Indirectly, wildfire risk will also be influenced by potential climate-related changes in vegetation and ignition potential from lightning, with human activities continuing to be the biggest factor in ignition risk. Models are showing that estimated property damage from wildfire risk could be as much as 35% lower if smart growth policies were adopted and followed than if there is no change in growth policies and patterns.

The third assessment by CNRA not only defines projected vulnerabilities to climatic changes but analyzes potential impacts from adaptation measures used to minimize harm and take advantage of beneficial opportunities that may arise from climate change.

The report highlights important new insights and data, using probabilistic and detailed climate projections and refined topographic, demographic, and land use information. The findings include:

- The state's electricity system is more vulnerable than was previously understood.
- The Sacramento-San Joaquin Delta is sinking, putting levees at growing risk.
- Wind and waves, in addition to faster rising seas, will worsen coastal flooding.
- Animals and plants need connected "migration corridors" to allow them to move to habitats that are more suitable to avoid serious impacts.
- Native freshwater fish are particularly threatened by climate change.
- Minority and low-income communities face the greatest risks from climate change.

The Fourth Assessment⁴⁶ by the CNRA goes further by including a set of state-funded research reports that examine how climate change will affect specific sectors, potential responses to climate change, and other policy-driven questions, including reports for nine regions of the state.

4.8.2 Regulatory Setting

4.8.2.1 Federal Climate Change Legislation

The federal government is taking several common-sense steps to address the challenge of climate change. The USEPA collects several types of GHG emissions data. This data helps policy makers, businesses, and USEPA track GHG emissions trends and identify opportunities for reducing emissions

⁴⁶ *California's Fourth Climate Assessment*. Governor's Office of Planning and Research, California Natural Resources Agency, California Energy Commission. http://www.climateassessment.ca.gov/. Accessed February 27, 2019.



and increasing efficiency. The USEPA has been collecting a national inventory of GHG emissions since 1990 and in 2009 established mandatory reporting of GHG emissions from large GHG emissions sources.

The USEPA is also getting GHG reductions through partnerships and initiatives; evaluating policy options, costs, and benefits; advancing the science; partnering internationally and with states, localities, and tribes; and helping communities adapt. Below are a list of laws and programs that have been implemented by the federal government.

Energy Independence and Security Act

The Energy Independence and Security Act of 2007 includes several provisions that will increase energy efficiency and the availability of renewable energy, which in turn will reduce GHG emissions. First, the Act sets a Renewable Fuel Standard that requires fuel producers to use at least 36 billion gallons of biofuel by 2022. Second, it increased Corporate Average Fuel Economy Standards to require a minimum average fuel economy of 35 miles per gallon for the combined fleet of cars and light trucks by 2020. Third, it includes a variety of new standards for lighting and for residential and commercial appliance equipment, including residential refrigerators, freezers, refrigerator-freezers, metal halide lamps, and commercial walk-in coolers and freezers.

Climate Action Plan

In June 2013, President Obama unveiled his Climate Action Plan. The plan was a national blueprint to slow the effects of climate change and focuses on both CO_2 and short-lived climate pollutants, such as CH_4 and HFCs. Although components of the plan are still active, the current administration is "committed to eliminating harmful and unnecessary policies such as the Climate Action Plan."⁴⁷

4.8.2.2 State Climate Change Legislation

Executive Order S 3-05

On June 1, 2005, the Governor issued Executive Order S 3-05, which set the following GHG emission reduction targets:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80% below 1990 levels.

To meet these targets, the Climate Action Team prepared a report to the Governor in 2006 that contains recommendations and strategies to help ensure that the targets in Executive Order S-3-05 are met.

⁴⁷ *An America First Energy Plan. White House Issues.* White House. Accessed March 26, 2017. URL: https://www.whitehouse.gov/america-first-energy.



Assembly Bill 32 (AB 32)

In 2006, the California State Legislature enacted the California Global Warming Solutions Act of 2006, also known as AB 32. AB 32 focuses on reducing GHG emissions in California. GHGs, as defined under AB 32, include CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆. AB 32 requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. The ARB is the state agency charged with monitoring and regulating sources of emissions of GHGs that cause global warming in order to reduce emissions of GHGs. AB 32 also requires that by January 1, 2008, the ARB must determine what the statewide GHG emissions level was in 1990, and it must approve a statewide GHG emissions level of 427 MtCO₂e, on December 6, 2007 in its Staff Report. Therefore, in 2020, emissions in California are required to be at or below 427 MtCO₂e.

Under the "business as usual or (BAU)" scenario established in 2008, statewide emissions were increasing at a rate of approximately 1% per year as noted below. It was estimated that the 2020 estimated BAU of 596 MtCO₂e would have required a 28% reduction to reach the 1990 level of 427 MtCO₂e.

Climate Change Scoping Plan

The Scoping Plan⁴⁸ released by the ARB in 2008 outlined the state's strategy to achieve the AB 32 goals. This Scoping Plan, developed by the ARB in coordination with the Climate Action Team (CAT), proposed a comprehensive set of actions designed to reduce overall GHG emissions in California, improve the environment, reduce dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health. It was adopted by the ARB at its meeting in December 2008. According to the Scoping Plan, the 2020 target of 427 MtCO₂e requires the reduction of 169 MtCO₂e, or approximately 28.3%, from the State's projected 2020 BAU emissions level of 596 MtCO₂e.

However, in May 2014, the ARB developed, in collaboration with the CAT, the First Update to California's Climate Change Scoping Plan⁴⁹ (Update), which shows that California is on track to meet the near-term 2020 greenhouse gas limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32. In accordance with the United Nations Framework Convention on Climate Change (UNFCCC), the ARB is beginning to transition to the use of the IPCC's Fourth Assessment Report (AR4) 100-year GWPs in its climate change programs. The ARB has recalculated the 1990 GHG emissions level with the AR4 GWPs to be 431 MtCO₂e; therefore, the 2020 GHG emissions limit established in response to AB 32 is now slightly higher than the 427 MtCO₂e in the initial Scoping Plan.

The 2017 Update to the Scoping Plan⁵⁰ builds upon the former Scoping Plans and Updates by outlining priorities and recommendations for the State to achieve its long-term climate objectives. The 2017 Update establishes a proposed framework of action for California to meet the climate target of a 40% reduction in GHGs by 2030, compared to 1990 levels. The major elements of the framework proposed are enhancement of the Renewables Portfolio Standard and the Low Carbon Fuel Standard;

⁴⁸ Climate Change Scoping Plan: a framework for change. California Air Resources Board. December 2008.

⁴⁹ First Update to the Climate Change Scoping Plan, Building on the Framework. California Air Resources Board. May 2014.

⁵⁰ The 2017 Climate Change Scoping Plan Update: The Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target. California Air Resources Board. January 20, 2017. URL: https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf



a Mobile Source Strategy, Sustainable Freight Action Plan, Short-Lived Climate Pollutant Reduction Strategy, Sustainable Communities Strategies, and a Post-2020 Cap-and-Trade Program; a 20% reduction in GHG emissions from the refinery sector and an Integrated Natural and Working Lands Action Plan.

Senate Bill 375 (SB 375)

Senate Bill (SB) 375 passed the Senate on August 30, 2008 and was signed by the governor on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions and contributes over 40% of the GHG emissions in California, with automobiles and light trucks alone contributing almost 30%. SB 375 indicates that GHGs from automobiles and light trucks can be reduced by new vehicle technology. However, significant reductions from changed land use patterns and improved transportation also are necessary. SB 375 states, "Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32." SB 375 (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

Executive Order B-30-15

On April 29, 2015, the Governor issued EO B-30-15, which added an interim target of GHG emissions reductions to help ensure that the state meets its 80% reduction by 2050, as set in EO S-3-05. The interim target is reducing GHG emissions by 40% by 2030. It also directs state agencies to update the Scoping Plan, update an Adaptation Strategy every three years, and take climate change into account in their planning and investment strategies. Additionally, it requires the State's Five-Year Infrastructure Plan to take current and future climate change impacts into account in all infrastructure projects.

Title 24

Although not originally intended to reduce GHGs, California Code of Regulations Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. The 2008 standards became effective January 1, 2010. The requirement for when the 2008 standards must be followed depends on when the application for the building permit is submitted. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The 2016 standards became effective July 1, 2017.

California Green Building Standards

Part 11 of Title 24 is specifically addressed as the California Green Building Standards Code (CalGreen Code). The 2016 CalGreen Code also became effective January 1, 2017. The specific purpose of the CalGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings with building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the categories of planning and design; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental quality.



4.8.2.3 Local Climate Change Policy

<u>SIVAPCD</u>

In 2009, the SJVAPCD adopted a comprehensive regional policy and guidance on addressing and mitigating GHG emission impacts caused by industrial, commercial, and residential development in the San Joaquin Valley. This set of guidance documents was designed to assist local permitting agencies and businesses by answering several questions related to CEQA and how to address GHG impacts under existing CEQA law.

To assist Lead Agencies, project proponents, permit applicants, and interested parties in assessing and reducing the impacts of project-specific GHG emissions on global climate change, the SJVAPCD has adopted the guidance: Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA.⁵¹ The guidance and policy rely on the use of performance-based standards, otherwise known as Best Performance Standards (BPS), to assess significance of project-specific GHG emissions on global climate change during the environmental review process, as required by CEQA. Use of BPS is a method of streamlining the CEQA process of determining significance and is not a required emission reduction measure. Projects implementing BPS would be determined to have a less than cumulatively significant impact. Otherwise, demonstration of a 29% reduction⁵² in GHG emissions from BAU, is required to determine that a project would have a less than cumulatively significant impact. The guidance does not limit a lead agency's authority in establishing its own process and guidance for determining significance of project related impacts on global climate change.

Kings County Association of Governments (KCAG)

SB 375 requires ARB to develop regional reduction targets for GHG and prompts the creation of regional plans to reduce emissions from vehicle use throughout the State. KCAG is the agency responsible for creating that regional plan or "Sustainable Communities Strategy" (SCS) for Kings County. KCAG has coordinated with the other seven metropolitan planning organizations in the SJV to ensure compatibility with their SCS strategies and create Valley-wide SCS.

Final Regional Climate Action Plan (CAP)

The Regional Climate Action Plan⁵³ (CAP) is a long-range policy document that identified cost-effective measures to reduce GHG emissions from activities within Kings County consistent with AB 32.

The Baseline inventory for GHG emissions in Kings County was quantified by the SJVAPCD. This inventory included all sources within the region, including those on State and Federal Lands. However, since the CAP was intended for local governmental uses, this CAP addressed only those emission sources over which the local agencies has some degree of ownership. For purposes of full disclosure, Appendix A of this CAP presents data of the SJVAPCD's Countywide 2005 inventory to generate the Adjusted Inventory – Local Government Control presented in **Table 4.8-2**.

⁵¹ https://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf.

⁵² Even though ARB's new 2011 Scoping Plan has reduced the 2020 BAU, which therefore reduces the percent reduction necessary to achieve the 1990 levels in 2020, the SJVAPCD *Guidance for Valley Land-Use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA* document has not been updated to reflect the changes.

⁵³ Final Regional Climate Action Plan. Kings County Association of Governments. May 28, 2014.



The CAP contains GHG reduction measures and actions that incorporate and/or build on many of the policies and implementation programs identified in the local jurisdictions' General Plans, and are also consistent with a number of other policy and guidance documents, including the Kings County Blueprint (2011), Kings County Smart Growth Principles (2008), and Kings Regional Bicycle Plan (2011), and Transit Development Plan (2008).

Source	Sub-source	2005 GHG Emissions (tCO2e)				
Regional Emissions	Regional Emissions					
Electricity Consumption	Electricity Consumption	358,694	358,694			
	Residential	86,529				
Fuel Combustion	Commercial	65,887	283,536			
	Industrial	131,120				
	On-road Vehicles	470,435	477,343			
Transportation	Off-road Vehicles	6,635				
	Marine Vessel/Watercraft	273				
Masta Managanant	Landfills	11,394	105(2			
waste Management	Wastewater Management	8,168	19,562			
Total Regional GHG Emissions	1,139,135					
Sequestration						
	Composting (Commercial)	-54,747				
Other Sources	Resource Recovery	re Recovery -25,141 -4				
	Urban Forests	-12,443	<u> </u>			
NET REGIONAL GHG EMISSIONS	1,046,804					

Table 4.8-2GHG EMISSIONS UNDER LOCAL GOVERNMENT CONTROL BY SOURCE (2005)54

Some measures that may be appropriate for the project are listed below:

Energy Measures

- <u>E-2: Energy Audit and Retrofit Program</u> Facilitate voluntary energy assessments, retrofits, and retrocommissioning⁵⁵ of existing residential and nonresidential buildings and public lighting.
- <u>E-4: On-Site Small-Scale Solar Energy</u> Facilitate the installation and use of on-site small-scale solar photovoltaic systems and solar hot water heaters in households and businesses.

⁵⁴ Ibid.

⁵⁵ Retrocommissioning is a systematic process for identifying less-than-optimal performance in a facility's equipment, lighting and control systems and making the necessary adjustments. While retrofitting involves replacing outdated equipment, retrocommissioning focuses on improving the efficiency of what's already in place.



Transportation and Land Use Measures

- <u>TL-1: Infill and Mixed-Use Development</u> Facilitate mixed-use, higher density, and infill development near transit stops, in existing community centers/downtown, and in other designated areas.
- <u>TL-3: Expand Transit Network</u> Continue to expand and improve the transit network and its accessibility.
- <u>TL-6: Electric Vehicle Readiness</u> Expand the use of electric vehicles through implementation of a comprehensive electric vehicle network.

Solid Waste Measures

• <u>S-1: Solid Waste Reduction and Recycling</u> Increase recycling, composting, source reduction, and education efforts to reduce the amount of solid waste sent to landfills.

4.8.3 Impact Thresholds

The CEQA and the SJVAPCD have established GHG threshold guidance for projects to be evaluated, and to assist lead agencies in determining a project's significance.

California Environmental Quality Act (CEQA)

Effective March 18, 2010, CEQA Appendix G states that a project would have potentially significant GHG emission impacts if it would:

- Generate GHG 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 reducing the emissions of GHGs.

District Significance Thresholds

It is widely recognized that no single project could generate enough GHG emissions to noticeably change the global climate temperature. However, the combination of GHG emissions from past, present and future projects could contribute substantially to global climate change. Thus, project-specific GHG emissions should be evaluated in terms of whether they would result in a cumulatively significant impact on global climate change.

In the SJVAPCD's Staff Report,⁵⁶ staff reviewed the relevant scientific information and concluded that the existing science is inadequate to support quantification of the extent to which project-specific GHG emissions would impact global climate features such as average air temperature, average

⁵⁶ Addressing Greenhouse Gas Emissions Impacts Under the California Environmental Quality Act. Final Staff Report. San Joaquin Valley Air Pollution Control District. December 17, 2009. Internet: https://www.valleyair.org/Programs/CCAP/12-17-09/1%20CCAP%20-%20FINAL%20CEQA%20GHG%20Staff%20Report%20-%20Dec%2017%202009.pdf. Accessed October 4, 2019.

rainfall, or average annual snow pack. In other words, the District was not able to determine a specific quantitative level of GHG emissions increase, above which a project would have a significant impact on the environment, and below which would have an insignificant impact.

In the absence of scientific evidence supporting establishment of a numerical threshold, the SJVAPCD policy applies performance-based standards to assess project-specific GHG emission impacts on global climate change. The determination is founded on the principle that projects whose emissions have been reduced or mitigated consistent with AB 32, should be considered to have a less than significant impact on global climate change. The SJVAPCD provides a tiered approach in assessing significance of project-specific GHG emission increases.⁵⁷

- Projects complying with an approved GHG emission reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions within the geographic area in which the project is located would be determined to have a less than significant individual and cumulative impact for GHG emissions. Projects complying with an approved GHG emission reduction plan or GHG mitigation program would not be required to implement BPS.
- Projects implementing BPS would not require quantification of project-specific GHG emissions. Consistent with the CEQA Guidelines, such projects would be determined to have a less than significant individual and cumulative impact for GHG emissions.
- Projects not implementing BPS would require quantification of project-specific GHG emissions and demonstration that project-specific GHG emissions would be reduced or mitigated by at least 29%, compared to BAU, including GHG emission reductions achieved since the 2002-2004 baseline period, consistent with GHG emission reduction targets established in ARB's AB 32 Scoping Plan. Projects achieving at least a 29%⁵⁸ GHG emission reduction compared to BAU would be determined to have a less than significant individual and cumulative impact for GHG.

4.8.4 Impact Analysis

4.8.4.1 Methodology

Short-term construction GHG emissions and long-term operational emissions were assessed using California Environmental Emissions Estimator Model (CalEEMod) Version 2016.3.2. For GHG emissions, CalEEMod also estimates indirect emissions from energy use, water supply, wastewater, and solid waste. A detailed summary of the assumptions and model data used to estimate the project's emissions are provided in Attachment A of **Appendix D**, Air Quality and Greenhouse Gas Technical Report.

⁵⁷ Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA. San Joaquin Valley Air Pollution Control District. December 17, 2009. Internet: https://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf. Accessed October 4, 2019.

⁵⁸ Even though ARB's new 2011 Scoping Plan has reduced the 2020 BAU which therefore reduces the percent reduction necessary to achieve the 1990 levels in 2020, the SJVAPCD Guidance for Valley Land-Use Agencies document has not been updated to reflect the changes.



4.8.4.2 Evaluation of Checklist Questions

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

Less than Significant Impact

The GHG emissions inventory for this analysis includes the following sources of annual direct and indirect emissions: (1) area sources (e.g., landscaping-related fuel combustion sources and natural gas fireplaces); (2) energy use associated with buildings; (3) water and wastewater; (4) solid waste; (5) mobile sources (e.g., passenger vehicles and trucks); and (6) construction activity. The ongoing operational emissions consist of the first five categories, while emissions associated with construction are one-time only. The typical types of GHG gases resulting from developments such as the project are CO_2 , CH_4 , and N_2O .

The major construction phases included in this analysis are demolition, site preparation, grading, building construction, paving, and architectural coating. Emissions are from off-road construction equipment and onroad vehicles such as worker and vendor commuting and trucks for soil and material hauling. CalEEMod defaults were used for construction activity and equipment usage. To assess the temporary construction effect on the project's overall lifetime GHG emissions, the South Coast Air Quality Management District (SCAQMD) developed an Interim Guidance⁵⁹ that recommends that construction emissions should be amortized over the life of the project, defined in the Guidance as 30 years, which is then added to the operational emissions and compared to the applicable GHG significance threshold.

GHG emissions would also continue to occur every year after buildout. GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fossil fuel emits CO₂ and other GHGs directly into the atmosphere; these emissions are considered direct emissions when associated with a building. GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are indirect emissions as they occur elsewhere but are attributed to the power usage onsite. Indirect GHG emissions also result from the production of electricity used to convey, treat, and distribute water and wastewater. The amount of electricity required to convey, treat and distribute water depends on the volume of water as well as the sources of the water. In addition, CalEEMod calculates the indirect GHG emissions associated with waste that is disposed of at a landfill using waste disposal rates by land use and overall composition. CalEEMod defaults were used throughout.

The GHG analysis also considered emissions from KART bus operations. Emissions from current operations were <u>not</u> considered because they are assumed to continue unchanged at the new facility. Impacts from GHG emissions are regional and global, so relocating the facility a short distance does not change them. However, because of the projected halving of headways for the buses on routes only within Hanford, VMT will double, and so will GHG emissions. Therefore, this increase in GHG emissions was calculated and taken into account in the analysis.

A summary of all GHG emissions from the proposed project is presented in **Table 4.8-3**. Estimated GHG emissions during project construction are presented in **Table 4.8-4**.

⁵⁹ *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules, and Plans.* South Coast Air Quality Management Board. Adopted December 5, 2008.



Category	CO ₂ e (tonnes/year)		
Direct – Amortized Construction	11.4		
Direct – Mobile (Operational)	3,442 ª		
Direct – Area Source	>0.1		
Indirect – Purchased Electricity (Power)	30.6		
Indirect – Purchased Natural Gas (Power)	8.5		
Indirect – Purchased Electricity (Water)	6.5		
Direct – Fugitive – Solid Waste	27.5		
TOTAL	3,527		

Table 4.8-3 PROPOSED PROJECT GHG EMISSIONS

^aIncludes 3,008 tonnes per year from increased bus travel in the city of Hanford.

Table 4.8-4 PROJECT CONSTRUCTION-RELATED GHG EMISSIONS

Year	Annual Emissions (tonnes)			
	CO ₂	CH ₄	N20	CO ₂ e
2021	186.01	0.05	0	187.15
2022	154.24	0.04	0	155.15
Total	340.25	0.09	0	342

As was discussed in **Section 4.8.3**, the SJVAPCD has concluded that it was not possible to determine a specific quantitative level of GHG emissions increase that would be significant under CEQA. Instead, GHG impacts are less than significant if they adhere to Best Performance Standards. BPS may be defined by a project applicant, as long as they are consistent with SJVAPCD guidelines. In addition, the SJVAPCD has published a number of BPS, some of which include public transit as one element of many factors that reduce GHG emissions for some types of development.

None of the published BPS is specific to a transit facility such as the proposed KART station. However, it is generally recognized that public transit *per se* reduces passenger car VMT and emissions per passenger mile. For example, the FTA reports⁶⁰ that the average public transit bus in the U.S. emits 0.64 pound of CO₂ per passenger mile, compared to 0.96 pound per mile from a single-occupancy passenger vehicle.⁶¹ Therefore, increasing the frequency of service on the Hanford routes will cause at least some travelers to switch from passenger vehicles to public transit, thereby reducing GHG emissions.

60 Public Transportation's Role in Responding to Climate Change. U.S. Department of Energy, Federal Transit Administration, Updated January 2010. Internet: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/PublicTransportationsRoleInRespondingToClimateChange

https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/PublicTransportationsRoleInRespondingToClimateChange 2010.pdf. Accessed October 2, 2019.

⁶¹ The value for buses is a national average. The emission factor can be as low as 0.18 pounds CO2 per passenger-mile for a fully loaded bus.



As noted in **Section 4.3.4.2**, transportation and transit station development are exempt from SJVAPCD operational indirect source review requirements. This is evidence that the SJVAPCD recognizes the emission reduction benefits of transit developments.

In addition to increasing public transit services, the project will employ several strategies in the spirit of sustainability. It will install energy-efficient lighting; energy-efficient appliances, such as dishwashers, fans, and refrigerators; install solar photovoltaics on building or as parking lot shade (size is unknown at this time); increase transit frequency by 50% or more (e.g., eight routes will be going from hourly service to half-hour service); install low-flow bathroom and kitchen faucets and low flow toilets; and use water-efficient irrigation systems.

The proposed project would not potentially generate direct and/or indirect emissions that may have a significant impact on the environment. Therefore, impacts would be less than significant.

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

Less than Significant Impact

The SJVAPCD has established its Land Use Guidelines as a component of its overall Climate Change Action Plan (CCAP).⁶² The proposed project would be consistent with the SJVAPCD's CCAP. In summary, the proposed project would not conflict with any applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions. This would be a less than significant impact.

⁶² Final Staff Report - Climate Change Action Plan: Addressing GHG Emissions Impacts under CEQA. San Joaquin Valley Air Pollution Control District. December 17, 2009.



4.9 Hazards and Hazardous Materials

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



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

Less than Significant Impact

The proposed project includes the demolition of existing structures on the project site and construction of a new transit station. Project onsite maintenance and operations would involve storage and use of small amounts of commercially available janitorial and landscaping supplies. These materials would be used, stored, handled, and disposed of in accordance with applicable regulations. There are no known current or proposed future operations that would involve the routine transport, use, or disposal of quantities of hazardous materials that may create a significant hazard to the public or environment. For these reasons, less than significant impacts are anticipated.

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

Less than Significant Impact

Construction and operation of the project would involve transport, storage, and use of chemical agents, solvents, paints, and other hazardous materials commonly associated with construction activities. Chemical transport, storage, and use would comply with Resource Conservation and Recovery Act (RCRA); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Occupational Safety and Health Administration (OSHA); California hazardous waste control law;⁶³ California Division of Safety and Health (DOSH); SJVAPCD; and City of Hanford Fire Department requirements.

In addition, all operations that store or handle specified quantities of hazardous materials must comply with the Kings County Hazardous Waste Management Plan by providing the County with a hazardous materials business plan detailing the location and quantities of their hazardous materials requirements (Quad Knopf, 2014, pg. 7-18). Onsite maintenance, and operation of the project would involve storage and use of small amounts of commercially available janitorial and landscaping supplies. These materials would be used, stored, handled, and disposed of in accordance with applicable regulations. Compliance with applicable laws and regulations during project construction and operation would ensure that impacts associated with upset or accident conditions would be less than significant.

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

Less than Significant Impact with Mitigation Incorporated

San Joaquin Valley College, located at 215 West 7th Street is located approximately 0.2 mile west of the project site. No other schools are located within one-quarter mile of the project site (Google Earth, 2019).

⁶³ Codified in California Health and Safety Code, Division 20, Chapter 6.5, Hazardous Waste Control.



The project site is located on several parcels in the City of Hanford, developed with a mix of commercial land uses and single-family homes.

In August 2019, UltraSystems prepared a Phase I Environmental Site Assessment for the proposed project site (**Appendix I** to this document). During the site reconnaissance, an abandoned auto repair facility was observed within the eastern building at 225 North Harris Street. UltraSystems observed six below-grade hydraulic lifts, multiple unidentified substance containers, and significant staining of the concrete surface. The lifts were presumably installed prior to 1977. Based on the pre-1977 installation of the lifts, the potential exists that the hydraulic fluid within the lift systems previously contained polychlorinated biphenyls (PCBs). Due to the age of the equipment, the integrity of the equipment is unknown; therefore, the potential exists that a release of hydraulic fluid which may have contained PCBs has occurred onsite. Therefore, the presence of the hydraulic lifts represents a recognized environmental condition (REC) (UltraSystems, 2019, p. v). Mitigation measure **HAZ-1** is recommended to reduce potential impacts from the abandoned auto repair facility located at 225 North Harris Street.

According to documentation provided by the Kings County Environmental Health Department (KCEHD), two underground storage tanks (USTs) were closed in place at the subject property in 1991. The USTs, described as either 30- or 100-gallon gasoline and waste oil USTs, were located to the west of the shop building at 225 North Harris Street. Inspection reports dated November 1991 and December 1992 indicated the USTs were closed in place, with two soil samples collected from beneath each UST. However, no analytical data or UST closure letter was provided in the KCEHD file, and it is unknown if a release occurred from the USTs. The USTs are therefore considered a REC (UltraSystems, 2019, p. v). Mitigation measure **HAZ-2** is recommended to reduce potential impacts from the USTs located to the west of the shop building at 225 North Harris Street.

Based on a review of historical Sanborn maps, city directories, and the regulatory database, a gasoline station was located at 232 East 7th Street from at least 1950 to 1960. The Sanborn maps from 1950 and 1958 depict a 'gas & oils' and auto service facility at this location, which is identified in the city directories from 1949-1960 as Toby's Mobil Service. No evidence of USTs or a former fueling system was observed at this location during the site reconnaissance; however, no information was available from the regulatory agencies regarding the removal of the USTs, and/or any subsurface investigation performed. The suspected former gasoline station and the unknown disposition of the fueling system is considered a REC (UltraSystems, 2019, p. v). Mitigation measure **HAZ-3** is recommended to reduce potential impacts from the suspected former gasoline station and the unknown disposition of the fueling system located at 232 East 7th Street in the City of Hanford, California.

Lead exposure can cause nervous system damage, stunted growth, kidney damage, and delayed development in humans. Lead-based paint (LBP) in household products was banned in the United States in 1978 (UltraSystems, 2019, p. 13). As part of the Phase I Environmental Site Assessment conducted by UltraSystems, a preliminary visual review was conducted for the presence of potential asbestos-containing materials (ACMs) during the visit to the subject property. ACMs may be present in drywall joint compound, floor tile mastic, and in building insulation. Thermal system insulation, surfacing material, and asphalt/vinyl flooring materials that are present in buildings constructed prior to 1981, and have not been analytically tested and determined to be non-ACM, are presumed to contain asbestos, and should be addressed in accordance with 29 CFR 1926.1101, and other applicable federal, state, and local regulations. Currently, there are no regulations requiring the removal of ACM unless it will be disturbed during renovation, repairs, or demolition (UltraSystems, 2019, p. 12). The Phase I Environmental Site Assessment prepared for the proposed project site



states that based on the years of construction (1903-1968), ACM and LBP surveys should be completed for the structures prior to demolition (UltraSystems, 2019, p. v). Mitigation Measure **HAZ-4** is recommended to reduce potential impacts from LBP and ACM to less than significant levels.

Mitigation Measures

- **MM HAZ-1** The project applicant shall ensure that subsurface sampling is conducted upon removal of the six below-grade hydraulic lifts located within the eastern building at 225 North Harris Street, Hanford, California. If significant contamination is encountered, a Soil Management Plan (SMP) shall be prepared to outline procedures to establish appropriate process and control measures to ensure contaminated soils are managed safely and in accordance with all applicable environmental requirements.
- **MM HAZ-2** Prior to the issuance of a grading permit, the project applicant shall ensure that subsurface sampling is conducted in the vicinity of the former USTs, located to the west of the shop building at 225 North Harris Street in Hanford, California. If significant contamination is encountered, a SMP shall be prepared to outline procedures to establish appropriate process and control measures to ensure contaminated soils are managed safely and in accordance with all applicable environmental requirements.
- **MM HAZ-3** Prior to the issuance of a grading permit, the project applicant shall ensure that subsurface sampling is conducted to address the former gasoline station, and a geophysical survey conducted to verify the underground storage tanks are no longer in place at 232 East 7th Street in Hanford, California. If significant contamination is encountered, a SMP shall be prepared to outline procedures to establish appropriate process and control measures to ensure contaminated soils are managed safely and in accordance with all applicable environmental requirements.
- **MM HAZ-4** Prior to the issuance of a demolition permit for the structures on site, the project applicant shall ensure that ACM and LBP surveys are completed. ACM and LBP materials, if present, shall be properly removed and disposed of (in accordance with all applicable laws and regulations) prior to demolition of onsite structures.

Level of Significance After Mitigation

After implementation of mitigation measures **HAZ-1** through **HAZ-4**, potentially hazardous materials impacts from previous uses/activities on the project site would be reduced to a less than significant level.

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

Less than Significant Impact

Government Code § 65962.5 requires the Department of Toxic Substances Control (DTSC) to compile and update, at least annually, lists of the following:



- Hazardous waste and substances sites from the DTSC EnviroStor database.
- Leaking Underground Storage Tank (LUST) sites by county and fiscal year in the State Water Resources Control Board (SWRCB) GeoTracker database.
- Solid waste disposal sites identified by SWRCB with waste constituents above hazardous waste levels outside waste management units.
- SWRCB Cease and Desist Orders (CDOs) and Cleanup and Abatement Orders (CAOs).64
- Hazardous waste facilities subject to corrective action pursuant to § 25187.5 of the Health and Safety Code, identified by DTSC.⁶⁵

These lists are collectively referred to as the "Cortese List" (EPA, 2018). Based on the information provided in the Phase I Environmental Site Assessment prepared for the proposed project, the project site (i.e., subject site) was not identified as a Cortese site (Attachment E to Appendix I (ERS Database), p. 27). Refer to **Figure 4.9-1**. Therefore, the project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5.

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 or excessive noise for people residing or working in the project area?

Less than Significant Impact

The project site is located approximately 0.5-mile northwest of the Hanford Municipal Airport (Google Earth, 2019). The project site is not located within the Airport's runway protection zone. As depicted in **Figure 4.9-2** below, the project site is located within the Airport Influence Area of the Hanford Municipal Airport. The project site is located within the Other Airport Environs zone. According to the compatibility criteria for this zone, the safety hazard is considered a negligible risk. While this zone is considered to have the potential for noise annoyance from overflights, this potential is not considered excessive (County of Kings, 2010, p. HS-34-37). As a consequence, the project would not expose people to safety hazards or excessive noise due to proximity to a public airport, and a less than significant impact would occur.

⁶⁴ CDOs and CAOs may be issued for discharges of domestic sewage, food processing wastes, or sediment that do not contain hazardous materials.

⁶⁵ If corrective action is not taken on or before the date specified in a CDO or CAO, or if immediate corrective action is necessary to remedy or prevent an imminent substantial danger to the public health, domestic livestock, wildlife, or the environment, the DTSC may take, or contract for corrective action and recover the cost for a responsible party.



Neville St Hill St N East St CC AA ulah Ma to 10 E Malone St Katherine St Keith St E Cameron St ansen Ct W Cameron St W Bush St W Florinda St E Florinda St EI W St E Elm St V sta. E Myrtle St vy St E Ivy St E Ivy St E 11th St E 10th St Geotracker Site ż Business Name: Southern California Gas Company Global ID: SLTSFT634538 Case Type::Cleanup Program Site Case Status: Open - Site Assessment QE 91 Ford St WLa ey Blvd W 8th St Hanford E 7th S Goleta Way C th W 7th St E Gth W 6th St W 7th St ESth E 4th St W 6th St W 5th St E 3rd St 4th St E 2nd St St E Ball Park Aly V 2nd St Glendale Ave 1/2 AV Hanford mbard St Municipa Airport ŝ Mariposa ono County County ScottSt Merced (hyo County South St Fresno County 12 esno Hanford Armona Rd E Hanford Armona Rd Project Location Harold St Hanfo Ave Municip Jordan Way Visalia 112 Airpor Tulare County Fran Dr 0 Kings County Disclaimer: Representations on this map or illustration are intended only to indicate locations of project parameters reported in the legend. Project parameter information supplied by others (see layer credits) may not have been independently verified for accuracy by UltraSystems Environmental, Inc. This map or illustration should not be used for, and does not replace, final grading plans or other documents that should be professionally certified for development purposes. Path. 110 0.0.137/gis/Projects17014_Kings_County_KartMXDs17014_Kings_County_Kart_Cortese Sites_2019_08_16:mxd Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, Increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, @ OpenStreetMap contributors, and the GIS User Community; Kings County Jan. 2018, UttraSystems Environmental, Inc., 2019 August 19, 2019









Figure 4.9-2 HANFORD MUNICIPAL AIRPORT- AIRPORT INFLUENCE AREA



f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

<u>No Impact</u>

The project site is not located along a designated evacuation route. The nearest designated evacuation routes are SR 198, Lacey Boulevard, and Grangeville Boulevard (County of Kings, 2010, p. HS-32-33). The proposed project is located approximately one-quarter mile north of SR 198, which is the closest evacuation route to the project site (refer to **Figure 4.9-3**). The construction and operation of the proposed project would not place any permanent or temporary physical barriers on any public streets designated as evacuation routes. Therefore, the project would have no impact regarding impairment or interference with an adopted emergency response plan or emergency evacuation plan.

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

<u>No Impact</u>

The project site is located in an urbanized area and is not surrounded by wildlands. The California Department of Forestry and Fire Protection (CAL FIRE) developed Fire Hazard Severity Zones (FHSZ) for State Responsibility Areas (SRA) and Local Responsibility Areas (LRA) (CAL FIRE, 2007a and 2007b). The project site is not located in a SRA. The project site is not located within a Very High Fire hazard LRA. Refer to **Figures 4.20-1** and **4.20-2** in the Wildfire section, which show that the project site is not located in a wildfire hazard area.

The project would have no impacts regarding wildland fires because the project site is not located in an area where wildlands are adjacent to or intermixed with urban areas (refer to **Figure 4.9-4**). Additionally, the project would be developed in compliance with all applicable fire codes. Therefore, the project would have no impact in this regard.



Figure 4.9-3 EVACUATION ROUTES



UltraSystems

Evacuation Routes



Figure 4.9-4 WILDLAND URBAN INTERFACE





4.10 Hydrology and Water Quality

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
	i) Result in substantial erosion or siltation on or offsite;			Х	
	substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;			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	
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	

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less than Significant Impact

The two center parcels (APNs 010-275-010-000 and 010-275-009-000) on the north side of East 8th Street are undeveloped and vegetated. Stormwater that cannot infiltrate the natural surface flows across the sidewalk and into the gutter on the north side of East 8th Street, enters a storm drain


inlet on the northeast corner of East 8th Street and Harris Street. Stormwater that does not infiltrate the soils of the landscaped residential parcel at 226 East 8th Street (the easternmost parcel) or the mostly bare ground of the residential parcel at 208 East 8th Street, sheet flows into the gutter and discharges into the same storm drain inlet, which is located approximately 75 feet southwest of the residence at 208 East 8th Street.

The north-facing parcel on East 8thh Street (APN 012-042-004-000) is undeveloped, and mostly unvegetated except for some vegetation along the perimeter fence line. The remainder of the parcels on East 8th Street and East 7th Street are paved and/or developed. The block bordered by East 7th Street and South Harris is bisected by a concrete v-gutter that follows the line of flow (slightly southwest). This v-gutter discharges stormwater into the gutter along the curb of the east side of North Harris Street, which drains into the municipal storm drain inlet located approximately 140 feet south. Stormwater runoff, along with excess water from canals in the City of Hanford, is delivered into the 125 acres of drainage and slough basins located throughout the City to help replenish groundwater, from which the City receives all of its potable water (City of Hanford, 2019a).

According to the City's Storm Drainage Master Plan (AKEL Engineering Group, Inc., 2017a p. 4-1), drainage basins within the City are typically defined by existing or natural conveyance systems, including stormwater conveyance systems. Due to the relatively flat topography of the City, drainage basin boundaries are largely dictated by street drainages and existing facilities to a set discharge point; in the City, these discharge points can be retention basins, pump stations, or direct outfalls to canals and remnant sloughs located throughout the City. The project site is located in the Sand Slough Watershed, in Drainage Basin 2. Drainage subbasins in the City are further divided for the purpose of routing stormwater flows to maintain hydrologic connectivity with each drainage basin. The project site is located in the City's Drainage Subbasin 1495. Stormwater from the project site is eventually discharged into Retention Basin 2, located approximately 1.7 miles south of the project site (AKEL Engineering Group, Inc., 2017a, pp. 2-4, 4-2, and 4-5). The evaluation of the City's existing stormwater drainage system did not identify the storm drain serving the project site or Retention Basin 2 as deficient in capacity and unable to serve future growth in the City, and did not recommend improvements for this section of the stormwater drainage system or for Retention Basin 2 (AKEL Engineering Group, Inc., 2017a, p. 5-2).

The project area is served by the California Regional Water Quality Control Board, Central Valley Region (RWQCB). Water quality objectives and corresponding beneficial uses of surface and groundwaters within this portion of the Central Valley are set forth in the Water Quality Control Plan for the Tulare Lake Basin (Basin Plan; RWQCB, 2018). The Basin Plan places the project location in Hanford-Lemoore Hydrologic Area (HA 551.9; RWQCB 2018, p. 2-10) within the South Valley Floor Hydrologic Unit (HU 551.00) as mapped by the California Department of Water Resources, and in the Sand Slough Hydrologic Unit (HU 180300122002; see **Figure 4.10-1**, USGS Surface Waters and Watersheds) as mapped by the U.S. Geological Survey. The Basin Plan designates beneficial uses to natural surface waters within the Tulare Lake Basin (RWQCB, 2018, p. 2-5); because stormwater leaving the project site would not discharge into a natural surface water. Construction and operation of the project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface water quality.

The project site is on the Tulare Lake Groundwater Basin. Available groundwater elevation data shows that, in general, groundwater elevations that underlie the City of Hanford and immediate vicinity range from between approximately 120 feet bgs to 160 feet bgs (City of Hanford 2016, p. 4.6-5).



Figure 4.10-1 USGS SURFACE WATERS AND WATERSHEDS



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The Basin Plan designates the following beneficial uses for the Tulare Lake Groundwater Basin (RWQCB, 2018, p. 2-6):

- Municipal and Domestic Supply (MUN) Uses of water for community, military, or individual water supply systems, including, but not limited to, drinking water supply;
- Agricultural Supply (AGR) Uses of water for farming, horticulture, or ranching, including, but not limited to, irrigation, stock watering, or support of vegetation for range grazing;
- Industrial Service Supply (IND) Uses of water for industrial activities that do not depend primarily on water quality, including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well repressurization; and
- Industrial Process Supply (PRO) Uses of water for industrial activities that depend primarily on water quality.

Table 4.10-1 provides the water quality objectives that apply to groundwater underlaying the project area.

Constituent	Objective				
Bacteria	In ground waters designated MUN, the	e concentration of total coliform			
	organisms over any 7-day period shall	l be less than 2.2/100 ml.			
	Ground waters shall not contain chem	ical constituents in concentrations			
Chemical Constituents	that adversely affect beneficial uses. At a minimum, water designated MUI				
	shall not contain lead in excess of 0.015 mg/l. ¹				
Destigidas	No individual pesticide or combination of pesticides shall be present in				
Pesticides	eneficial uses. ¹				
	Radionuclides				
Dedicestivity	Beta/photon emitters	4 millirem/year ²			
Radioactivity	Strontium-90	8 pCi/L ³			
	Tritium	20,000 pCi/L			
	All ground waters shall be maintained	as close to natural concentrations of			
Salinity	dissolved matter as is reasonable cons	sidering careful use and management			
	of water resources. ¹				
Testes and Odors	Ground waters shall not contain taste	or odor-producing substances in			
Tastes and Odors	concentrations that cause nuisance or	adversely affect beneficial uses.			
	Ground waters shall be maintained free	ee of toxic substances in			
Toxicity	concentrations that produce detrimen	tal physiological responses in human,			
-	plant, animal, or aquatic life associated with designated beneficial use(s). ¹				

Table 4.10-1 GROUNDWATER QUALITY OBJECTIVES FOR THE TULARE LAKE GROUNDWATER BASIN

1. Detailed numeric objectives for can be found in Section 3.2 (pp. 3-10 to 3-12) of the Basin Plan.

2. The millirem is a unit of absorbed dose of radiation, roughly equivalent to 10 chest x-rays (USNRC, 2019).

3. The curie is a unit measuring the intensity of radioactivity based on the activity of one gram of radium. A picocurie equals one trillionth of a curie, roughly equivalent to background radiation levels; pCi/L is picocuries per one liter of air (USACE, undated).

Development of the proposed project may result in two types of groundwater quality impacts: (1) short-term impacts due to construction related discharges; and (2) long-term impacts from operation or changes in site runoff characteristics. Runoff may carry onsite surface pollutants to Retention Basin 2, potentially infiltrating the soil and reaching groundwater.



Construction Pollutants Control

Construction projects typically expose soil to erosion. Stormwater runoff during construction may contain soil amendments such as fertilizers and pesticides, as well as entrained soil, trash, waste oil, paints, solvents and other substances used during construction. Based on a preliminary rainfall erosivity index value of 23 (SWRCB, 2013), the project would be required to file a Notice of Intent (NOI) to obtain coverage under the State's General Construction Permit (2009-0009-DWQ), which includes preparation of a project-specific Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would designate site-specific best management practices (BMPs) that would minimize or avoid erosion and the amount of sediment leaving the project site during construction. The Construction General Permit requires dischargers of potential pollutants into waters of the State to: (1) implement BMPs to eliminate or reduce point and non-point source discharges of pollutants; and (2) if one acre or more of soil is disturbed during construction, to prepare a site-specific SWPPP to protect water quality and beneficial uses and obtain a National Pollutant Discharge Elimination System (NPDES) permit. NPDES permits establish enforceable limits on discharges, require effluent monitoring, designate reporting requirements, and require construction and post-construction BMPs to eliminate or reduce point source discharges of pollutants.

The project would be required to obtain an NPDES permit, prepare a SWPPP, and implement BMPs prior to commencement of construction activities; additionally, BMPs must be maintained, inspected after each precipitation event, and repaired or replaced as necessary. Because the project is required by the SWRCB to comply with all applicable conditions of Construction General Permit Order 2009-0009-DWQ, potential violations of water quality standards or waste discharge requirements would be less than significant during project construction.

Operational Pollutant Controls

On March 10, 2003, the City of Hanford became a permittee under the General Permit for the Discharge of Storm Water from Small MS4s (Water Quality Order No. 2003-0005-DWQ; Phase II General Permit). The Phase II program requires operators of Municipal Separate Storm Sewer Systems (MS4s) in urbanized areas serving populations greater than 25,000 and less than 100,000 and operators of small construction sites disturbing one acre or more to implement programs and practices to control pollutants in stormwater runoff. Such requirements are implemented through the use of the NPDES permitting system. The NPDES Phase II Program is intended to reduce adverse impacts to water quality by implementing minimum control measures on unregulated stormwater discharges that have the potential to cause increased environmental degradation.

Operation of the project would potentially introduce into stormwater particulate matter from the atmosphere, nitrogen oxides from car exhaust, rubber particles from tires, debris from brake systems, hydrocarbons, and bacterial contamination (Frazer, 2005, p. A 458), resulting from accumulation of these pollutants on parking lots, bus areas, and pedestrian areas. The project could also potentially introduce pesticides and phosphates from landscaping. Operational compliance with the Phase II General Permit would be regulated by the City of Hanford Storm Water Management Plan (City of Hanford, 2005), which provides a comprehensive plan and Minimum Control Measures (MCMs) designed to enhance and protect stormwater quality and, ultimately, groundwater quality, in the City of Hanford and the surrounding areas. The SWMP incorporates measurable goals, control measures, and public programs to minimize the amount of pollutants discharged through the stormwater system. In Hanford, NPDES requirements for a project's operational period are enforced through review of grading plans and site development approval through the City's Community



Development Department and Engineering Division. The existing process requires development of runoff control standards and submittal of a SWPPP (Quad Knopf, 2016, p. 4.9-12).

With implementation of pollutant control measures required in the City of Hanford SWMP and the project SWPPP, the project's potential to violate any water quality standards, waste discharge requirements, or to otherwise substantially degrade surface or ground water quality would be less than significant and mitigation is not proposed.

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

Less Than Significant Impact

The water supply source for the City of Hanford is local groundwater. Surface water is not used by the water system. Water is pumped from 13 wells; well depth ranges from 600 feet below ground surface (bgs) to 1,700 feet bgs, as determined by the quality of water in the aquifer. In their 2015 Urban Water Management Plan (AKEL Engineering Group, Inc., 2016, p. 7-6 and 7-7) the City of Hanford estimated water demand and water supply through the year 2035, as shown in **Table 4.10-2** and **Table 4.10-3**.

Domand Type	Demand							
Demanu Type	2015 (AF)	2015 (AF) 2020 (AF) 2025 (AF)		2030 (AF)	2035 (AF)			
Potable and Raw Water	11,640	12,833	14,571	16,309	18,046			
Recycled Water	4,971	5,606	6,366	7,125	7,884			
Total	16,611	18,440	20,937	23,433	25,930			

<u>Table 4.10-2</u> CITY OF HANFORD TOTAL WATER DEMANDS THROUGH 2035

AF = acre feet

Source: City of Hanford 2015 Urban Water Management Plan p. 4-4 (AKEL Engineering Group, Inc. 2016).

<u>Table 4.10-3</u>
CITY OF HANFORD PROJECTED WATER SUPPLY THROUGH 2035

Waton Supply Source	Projected Water Supply						
water suppry source	2020 (AF)	2025 (AF)	2030 (AF)	2035 (AF)			
Groundwater	12,833	14,571	16,309	18,046			
Recycled Water	5,606	6,366	7,125	7,884			
Total	18,440	20,397	23,433	25,930			

AF = acre feet

Source: City of Hanford 2015 Urban Water Management Plan p. 6-16 (AKEL Engineering Group, Inc. 2016).

Surveys conducted amongst KART riders (Transit Marketing/Trillium Solutions, 2016, p. 4) found that most KART riders surveyed (69 percent) lived in Hanford; the most frequent (riding 6 days per week) live in Hanford (82 percent; p. 27), and 82 percent of riders intercepted on Hanford routes live in Hanford (p. 27).

As described in **Section 4.14**, Population and Housing, the project proposes construction of a new transit center on the project site. The project does not propose construction of any residential uses,



nor does it include extension of existing infrastructure. The project is not of the scope or scale to induce population growth by requiring people to move from out of the project area to work at the proposed project. Because most current KART riders already live in the City of Hanford, construction and operation of the project is not anticipated to increase the population within the City such that the population would exceed the projected water supply. Therefore, the project would have a less than significant impact regarding groundwater supply.

The project would result in a decrease in the amount of landscaped area compared to existing conditions. Under existing conditions, impervious surfaces cover approximately 75 percent of the existing project site and, with the project, the total area of impervious surfaces would increase to approximately 100 percent. The limited size of the project site and its location in a developed area of downtown Hanford reduce its potential to contribute to groundwater recharge. However, the stormwater drainage system of the City has been designed to convey stormwater from city streets into a system of a system of 125 acres of drainage and slough basins located throughout the City (City of Hanford, 2019a) and provide opportunities for water to seep into the ground to allow for groundwater supplies, or interfere substantially with groundwater recharge such that the project would impede sustainable groundwater management of the basin. Impacts would be less than significant and mitigation is not proposed.

- c) Would the project 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 offsite;

Less Than Significant Impact

No streams, rivers, or drainage channels that contribute runoff to the local drainage network would be impacted by the project (Google, 2018; refer to **Section 4.4**, Biological Resources), During project construction the drainage pattern of the site would be altered during demolition of the existing structures and pavement and grading to prepare the site for construction activities; however, based on preliminary rainfall erosivity index value of 23 (SWRCB, 2013), the project would be required to file a NOI to obtain coverage under the State's General Construction Permit (2009-0009-DWQ), which includes preparation of a project-specific SWPPP. The SWPPP would designate site-specific BMPs that would minimize or avoid erosion and the amount of sediment leaving the project site during construction. Impacts during the construction phase would be less than significant.

Upon completion, the project would be mostly comprised of paved surfaces, with the exception of landscaping; the project does not include large areas of unpaved or unvegetated soil. Impacts resulting from erosion or siltation on or offsite during project operation would be less than significant, and mitigation is not proposed.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

Less Than Significant Impact

Under existing conditions, approximately 75 percent of the project site is comprised of impervious surfaces; construction of the project would increase the impervious area to nearly 100 percent, with



the exception of onsite landscaping. Although the project may potentially generate a greater volume of stormwater runoff compared to existing conditions, the capacity evaluation that formed the basis of the City's Storm Drainage Master Plan determined that both the storm drain serving the project site and Retention Basin 2, to which the storm drain discharges, are sufficient to serve future growth within Drainage Subbasin 1495 of the City of Hanford (AKEL Engineering Group, Inc., 2017a, p. 4-3).

In addition, the City's Phase II Permit requires the City to implement design standards which are applicable to discretionary development and redevelopment projects, including parking lots 5,000 square feet or more or with 25 or more parking spaces and potentially exposed to stormwater runoff. These design standards are discussed in detail in **Section 4.10 c) iii)**.

With adherence of applicable design standards mandated by the City's Phase II Permit, it is not anticipated that the project would generate sufficient stormwater runoff which would result in flooding on or offsite. Therefore, impacts would be less than significant and mitigation is not proposed.

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

Less Than Significant Impact

As discussed in **Section c) ii)**, the project may potentially generate a greater volume of stormwater runoff compared to existing conditions; however, the capacity evaluation conducted for the Storm Drainage Master Plan determined that the storm drain and retention basin serving the project site are sufficient to serve future growth within Drainage Subbasin 1495 of the of the City of Hanford (AKEL Engineering Group, Inc., 2017a, p. 4-5).

The City of Hanford General Plan Draft Environmental Impact Report (Quad Knopf, 2016, p. 4.9-28) states that new development would be required to undergo a site development requirements approval process with the City Building Division that would include developing necessary stormwater drainage improvements (in compliance with appropriate Phase II General Permit MCMs and design standards and the City's site development requirements) to sufficiently capture and treat polluted runoff. New development would also be required to pay a stormwater system development fee (Chapter 15.50.020 of the Hanford Municipal Code). This development fee is required for all new development in order to "to pay the cost of capital improvements for the city of Hanford stormwater system."

The City of Hanford Storm Water Management Plan (City of Hanford, 2005) provides a comprehensive plan designed to enhance and protect stormwater quality in the City of Hanford and the surrounding areas. The SWMP incorporates measurable goals, control measures, and public programs to minimize the amount of pollutants discharged through the stormwater system. Part 5 of the SWMP established certain MCMs comprised of BMPs that are designed to reduce the discharge of pollutants from MS4s to the maximum extent practicable (City of Hanford, 2005, pp. 16 to 21). The SWMP requires the City to implement BMPs in the following six categories as part of the City's Phase II Permit:

• MCM – 1: Public education and outreach on stormwater impacts;



- MCM 2: Public involvement and participation program on stormwater impacts and stormwater pollutants control (e.g., neighborhood cleanup events, public reporting of illicit discharges);
- MCM 3: Illicit discharge detection and elimination;
- MCM 4: Construction site stormwater runoff control;
- Post-construction stormwater management om new development and redevelopment;
- Pollution prevention and good housekeeping for municipal operations.

In addition, the City's Phase II Permit requires the City to require specific standards incorporated into project designs, which are applicable to discretionary development and redevelopment projects, including parking lots 5,000 square feet or more or with 25 or more parking spaces and potentially exposed to stormwater runoff (City of Hanford 2016, pp. 4.9-18 to 4.9-21). These design standards include:

- *Peak Stormwater Runoff Discharge Rates* Post-development peak stormwater runoff discharge rates shall not exceed the estimated pre-development rate for developments where the increased peak stormwater discharge rate will result in increased potential for downstream erosion.
- *Minimize Stormwater Pollutants of Concern* Incorporation of a BMP or combination of BMPs best suited to maximize the reduction of pollutant loadings in that runoff to the maximum extent practicable.
- *Provide Storm Drain System Stenciling and Signage* Provision of stenciling or signage, typically placed directly adjacent to storm drain inlets, which contains a brief statement that prohibits the dumping of improper materials into the stormwater conveyance system.
- *Properly Design Outdoor Material Storage Areas*—Where proposed project plans include outdoor areas for storage of materials that may contribute pollutants to the stormwater conveyance system, the following Structural or Treatment BMPs are required:
 - Materials with the potential to contaminate stormwater must be: 1) placed in an enclosure such as, but not limited to, a cabinet, shed, or similar structure that prevents contact with runoff or spillage to the stormwater conveyance system; or 2) protected by secondary containment structures such as berms, dikes, or curbs.
 - The storage area must be paved and sufficiently impervious to contain leaks and spills.
 - The storage area must have a roof or awning to minimize collection of stormwater within the secondary containment area.
- *Properly Design Trash Storage Areas* All trash container areas must meet the following Structural or Treatment Control BMP requirements (individual single-family residences are exempt from these requirements):



- Trash container areas must have drainage from adjoining roofs and pavement diverted around the area(s).
- Trash containers must be screened or walled to prevent offsite transport of trash.
- *Provide Proof of Ongoing BMP Maintenance* Require that an applicant provide verification of maintenance provisions through such means as may be appropriate, including, but not limited to legal agreements, covenants, CEQA mitigation requirements, and/or Conditional Use Permits.
- *Design Standards for Structural or Treatment Control BMPs* Require that postconstruction treatment control BMPs incorporate, at a minimum, either a volumetric or flow-based treatment control design standard, or both, as identified below to mitigate (infiltrate, filter or treat) storm water runoff:
 - <u>Volumetric Treatment Control BMP</u> The 85th percentile 24-hour runoff event determined as the maximized capture stormwater volume for the area. The volume of annual runoff based on unit basin storage water quality volume, to achieve 80% or more volume treatment. The volume of runoff produced from a historical record-based reference 24-hour rainfall criterion for "treatment" that achieves approximately the same reduction in pollutant loads achieved by the 85th percentile 24-hour runoff event.
 - <u>Flow-Based Treatment Control BMP</u> The flow of runoff produced from a rain event equal to at least two times the 85th percentile hourly rainfall intensity for the area or the flow of runoff produced from a rain event that will result in treatment of the same portion of runoff as treated using volumetric standards above.

The SWMP also applies the following standards to parking lots:

- *Properly Design Parking Area* Parking lots contain pollutants such as heavy metals, oil and grease, and polycyclic aromatic hydrocarbons that are deposited on parking lot surfaces by motor vehicles. These pollutants are directly transported to surface waters. To minimize the offsite transport of pollutants, the following design criteria are required:
 - Reduce impervious land coverage of parking areas;
 - Infiltrate or treat runoff.
- *Properly Design to Limit Oil Contamination and Perform Maintenance* Parking lots may accumulate oil, grease, and water insoluble hydrocarbons from vehicle drippings and engine system leaks:
 - Treat to remove oil and petroleum hydrocarbons at parking lots that are heavily used;
 - Ensure adequate operation and maintenance of treatment systems, particularly sludge and oil removal, and system fouling and plugging prevention control.

Through the site development requirements approval process and payment of necessary fees as guided by the Storm Drainage Master Plan, new development (including the project) would not



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. Impacts would be less than significant and mitigation is not proposed.

iv) Impede or redirect flood flows?

Less Than Significant Impact

The project is located in Zone X, *Areas determined to be outside the 0.2% annual chance* [500-year] *floodplain,* as shown on the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map Number 06031C0185C (FEMA, 2009; see **Figure 4.10-2**). The 500-year Flood Zone describes a flood event that has a 0.2 percent chance of occurring in any year.

The Storm Drainage Master Plan (AKEL Engineering Group, Inc., 2017a) analyzed the stormwater drainage system for design storms of 100-year (1 percent annual chance) 10-day storms (for retention basins), of 5-year 6-hour storms for commercial areas, and of 2-year 6-hour storms for residential areas and identified only two deficient sections of the Retention Basin 2 storm drainage collection system, which serves the project site. Both deficiencies were north of the project, along Brookhollow Drive from Waterview Street to Hoover Way (residential area), and along 10th Avenue from Bass Street to approximately 190 feet north of Malone Street (mixed-use).

The remainder of the Retention Basin 2 stormwater drainage system was found to be sufficient to serve the City of Hanford and its anticipated future growth. The project site does not involve the construction of new buildings on previously undeveloped areas, but rather one building and areas for parking and bus bays. It is not anticipated that the project would impede or redirect flood flows; therefore, impacts would be less than significant and mitigation is not proposed.

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

Less Than Significant Impact

The project is located within the inundation area of Pine Flats Dam (Quad Knopf, 2016, p. 4.9-9); however, the dam is located approximately 39 miles north of the project (as shown in **Figure 4.10-3**, Dam Locations) and does not pose a potential seiche risk to the project. Terminus Dam is located approximately 36 miles east of the project but the inundation area of this dam has been determined by the USACE to not include the City of Hanford (Quad Knopf, 2016, p. 4.9-9) due to differences in topography. Similarly, the project is located approximately 100 miles from the Pacific Ocean and is not at risk of inundation by tsunami.

In the event of inundation resulting from the failure of Pine Flats Dam, the project could potentially release the pollutants described in **Section 4.10 a)** as well as water pollutants such as those used in cleaning and maintenance activities (e.g., bleach, paint).



<u>Figure 4.10-2</u> FEMA FIRM MAP PANEL





Figure 4.10-3 DAM LOCATIONS





In the context of a dam failure that would generate floodwaters with the volume and velocity capable of engulfing the agricultural lands, in combination with the residential neighborhoods, commercial buildings upstream of and within Hanford as well as their contents, (e.g. fertilizer, pesticides, residential and commercial cleaning supplies, and the contents of flooded sewage lines), the release of the aforementioned pollutants from the project as a result of inundation due to dam failure would be negligible in consideration of the amount of pollutants already released into the water from upstream sources in the inundation zone.

Impacts from the release of pollutants from the project through inundation due to dam failure would be less than significant in comparison with the level of pollutants already in the floodwater. Mitigation of the effects of a dam failure are infeasible and therefore mitigation is not proposed. Based on the above analysis, impacts in this regard would be less than significant

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

Less Than Significant Impact

As detailed in **Section 4.10 c) iii)** of this document, the SWMP and the General Plan Draft EIR specify BMPs and design standards that are required by the City's Phase II Permit for discretionary development and redevelopment projects, including parking lots 5,000 square feet or more or with 25 or more parking spaces and potentially exposed to stormwater runoff. Incorporation of applicable BMPs and design standards described in the SWMP would minimize or avoid conflict with or obstruction of implementation of the City's SWMP applicable groundwater management BMPs, or the RWQCB's Water Quality Control Plan for the Tulare Lake Basin (RWQCB, 2018), including water quality objectives for groundwater. Impacts would be less than significant, and mitigation is not proposed.



4.11 Land Use and Planning

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

a) Would the project physically divide an established community?

<u>No Impact</u>

The project site is located on several parcels in the City of Hanford, developed with a mix of commercial and light industrial uses and single-family residential homes. The project site is adjacent to parcels with commercial and light industrial uses to the south, east, and west. Single-family residential homes are located to the east and north.

The project would involve the demolition of existing commercial, light industrial, and residential buildings and the development of an approximately 19,000-square-foot, three-story Transit Station building, offsite parking, and onsite bus parking. While the distribution of parking and building areas would change from the project site's existing conditions, the project would not be out of character with the surrounding area, which contains a mix of land uses including commercial, light industrial and residential. Development of the project site with a transit station and commercial uses would be compatible with the established land use patterns in the project area and would not physically divide an established community.

Additionally, the project would not divide existing public spaces in the vicinity of the site or extend beyond the project site's boundaries. Furthermore, no streets or sidewalks would be permanently closed as a result of the development. The project would utilize existing roadways, resulting in no change in roadway patterns. No separation of uses would occur as a result of the project. Therefore, the project would not physically divide an established community and no impact would occur.

b) Would the project 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?

<u>No Impact</u>

As shown in **Figure 4.11-1**, the project site's General Plan land use designation is Downtown Mixed-Use. Policy L70 in the city's General Plan (Typical Uses in Downtown Mixed-Use Land Use Designation) "Define the uses allowed in the Downtown Mixed-Use land use designation to include a wide range of retail, financial, governmental, professional, business, service, dining, and



entertainment activities, along with high density residential dwellings. Typical uses include small retail shops, eating and drinking establishments, townhomes, apartments, markets, professional services, convenience stores, beauty salons, and other similar uses. Vertical and horizontal mixed-use developments are encouraged" (Quad Knopf, 2017. p.37). The proposed project would not conflict with the land use designation for the project site.

As shown in **Figure 4.11-2**, the project site's zoning designation is Downtown Mixed-Use Zoning District (MX-D). Professional or commercial offices are permitted in the MX-D zone with a permit and Bus, transit, or train station is a permitted use in the MX-D Zone (City of Hanford Municipal Code Title 17 - Zoning Ordinance, 2017). As shown in **Figure 4.11-3** below, the project is located within the Downtown East Precise Plan Area. Therefore, the proposed project would not conflict with the zoning designation for the project site. No general plan amendment or zone change would be required for the project and no impact would occur.



Figure 4.11-1 PROPOSED PROJECT SITE CURRENT GENERAL PLAN LAND USE DESIGNATION





Figure 4.11-2 **PROPOSED PROJECT SITE ZONING DESIGNATION**



P-F Public Facilities

AP Airport Protection

CO Conservation



360 Meters

0

180

C-N Neighborhood Commercial

C-R Regional Commercial

C-S Service Commercial

C-H Highway Commercial

MX-N Neighborhood Mixed Use



<u>Figure 4.11-3</u> DOWNTOWN EAST PRECISE PLAN



Sources: City of Hanford General Plan – Downtown East Precise Plan, March 2014



KART Transit Station

Zoning – Downtown East Precise Plan



4.12 Mineral Resources

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			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	

a) Would the project 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?

b) Would the project 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?

Less Than Significant Impact

As depicted in **Figure 4.12-1**, the project site falls within Mineral Resource Zone (MRZ)-2, which is an area underlain by mineral deposits where geologic data indicate that significant measured or indicated resources are present (California Department of Conservation, 2015). However, according to the Open Space, Conservation, & Recreation Element of the City of Hanford General Plan, the only significant mineral resources that have been found within the planning area are sand and gravel (Quad Knopf, 2017). There are no active mining operations within the City limits or within the City's sphere of influence (California Department of Conservation, 2016b). According to the California Department of Conservation Division of Oil, Gas, & Geothermal Resources Well Finder, no oil or gas wells were identified on or within one mile of the project site (California Department of Conservation, 2019). For these reasons the project would have a less than significant impact on the availability of known mineral resources of value to the region or state residents and to any locally important mineral resource recovery sites.



Figure 4.12-1 CLOSEST MINERAL RESOURCES





4.13 Noise

	Would the project result in:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		X		
b)	Generation of excessive groundborne vibration or groundborne noise levels?			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	

4.13.1 Characteristics of Sound

Sound is a pressure wave transmitted through the air. It is described in terms of loudness or amplitude (measured in decibels), frequency or pitch (measured in hertz [Hz] or cycles per second), and duration (measured in seconds or minutes). The decibel (dB) scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Because the human ear is not equally sensitive to all frequencies, a special frequency-dependent rating scale is used to relate noise to human sensitivity. The A-weighted decibel scale (dBA) provides this compensation by discriminating against upper and lower frequencies in a manner approximating the sensitivity of the human ear. The scale is based on a reference pressure level of 20 micropascals (zero dBA). The scale ranges from zero (for the average least perceptible sound) to about 130 (for the average human pain level).

4.13.2 Noise Measurement Scales

Several rating scales have been developed to analyze adverse effects of community noise on people. Since environmental noise fluctuates over time, these scales consider that the effect of noise on people depends largely upon the total acoustical energy content of the noise, as well as the time of day when the noise occurs. Those that are applicable to this analysis are as follows:

• L_{eq} , the equivalent noise level, is an average of sound level over a defined time period (such as 1 minute, 15 minutes, 1 hour or 24 hours). Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure.



- L₉₀ is a noise level that is exceeded 90 percent of the time at a given location; it is often used as a measure of "background" noise.
- L_{max} is the root mean square (RMS) maximum noise level during the measurement interval. This measurement is calculated by taking the RMS of all peak noise levels within the sampling interval. Lmax is distinct from the peak noise level, which only includes the single highest measurement within a measurement interval.
- CNEL, the Community Noise Equivalent Level, is a 24-hour average Leq with a 4.77-dBA "penalty" added to noise during the hours of 7:00 p.m. to 10:00 p.m., and a 10-dBA penalty added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime (Caltrans, 2013). The logarithmic effect of these additions is that a 60-dBA 24-hour L_{eq} would result in a calculation of 66.7 dBA CNEL.
- L_{dn} , the day-night average noise, is a 24-hour average Leq with an additional 10-dBA "penalty" added to noise that occurs between 10 p.m. and 7 a.m. The L_{dn} metric yields values within 1 dBA of the CNEL metric. As a matter of practice, L_{dn} and CNEL values are considered to be equivalent and are treated as such in this assessment.

4.13.3 Existing Noise

The City of Hanford Municipal Code § 9.10.040 defines "noise sensitive institutions" or "noise sensitive areas" as schools, churches, hospitals and other facilities at which healthcare services are provided, courts and public libraries. Although not labeled as such in the Municipal Code, residences and hotels are usually included in the sensitive receiver category.

The principal existing sensitive receivers near the project are single and multi-family residences. **Table 4.13-1** identifies sensitive receivers in the project vicinity. The ones with ID numbers **A** through **E** in parentheses were used in the construction noise impact analysis in **Section 4.13.6**. **Figure 4.13-1** shows the locations of the sensitive receivers.

Name	Туре	Address	Feet From Siteª
Centro Cristiano Fuego Santo	Religious	211 N Brown St	79
Single-family Residence	Residential	307 N Brown Street	163
Apostolic Assembly	Religious	223 E 9th St	171
House of Hope	Religious	206 E 9th St	316
Hanford Carnegie Museum	Museum	109 E 9th St	332
Hanford Buddhist Church	Religious	238 N Green St	475
Kings County Library	Library	401 N Douty St	513
Hanford Civic Auditorium	Auditorium	400 N Douty St	871
Pentecostal Church of God	Religious	323 E 11th S	935
St. Vincent de Paul Center	Religious	115 W 5th St	1,022
Comfort Inn Hanford Lemoore	Hotel	10 N Irwin St	1,034
Episcopal Church of the Savior	Religious	519 N Douty St	1,050
Rodeway Inn	Hotel	101 N Redington St	1,411
	Name Centro Cristiano Fuego Santo Single-family Residence Apostolic Assembly House of Hope Hanford Carnegie Museum Hanford Buddhist Church Kings County Library Hanford Civic Auditorium Pentecostal Church of God St. Vincent de Paul Center Comfort Inn Hanford Lemoore Episcopal Church of the Savior Rodeway Inn	NameTypeCentro Cristiano Fuego SantoReligiousSingle-family ResidenceResidentialApostolic AssemblyReligiousHouse of HopeReligiousHanford Carnegie MuseumMuseumHanford Buddhist ChurchReligiousKings County LibraryLibraryHanford Civic AuditoriumAuditoriumPentecostal Church of GodReligiousSt. Vincent de Paul CenterReligiousComfort Inn Hanford LemooreHotelEpiscopal Church of the SaviorReligious	NameTypeAddressCentro Cristiano Fuego SantoReligious211 N Brown StSingle-family ResidenceResidential307 N Brown StreetApostolic AssemblyReligious223 E 9th StHouse of HopeReligious206 E 9th StHanford Carnegie MuseumMuseum109 E 9th StHanford Buddhist ChurchReligious238 N Green StKings County LibraryLibrary401 N Douty StHanford Civic AuditoriumAuditorium400 N Douty StPentecostal Church of GodReligious323 E 11th SSt. Vincent de Paul CenterReligious115 W 5th StComfort Inn Hanford LemooreHotel100 N Irwin StEpiscopal Church of the SaviorReligious519 N Douty StRodeway InnHotel101 N Redington St

Table 4.13-1 SENSITIVE RECEIVERS IN PROJECT AREA

^aThese distances are from the sensitive receiver to the nearest point on the project boundary.



In the general area of Hanford where the KART station will be located, the major sources of noise include, but are not limited to, highway traffic, street traffic and commercial activity (Quad Knopf, 2016, p. 4.12-7). The loudest mobile noise sources in the city are State Route (SR) 198 and other major roadways, the Hanford Municipal Airport, and the Southern Pacific (SP) and the Burlington Northern Santa Fe (BNSF) railroad lines. However, SR 198 is about 0.25 mile to the south and the SP and BNSF rail lines are about 600 feet and 0.5 mile, respectively. Numerous intervening structures block transmission of sound from these sources to the project site. Finally, the project area is more than 2,100 feet from the 60-dBA noise contour of the land use map for the airport.

The Draft EIR for the City of Hanford 2035 General Plan Update includes the results of short-term ambient noise measurements made at 12 locations in the city on August 27, 2015 (Quad Knopf, 2016, pp. 4.12-8 and 4.12-9). As the purpose of the measurements was to gauge the contribution of street traffic to noise exposures in the city, the noise meters were placed between 20 and 90 feet of roadway centerlines. One-hour L_{eq} values ranged from 38 to 70 dBA. However, the 38-dBA value is likely to be either an anomaly or a reporting error. First, it is unusual for a daytime ambient noise value in an active urban area to be below 40 dBA. In addition, a 95-percent confidence interval for the mean of the remaining 11 noise samples is 66.0 to 70.0 dBA L_{eq} . The 38-dBA reading is clearly an outlier.

UltraSystems used GIS software with kriging⁶⁶ to develop a grid of ambient noise values in a domain containing all 11 remaining data points. We then developed the noise contour lines shown in **Figure 4.13-2**. Ambient noise levels were then estimated by interpolation for five sensitive receivers in the general project area.⁶⁷ These sensitive receivers are labeled **A** through **E** in **Table 4.13-1**. The locations were chosen to provide ambient noise data to compare with the results of construction noise projections. The results of the interpolation are shown in **Table 4.13-2**.

Site	Name	Address	Estimated 1-hr Noise
Α	Single-family residence	307 N Brown Street	63.0
В	House of Hope	206 E 9th St	62.6
С	Kings County Library	401 N Douty St	62.4
D	Hanford Buddhist Church	238 N Green St	63.7
Е	Centro Cristiano Fuego Santo	211 N Brown St	63.3

Table 4.13-2ESTIMATED EXISTING SHORT-TERM NOISE EXPOSURES AT SITES NEAR THE PROJECT

⁶⁶ Kriging is a statistical method of estimating values (e.g. noise levels) at unmeasured points from the results of measurements at surrounding points.

⁶⁷ None of the five sensitive receivers examined was part of the DEIR ambient noise data set.



Figure 4.13-1 SENSITIVE RECEIVERS IN PROJECT AREA



tors, and the GIS user con nunity, Sources, Esri, HERE, Garmin, USGS, Informap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong F USGS, 2007, CAL Fire, 2007, Kings County, 2019, UltraSystems Environmental Inc., 2010 and the GIS User



<u>Figure 4.13-2</u> AMBIENT NOISE CONTOURS IN THE PROJECT AREA





4.13.4 Regulatory Setting

Federal

The U.S. Department of Housing and Urban Development has set a goal of 45 dBA L_{dn} as a desirable maximum interior standard for residential units developed under HUD funding (U.S. Department of Housing and Urban Development, 1985). While HUD does not specify acceptable exterior noise levels, standard construction of residential dwellings constructed under Title 24 of the California Code of Regulations typically provides 20 dBA of acoustical attenuation with the windows closed and 10 dBA with the windows open. Based on this assumption, the exterior L_{dn} or CNEL should not exceed 65 dBA under normal conditions.

State of California

The California Department of Health Services (DHS) Office of Noise Control studied the correlation of noise levels with effects on various land uses. (The Office of Noise Control no longer exists.) The most current guidelines prepared by the state noise officer are contained in the "General Plan Guidelines" issued by the Governor's Office of Planning and Research in 2017 (OPR, 2017). These guidelines establish four categories for judging the severity of noise intrusion on specified land uses:

- **Normally Acceptable**: Is generally acceptable, with no mitigation necessary.
- **Conditionally Acceptable**: May require some mitigation, as established through a noise study.
- Normally Unacceptable: Requires substantial mitigation.
- **Clearly unacceptable**: Probably cannot be mitigated to a less-than-significant level.

The types of land uses addressed by the state standards, and the acceptable noise categories for each are presented in **Table 4.13-3**. There is some overlap between categories, which indicates that some judgment is required in determining the applicability of the numbers in every situation.





<u>Table 4.13-3</u>
LAND USE COMPATIBILITY FOR COMMUNITY NOISE SOURCES

Land Use Category	Noise Exposure (dBA, CNEL)						
	55	60	65	70	75	80	
Residential – Low-Density Single-Family, Duplex, Mobile Homes				1	N.		
		, I					
Residential – Multiple Family				[
	Į	I					
Transient Lodging – Motel, Hotels							
	1						
Schools, Libraries, Churches, Hospitals, Nursing Homes				[
Auditoriums Concert Holls Amphitheaters				1			
Autoriunis, concert mans, Ampintheaters							
Sports Arena, Outdoor Spectator Sports							
Playgrounds, Neighborhood Parks							
		1					
Golf Courses, Riding Stables, Water Recreation,							
Cemeteries							



Land Use Category	Noise Exposure (dBA, CNEL)						
	55	60	65	70	75	80	
Office Puildings Pusiness Commercial and Professional							
once buildings, business commercial and Professional							
Industrial, Manufacturing, Utilities, Agriculture							
industrial, Manufacturing, Otinties, Agriculture							
Normally Acceptable: Specified land use is satisfactor involved are of normal conventional construction wit	ory, base hout an	ed upor Iy speci	n the as: al noise	sumpti e insula	on that ition red	any bu quirem	ildings ients.
Conditionally Acceptable : New construction or development should be undertaken only after detailed analysis of the noise reduction requirements is made and needed noise insulation feature included in the design. Conventional construction, but with closed windows and fresh air supply system or air conditioning will normally suffice.					after a eatures system		
Normally Unacceptable : New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirement must be made and needed noise insulation features included in the design.					If new ements		
Clearly Unacceptable : New construction or development should generally not be undertaken.							

Source: Office of Planning and Research (Governor's Office of Planning and Research, 2017).

Local Standards

The primary regulatory documents that establish noise standards within the city of Hanford are the City of Hanford 2035 General Plan Health, Safety and Noise Element and the Hanford Municipal Code (HMC) (City of Hanford Municipal Code Title 9, 2017).

General Plan Health, Safety and Noise Element

The Health, Safety and Noise Element of the City of Hanford's 2035 General Plan has two goals concerning noise:

- **Goal H7**: Protection from the harmful and annoying effect of excessive noise.
- **Goal H8:** Protection of the City's economic base by preventing incompatible land uses from encroaching upon existing or planned noise-producing uses.

To achieve these goals, the Health, Safety and Noise Element has 13 policies, seven of which potentially apply, directly or indirectly, to the proposed project:

Policy H39 (Aircraft Noise). Evaluate proposed development proposals against the land use policies of the Kings County Airport Land Use Compatibility Plan.



Policy H40 (Ground Transportation Noise). Limit the effects of vehicle noise generation by designating truck routes, limiting vehicle speeds, standards relating to vehicle noise emission levels and muffler systems.

Policy H42 (Noise Evaluation for New Development). Evaluate proposed development proposals against existing and future noise levels from ground transportation noise sources.

Policy H44 (Noise Contours). Develop noise contours for major transportation corridors and stationary facilities that emit noise levels greater than DNL of 60 dBA.⁶⁸

Policy H46 (Noise Ordinance). Adopt ordinances that limit noise-generating sources to acceptable, safe levels.

Policy H48 (Noise Mitigation for Construction Activities). Require all development projects to mitigate noise impacts associated with construction activities.

Policy H49 (Acoustical Analysis). The City shall utilize procedures for project review and issuance of building permits to ensure that noise mitigation measures identified in an acoustical analysis are implemented in the project design.

Hanford Municipal Code

The Hanford Municipal Code has several provisions that are relevant to noise during construction and operation of the KART facility. They are described as follows.

First, several HMC provisions are based upon the concept of "unreasonable noise," which the Code first defines as "any noise that is plainly audible from a distance of fifty (50) feet from any boundary line of a property from which the noise originates"⁶⁹ The Code contains a general prohibition of unreasonable noise.⁷⁰ It also prohibits "any noise which unreasonably disturbs, injures, or endangers the comfort, repose, health, peace, or safety of reasonable persons of ordinary sensitivity, within the jurisdictional limits of the city;"⁷¹ or "any noise which is so harsh, prolonged, unnatural, or unusual in time or place as to occasion unreasonable discomfort to any persons within the neighborhood from which said noise emanates, or as to unreasonably interfere with the peace and comfort of neighbors or their guests, or operators or customers in places of business, or as to detrimentally or adversely affect such residences or places of business."⁷²

The HMC finds that "Certain short-term easing of noise restrictions is essential to allow the construction and maintenance of structures, infrastructure and other elements necessary for the physical and commercial vitality of the city."⁷³ Thus there are no express, quantifiable limitations on construction noise. Nevertheless, construction activities are confined to 7:00 a.m. to 8:00 p.m.⁷⁴ A construction contractor may apply to the City for a permit to do construction work outside of those hours, "if the city manager, or designee, determines that the public health and safety … will not be impaired, and if the city manager, or designee, further determines that loss or inconvenience would

⁶⁸ DNL is assumed here to mean Ldn, as defined in Section 2.2.

⁶⁹ HMC § 9.10.040.

⁷⁰ HMC § 9.10.050(A)(1).

⁷¹ HMC § 9.10.050(A)(2).

⁷² HMC § 9.10.050(A)(3).

⁷³ HMC § 9.10.010(D).

⁷⁴ HMC § 9.10.060(A)(10).



otherwise result."⁷⁵ Permits are good for up to three days but can be renewed for up to three days at a time.

4.13.5 Significance Thresholds

Two criteria were used for judging noise impacts. First, noise levels generated by the proposed project must comply with all relevant federal, state, and local standards and regulations. Noise impacts on the surrounding community are limited by local noise ordinances, which are implemented through investigations in response to nuisance complaints. It is assumed that all existing regulations for the construction and operation of the proposed project will be enforced. In addition, the proposed project should not produce noise levels that are incompatible with adjacent noise-sensitive land uses.

The second measure of impact used in this analysis is a significant increase in noise levels above existing ambient noise levels as a result of the introduction of a new noise source. An increase in noise level due to a new noise source has a potential to adversely impact people. The proposed project would have a significant noise impact if it would do any of the following:

- Expose persons to or generate long-term noise levels (as CNEL) in excess of standards recommended in the state's land use compatibility table.
- Include construction activities outside of the allowed construction times.
- Increase short-term noise exposures at sensitive receivers during construction by 5 dBA L_{eq} or more.
- Contribute, with other local construction projects, to a significant cumulative noise impact.
- Increase operational exposures at sensitive receivers (mainly because of an increase in traffic flow) by 5 dBA CNEL or more.

4.13.6 Response to Checklist Questions

a) Would the project result in 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?

Less than Significant Impact with Mitigation Incorporated

Noise impacts associated with new facility developments include short-term and long-term impacts. Construction activities, especially heavy equipment operation, would create noise effects on and adjacent to the construction site. Long-term noise impacts include project-generated onsite and offsite operational noise sources. Onsite (stationary) noise sources from the KART project would include movement of buses into and from the station, air conditioners, landscaping and building maintenance. Offsite noise would be attributable to project-induced traffic, which would cause an incremental increase in noise levels within and near the project vicinity.

⁷⁵ Ibid.



This section also evaluates potential groundborne vibration that would be generated from the construction or operation of the proposed project.

Short-Term Construction Noise

The construction of the proposed project may generate temporary increases in ambient noise levels that exceed the thresholds of significance for this analysis. Noise impacts from construction activities are a function of the noise generated by the operation of construction equipment and on-road delivery and worker commuter vehicles, the location of equipment, and the timing and duration of the noise-generating activities. For the purpose of this analysis, it was estimated that the construction of the proposed project would begin with demolition of existing structures in early July 2021 and finish in late June of 2022.

The types and numbers of pieces of equipment anticipated in each phase of construction and development were estimated using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2 (BREEZE Software, 2017) and UltraSystems' experience with similar projects. Details of the equipment assumptions are in the noise technical study for this project (UltraSystems, 2019a).

Table 4.13-4 lists the equipment expected to be used. For each equipment type, the table shows an average noise emission level (in dB at 50 feet, unless otherwise specified) and a "usage factor," which is an estimated percentage of operating time that the equipment would be producing noise at the stated level (Knauer, H. et. al., 2006). Equipment use was matched to phases of the construction schedule.

Construction Phase	Equipment Type	Maximum Sound Level (dBA @ 50 feet)	Usage Factor	Composite Noise (dBA @ 50 feet)	
Demolition	Concrete/Industrial Saw	90	0.2		
	Tractor/Loader/Backhoe	85	0.37	050	
	Excavators	80	0.4	03.0	
	Rubber-Tired Dozer	79	0.4		
Site Preparation	Rubber-Tired Dozer	79	0.4	07 E	
	Tractor/Loader/Backhoe	85	0.37	07.5	
Grading	Graders	85	0.41		
	Rubber-Tired Dozer	79	0.4	074	
	Excavators	80	0.4	07.4	
	Tractor/Loader/Backhoe	85	0.37		
Building Construction	Crane	83	0.29		
	Forklift	67	0.2		
	Generator Set	73	0.5	86.4	
	Tractor/Loader/Backhoe	85	0.37		
	Welder	74	0.45		
Paving	Cement and Mortar Mixer	85	0.4		
	Pavers	77	0.5		
	Paving Equipment	85	0.5	88.8	
	Rollers	80	0.2		
	Tractor/Loader/Backhoe	85	0.37		
Architectural Coating	Air Compressors	81	0.48	77.8	

Table 4.13-4 CONSTRUCTION EQUIPMENT NOISE CHARACTERISTICS



Using calculation methods published by the Federal Transit Administration, (FTA, 2018) UltraSystems estimated the average hourly exposures at sensitive receiver sites **A** through **E**. To account for the fact that at any given time the various pieces of construction equipment are at different places, the distances used for the calculation were those from the center of each major construction area (north and south of East 8th Street) to each ambient noise measurement point. Results are shown in **Table 4.13-5**.

<u>Table 4.13-5</u>
ESTIMATED UNSHIELDED CONSTRUCTION NOISE EXPOSURES AT NEAREST SENSITIVE
RECEIVERS

For Construction Activity North of East 8th Street							
Sito	Sonsitivo Posoivor	Distance (feet)	1-Hour L _{eq} (dBA)				
Site	Sensitive Receiver		Existing	Projected ^a	Change		
А	Single-family residence	172	63.0	78.1	+15.1		
В	House of Hope	343	62.6	72.5	+9.9		
С	Kings County Library	391	62.4	71.5	+9.1		
D	Hanford Buddhist Church	711	63.7	67.8	+4.1		
	For Construction Activity South of East 8th Street						
Е	Centro Cristiano Fuego Santo	391	63.3	72.6	+9.3		
А	Single-family residence	316	63.0	73.1	+10.1		
В	House of Hope	640	62.6	68.1	+5.5		
С	Kings County Library	662	62.4	67.8	+5.4		
D	Hanford Buddhist Church	715	63.7	67.8	+4.1		
Е	Centro Cristiano Fuego Santo	281	63.3	74.2	+10.9		

^aExisting plus construction-related.

For sensitive receivers B, C and D, at least one existing building is on a line of sight between the construction noise source and a receiver. According to Caltrans, in cases where the first row of buildings covers less than about 60% of the field of view, the first row attenuates the noise by about 3 dBA, with 1.5 dBA for each additional row (DOT, 2013). Where the coverage exceeds 60%, the first building attenuates about 5 dBA, with 1.5 dBA for each additional row. The attenuation from intervening structures was used to adjust the increases in exposures. **Table 4.13-6** shows the results.

Table 4.13-6 ADJUSTED CONSTRUCTION NOISE EXPOSURE INCREASES AT NEAREST SENSITIVE RECEIVERS

Sensitive	Increase Due to Construction 1-Hour L _{eq} (DBA)		
Receiver	Activity North of East 8th Street	Activity South of East 8th Street	
А	15.1	10.1	
В	9.9	3.5	
С	6.6	2.7	
D	1.8	1.3	
Е	9.3	10.9	



At all sensitive receivers except D, the *increase* in exposure would, for at least part of construction, exceed the 5-dBA L_{eq} significance threshold defined in **Section 4.13.5**. Implementation of the following mitigation measures will ensure that impacts from construction noise would be less than significant.

Mitigation Measures

- **MM N-1** If surrounding residents or businesses complain of excessive noise during construction, then the construction contractor will conduct noise monitoring in the residential or commercial area of concern during the suspected noise-producing construction activities. If the monitored noise levels exceed background levels by 5 dBA or more, then the construction contractor will mitigate noise levels using temporary noise shields, noise barriers or other mitigation measures to comply with those restrictions or standards. (See below.)
- **MM N-2** The construction contractor will use the following **source controls**, except where not physically feasible:
 - Use of noise-producing equipment will be limited to the interval from 7 a.m. to 6 p.m., Monday through Friday.
 - For all noise producing equipment, use types and models that have the lowest horsepower and the lowest noise generating potential practical for their intended use.
 - The construction contractor will ensure that all construction equipment, fixed or mobile, is properly operating (tuned-up) and lubricated, and that mufflers are working adequately.
 - Have only necessary equipment onsite.
 - Use manually-adjustable or ambient sensitive backup alarms
- **MM N-3** The contractor will use the following **path controls**, except where not physically feasible:
 - Install portable noise barriers, including solid structures and noise blankets, between the active noise sources and the nearest noise receivers.
 - Temporarily enclose localized and stationary noise sources.
 - Store and maintain equipment, building materials, and waste materials as far as practical from as many sensitive receivers as practical.
- **MM N-4** Advance notice of the start of construction shall be delivered to all noise sensitive receivers adjacent to the project area. The notice shall state specifically where and when construction activities will occur, and provide contact information for filing noise complaints with the contractor and the City.

Level of Significance After Mitigation

With implementation of mitigation measures **N-1** through **N-4** above, the project would result in less than significant impacts to sensitive receivers.



Operational Noise

<u>Onsite</u>

Onsite noise sources from the proposed KART project would include bus maneuvering and parking, externally placed air conditioners, landscaping and building maintenance equipment; and motor vehicles driving into, within, and out of the parking areas. The new station building will block most of the noise transmission toward the south. Noise from onsite sources would be less than significant.

Roadway Noise

The principal noise source in the project area is traffic on local streets. The project may contribute to a permanent increase in ambient noise levels in the project vicinity due to project-generated vehicle traffic on neighborhood roadways and at intersections. A noise impact would occur if the project contributes to a permanent increase in ambient noise levels affecting sensitive receivers along roadways that would carry project-generated traffic.

According to the transportation impact analysis (TIA) prepared for this project (Fehr and Peers, 2019), the project will generate about 760 net⁷⁶ bus and other passenger vehicle trips per day. The weekday AM and PM peak traffic volumes are predicted to be 82 and 99 vehicles per hour, respectively. To obtain an idea of the magnitude of the increase in local traffic due to the project, the AM and PM peak hour project-generated traffic was compared to the existing traffic at six of the TIA's study intersections. **Table 4.13-7** shows the result of the analysis. The highest traffic increase through an intersection would be 75%. The remaining increases would range from 0% to 31.0%.

	AM Peak Vehicles/Hour		Porcont	PM Peak Vehicles/Hour		Dercent
TIA Intersection	Baseline	Project	Increase	Baseline	Project	Increase
N. Harris St./ 7th Street	372	27	7.3	589	0	0
N. Harris St./ E. 8th Street	163	19	11.7	207	17	8.2
N. Brown St./ 7th Street	329	42	12.8	299	33	11.0
N. Brown St./ 8th Street	44	33	75.0	58	18	31.0
10th Ave/7th Street/ Lacey Blvd.	1,209	13	1.1	1,796	9	0.5
N. 11th Avenue/ 7th Street	1,412	40	2.8	2,395	71	3.0

<u>Table 4.13-7</u> PERCENTAGE TRAFFIC INCREASE DUE TO PROJECT

Source: Traffic data from KART Transit Center. Administrative Draft Transportation Impact Assessment, Figure 3 and Figure 5.

Given the logarithmic nature of the decibel, traffic volume needs to be doubled in order for the noise level to increase by 3 dBA (ICF Jones and Stokes, 2009), the minimum level perceived by the average

⁷⁶ The transportation impact analysis estimated traffic to be generated by the project and then subtracted project from existing uses that will be displaced by the new KART facility.



human ear. A doubling is equivalent to a 100% increase. Because the maximum increase in traffic at any intersection would be below 100%, operational traffic noise impacts on sensitive receivers would be less than significant.

Noise impacts on businesses and residences from transit vehicles entering and leaving the facility at many hours of the day and night were also estimated. Because the new station will be at some distance from the current location, new streets will receive the bus traffic. Therefore, the analysis included both the current bus traffic and the forecasted increase, essentially a doubling of existing traffic. From information provided by KCAPTA (Dow, 2019b), it appears that the bus traffic into and out of the new facility will be divided roughly evenly among four streets: East 8th Street, North Brown Street, East 7th Street, and North Harris Street. In a given hour the bus traffic would be the present number of vehicles per hour multiplied by two and divided by four. Exposures to bus noise were estimated by the sound exposure level (SEL) method prescribed by the Federal Transit Administration (FTA, 2018). Vehicle data and the noise analysis are shown in Table 4.13-8. For exposures at 50 feet from the centerlines of each of the four aforementioned streets, the hourly L_{ea} values due to bus traffic would range from about 40 dBA to about 53 dBA. These values are about 10 dBA below the local ambient noise levels estimated in Section 4.13.3. The increase in hourly average noise exposure due to the bus traffic would be less than 1 dBA, which would not be noticeable. The calculated CNEL value is 51.6 dBA, which is in the "normally acceptable" range for the types of sensitive receivers in the area. (See Table 4.13-3.) Because the nearest sensitive receivers are more than 50 feet away, actual exposures would be less than 51.6 dBA CNEL. Therefore, the proposed project would have less than significant operational noise impacts.

	CNEL Calculation			
Starting	Buses	1-Hour	CNEL	Adjusted
Hour	on Each	Leq	Weighting	Leq
	Street ^a	(dBA)		(dBA)
0000	0	0	10	10
0100	0	0	10	10
0200	0	0	10	10
0300	0	0	10	10
0400	0	0	10	10
0500	1	40.4	10	50.4
0600	9	50.0	10	60.0
0700	13	51.6	0	51.6
0800	17	52.7	0	52.7
0900	14	51.9	0	51.9
1000	13	51.6	0	51.6
1100	14	51.9	0	51.9
1200	14	51.9	0	51.9
1300	14	51.9	0	51.9
1400	14	51.9	0	51.9
1500	14	51.9	0	51.9
1600	12	51.2	0	51.2
1700	15	52.2	0	52.2
1800	14	51.9	0	51.9
1900	6	48.2	4.77	53.0
2000	6	48.2	4.77	53.0

Table 4.13-8 BUS TRAFFIC NOISE IMPACTS AT 50 FEET



	CNEL Calculation				
Starting	Buses	1-Hour	CNEL Woighting	Adjusted	
noui	Street ^a	Leq (dBA)	weighting	Leq (dBA)	
2100	3	45.2	4.77	50.0	
2200	0	0	10	10	
2300	0	0	10	10	
			dBA CNEL	51.6	

b) Would the project generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant Impact

Vibration is sound radiated through the ground. Vibration can result from a source (e.g., subway operations, vehicles, machinery equipment, etc.) causing the adjacent ground to move, thereby creating vibration waves that propagate through the soil to the foundations of nearby buildings. This effect is referred to as groundborne vibration. The peak particle velocity (PPV) or the root mean square (RMS) velocity is usually used to describe vibration levels. PPV is defined as the maximum instantaneous peak of the vibration level, while RMS is defined as the square root of the average of the squared amplitude of the level. PPV is typically used for evaluating potential building damage, while RMS velocity in decibels (VdB) is typically more suitable for evaluating human response.

The background vibration velocity level in residential areas is usually around 50 VdB. The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for most people. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is rarely perceptible. The range of interest is from approximately 50 VdB to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

The American National Standards Institute (ANSI, 1983) indicates that vibration levels in critical care areas, such as hospital surgical rooms and laboratories, should not exceed 0.2 inch per second of PPV. The FTA also uses a PPV of 0.2 inch per second as a vibration damage threshold for fragile buildings and a PPV of 0.12 inch per second for extremely fragile historic buildings (FTA, 2018, p. 186). The FTA criteria for infrequent groundborne vibration events (less than 30 events per day) that may cause annoyance are 80 VdB for residences and buildings where people normally sleep, and 83 VdB for institutional land uses with primarily daytime use.

Construction Vibration

It is expected that groundborne vibration from project construction activities would cause only intermittent, localized intrusion. The project's construction activities most likely to cause vibration impacts are:

• **Heavy Construction Equipment:** Although all heavy, mobile construction equipment has the potential of causing at least some perceptible vibration while operating close to buildings, the vibration is usually short-term and is not of sufficient magnitude to cause building


damage. It is not expected that heavy equipment such as large bulldozers would operate closely enough to any sensitive receivers to cause vibration impact.

• **Trucks:** Trucks hauling building materials to construction sites can be sources of vibration intrusion if the haul routes pass through residential neighborhoods on streets with bumps or potholes. Repairing the bumps and potholes almost always eliminates the problem.

The project would not include any blasting, drilling, or pile driving. Construction equipment such as loaded trucks, jack hammers, and small bulldozers may temporarily increase groundborne vibration or noise at the project site.

The construction vibration analysis used formulas published by the Federal Transit Administration (FTA, 2018, p. 186). For a standard reference distance of 25 feet, peak particle velocity is found from:

 $PPV = PPV_{ref} x (25/D)^{1.5}$

where

PPV_{ref}	=	Reference source	vibration	at 25	feet
PPV _{ref}	=	Reference source	vibration	at 25	tee

D = Distance from source to receiver

The vibration level (VdB) for a standard reference distance of 25 feet is found from:

 $VdB = L_{vref} - 30 \log(D/25)$

where

 L_{vref} = Reference source vibration level at 25 feet

D = Distance from source to receiver

The FTA has published standard vibration levels for construction equipment operations, at a distance of 25 feet (FTA, 2018, p. 184). The smallest distance from construction activity to a residential receiver would be about 172 feet. The calculated vibration levels expressed in VdB and PPV for selected types of construction equipment at distances of 25 and 172 feet are listed in **Table 4.13-9**.

Table 4.13-9 VIBRATION LEVELS OF TYPICAL CONSTRUCTION EQUIPMENT

Equipment	PPV at 25 feet (in/sec)	Vibration Decibels at 25 feet (VdB)	PPV at 172 feet (in/sec)	Vibration Decibels at 172 feet (VdB)
Loaded trucks	0.076	86	0.004	61
Jack hammer	0.035	79	0.002	54
Small bulldozer	0.003	58	0.0002	33



As shown in **Table 4.13-9**, the vibration level of construction equipment at the nearest sensitive receiver (172 feet) is at most 0.004 inch per second, which is less than the FTA damage threshold of 0.12 inch per second PPV for fragile historic buildings, and 61 VdB, which is less than the FTA threshold for human annoyance of 80 VdB. Construction vibration impacts would therefore be less than significant.

Operational Vibration

Operation of the proposed project would not involve significant sources of groundborne vibration or groundborne noise. Thus, operation of the proposed project would result in a less than significant impact.

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?

Less than Significant Impact

The project site is located approximately 0.5 mile northwest of the Hanford Municipal Airport (Google Earth, 2019), which is a public use airport. According to the Hanford Municipal Airport Master Plan (City of Hanford, 2010), the projected 2025 60-dBA CNEL noise contour for the airport is limited to a relatively small area on either side of the runway, all of it south of State Route 198. Therefore, exposure of project employees and bus customers to airport-related noise will be less than significant. Employees and travelers may also be exposed to noise from aircraft overflights. This noise would be intermittent and of short duration, and would be part of the mix of urban noise exposure. Finally, and perhaps most importantly, the proposed new KART site is less than a mile from the existing facility and will be in essentially the same noise environment as is the current facility. Thus, the project will not increase in a significant.



4.14 Population and Housing

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

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

Less than Significant Impact

The project proposes construction of a new transit center on the project site. The project does not propose construction of any residential uses, nor does it include extension of existing infrastructure. The project would create employment opportunities both during the construction and operational phases. However, it is anticipated that employees from the local workforce would be hired during both the construction and operational phases of the project. The project is not of the scope or scale to induce population growth by requiring people to move from out of the project area to work at the proposed project. Therefore, less than significant impacts would occur regarding unplanned growth as a result of the project.

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

Less than Significant Impact

The project site contains two residential structures. The project would demolish existing structures on the project site and build a new transit center consisting of an approximately 19,000-square-foot transit station building, offsite parking, and onsite bus parking, as described in **Section 3.0**. The project would remove one boarded-up (and unoccupied) residence located just east of the Baby's Nutrition parking lot at 202 E. 8th Street. Although the home located at 226 E. 8th Street is within the project boundary, this home will remain in its current state and will not be developed as part of the proposed project. The home could be acquired in the future should the owner decide to sell it. No homes where people live would be removed or torn down as a result of the proposed project and no residents would be displaced as a result of the project. Therefore, project impacts regarding displacement of housing and people would be less than significant.



The project would result in the relocation of the following three businesses: 1) ProLite Signs located at 222 E. 7th Street; 2) American Audio, located at 216 E. 7th Street; and 3) Kings View Community Services, located at 289 E. 8th Street. In July and August 2019 staff from UltraSystems Environmental called each of these businesses to inquire about the approximate number of employees to determine how many persons would be displaced from these businesses.

- On July 23, 2019 Margaret Partridge with UltraSystems spoke to an employee who indicated that two employees work at ProLite Signs.
- On July 23, 2019 Margaret Partr4idge with UltraSystems spoke to an employee who indicated that there is one employee at American Audio.
- On August 8, 2019 Margaret Partridge with UltraSystems spoke to an employee who indicated that there are five employees at Kings View Community Services.

The eight employees working at the three businesses listed above would be re-located as a result of the proposed project. All relocation options will be discussed with the owners and tenants and a consultant will be hired to assist in relocation of businesses. Therefore, the project would have a less than significant impact regarding relocation of businesses and no mitigation is warranted.



4.15 Public Services

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact		
Would the project 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:						
a) Fire protection?			X			
b) Police protection?			X			
c) Schools?			X			
d) Parks?			X			
e) Other public facilities?			Х			

a) Fire Protection?

Less than Significant Impact

The City of Hanford's Fire Department has provided fire prevention, fire protection and emergency response services for the 14 square miles of Hanford since 1945 (City of Hanford, 2017c). The city of Hanford has three fire stations that protect approximately 57,000 people within 12 square miles. The city is divided into three sections with one station located in each section.

On June 14, 2019 an information request letter for the proposed KART Transit Station Project was sent via email to Erik Brotemarkle, Fire Chief for the City of Hanford. This letter described the proposed project, requested information regarding Fire Department services to the project site, and asked about potential project impacts.

On June 20, 2019 UltraSystems received a response via email from Battalion Chief David Sumaya (Sumaya, 2019); refer to **Appendix L**. In this letter it stated that Fire Station 1 is the headquarter station located at 350 W. Grangeville Boulevard, approximately 1.1 mile north of the project site. This station serves the city limits north of Highway 198. The engine (E41) is staffed with a four-person crew (when fully staffed) and with a minimum of a three-person crew. This station would be first to respond to the project site in case of an emergency (Sumaya, 2019).

Fire stations 2 and 3 will cover calls if station one is not available and also respond to the project site if a fire occurs. Fire Station 2 is located at 10553 Houston Avenue and serves the city limits south of Highway 198. Patrol 42 runs out of this station with a two-person crew (Sumaya, 2019). Fire Station 2 is approximately 2 miles to the south of the project (Google Earth, 2019). Fire Station 3 is located at 1057 S. Twelfth Avenue and is staffed with a three-person engine (Sumaya, 2019).

The Hanford Fire Department responds to approximately 4,400 emergency and non-emergency incidents per year (City of Hanford, 2017d). According to Fire Chief Sumaya, the Fire Department's average response time is five minutes and 43 seconds in the City of Hanford.



Emergency medical calls make up the majority of the responses. In a medical emergency, one fire unit will respond with a minimum of two personnel trained to the level of Emergency Medical Technician Defibrillator (EMT-D) (City of Hanford, 2017d).

The project includes the construction of a new transit station and commercial development. Travel time to the project site from Fire Station 1 is approximately two minutes and from Fire Station 2 is approximately eight minutes (Google Earth, 2019).

In the information request letter sent to the Fire Department in June 2019, when asked if the project would require construction of new fire department facilities to meet existing fire demands, in addition to the proposed project's demands, the department responded that the project would not require anything more than is needed today (Sumaya, 2019). When asked if the proposed project could have a potentially significant impact on the Fire Department's level of service or response times, the department responded that whenever a large structure or sub-division is developed, that the fire department is impacted and that there could potentially be more people coming in and out of the city who may place demands on the Fire Department and that with additional development comes additional structures that could burn (Sumaya, 2019). When asked if the Fire Department anticipates any potential environmental impacts from the proposed project related to providing fire service to the project site, the response was "Just like any existing structure, one fire depletes our resources" (Sumaya, 2019). A less than significant impact is anticipated on the City of Hanford Fire Department because the project would be in compliance with applicable portions of the 2016 edition of the California Fire Code and the 2015 edition of the International Fire Code (IFC), as adopted and amended by the Fire District. Development of the project site would be consistent with the land use goals and land use map included in the City of Hanford 2035 General Plan and has therefore been planned for from the standpoint of long-term infrastructure needs (Quad Knopf, 2017, p. 23). In addition, per the City of Hanford 2035 General Plan Update Policy Document, there is a policy regarding collection of impact fees for fire facilities needed to support new development and population growth (Quad Knopf, 2017, p. 102). Therefore, the project would be required to pay fire impact fees to the City of Hanford which would offset potential impacts to fire services from the proposed project.

In addition, the Hanford Fire Department is part of the California Fire Service Mutual Aid System (MAS), which involves an agreement among neighboring agencies to furnish resources and facilities to prevent and combat any type of disaster or emergency. For example, if a fire were to overwhelm the first arriving on scene crews, a general alarm or mutual aid would be activated, which would summon all off duty personnel and/or neighboring fire departments to the incident (Quad Knopf, 2016, pp. 4.14-1 through 4.14-2).

Furthermore, the adequacy of existing water pressure and water availability in the project area would be verified by the City of Hanford Fire Department during the proposed project's plan check review process. Compliance with the city and state codes is mandatory and routinely conditioned upon projects. In addition, the project, once operational, would be periodically inspected by the City of Hanford Fire Department.

The Fire Department staff stated that they are a small department in a growing city that will continue to meet the demands put upon them as effectively and efficiently as possible and that the Hanford Fire Department welcomes the project and looks forward to project completion (Sumaya, 2019).



Based on the analysis above, the project's compliance with fire-related design regulations and payment of fire department impact fees would reduce potential project impacts to a less than significant level.

c) Police Protection?

Less than Significant Impact

The City of Hanford Police Department provides police and law enforcement services in the project area. The Hanford Police Department has approximately 49 sworn officers and is comprised of four separate divisions; Records Division, Traffic Unit, Investigations Division, and Operations Division (City of Hanford, 2017f). The Hanford Police Department operates from one station located at 425 N. Irwin Street, approximately 0.5 mile to the northwest of the project site (Google Earth, 2019). The current officer-to-resident ratio for the City of Hanford is approximately 1 per 1,000 (Sever, 2019). Response times are affected by a few different factors; time of day, priority of calls, type of call and location of the officers. The average response time for a call in the project area is 15 minutes 32 seconds. This time would be much faster or slower depending upon the call priority and location of the responding officer. For example, the Police Department's city-wide response time to priority 1 calls is two minutes and five seconds and the Department's response time to a priority 3 call is twenty-one minutes and twenty-one seconds (Sever, 2019).

The City's population is not anticipated to increase as a result of the proposed project. While the project would create employment opportunities (both during the construction and operational phases), it is anticipated that employees from the local workforce would be hired during both phases. The project is not of the scope or scale to induce people to move from out of the project area to work at the proposed project. Therefore, the ratio of sworn officers to residents in the City of Hanford is not expected to change as a result of the project. Moreover, development of the project site is consistent with the overall growth anticipated by the General Plan at buildout and has therefore been planned for from the standpoint of long-term infrastructure needs (Quad Knopf, 2017, p. 23). Additionally, the project proposes to have three security guards at the project site.

Under existing conditions, the existing KART station has security onsite. The proposed project would also have onsite security to ensure that all persons at the KART station have business at the station and are there for transit-related reasons. Onsite security for the KART station would arrive half an hour before the station opens (station hours would be from 5:00:00 a.m. to 11:00 p.m.) and would stay until half an hour after the KART station closes. The project site would have one onsite security guard on duty during operating hours.

In the information response letter from the Police Department Police Chief Parker Sever stated that the proposed project would not require new law enforcement facilities. (Sever, 2019) When asked if the proposed project could have a potentially significant impact on the Police Department's level of service and/or response times, the Police Chief stated that the proposed project has the potential to slow the Department's response time to locations in the project area. The Department had divided the City of Hanford into 81 response areas. The proposed project is located in response area 42. Response area 42 is already one of the busiest areas for the police department and increased calls from this area may slow the Department's response times, as officers from different beats located further away may be required to assist. The current KART station has averaged 113 calls over the last 3 years. Police Chief Sever anticipates the calls for service to increase significantly upon full build out with an additional 50,000 square feet of office/retail (Sever, 2019). Per Angie Dow, based on daily security logs for the existing KART station, over the last three years there have been 43 called, nine



of which were for EMTs and two were related to issues observed at the Amtrak station. Ms. Dow believes the 113 calls cited above by Police Chief Sever, include calls to Amtrak, which does not have security personnel on duty. The existing KART station averages 1 call per month (12 calls per year) to the City of Hanford Police Department.

The Police Chief stated that the existing KART station is a location where the homeless sometimes congregate and that the proposed project could increase the number of homeless persons in this area. The homeless account for a significant number of police calls (Sever, 2019). Per Angie Dow, homeless currently congregate at the Amtrak Station. Loitering is not allowed at the exiting KART station. Only those individuals using transit may wait at the station. When asked what mitigation, if any, is recommended to reduce the potential impacts of the proposed project on police service, Police Chief Sever stated that he would like to see added security measures in place. He stated that these measures should include 24/7 led lighting, anti-loitering measures such as benches designed not to be slept upon and security cameras to cover the terminal and parking lot areas. The Chief would like these cameras to be the type that could be monitored remotely at the Police Department (Sever, 2019). When asked if there are any other issues with the proposed project related to police services, the Chief stated that there could be an increase in traffic in the project area that would require more frequent enforcement. He also stated that overall, he thinks "the proposed project would be a great project for that area" (Sever, 2019).

Per the City of Hanford 2035 General Plan Update Policy Document, there is a policy regarding collection of impact fees for police facilities needed to support the cost of providing new police facilities (Quad Knopf, 2017, p. 99). Therefore, the project would not significantly affect the existing service capacity of the City of Hanford Police Department. With the payment of these mandatory fees, and incorporation of project design features **PDF PS-1** through **PDF PS-3** below, the proposed project would have a less than significant impact on police services. Therefore, less than significant impacts would occur and mitigation is not required.

Project Design Features

- **PDF PS-1** The proposed project will incorporate 24/7 LED lighting. Outdoor lighting fixtures would be designed and installed in accordance with the City of Hanford Zoning Ordinance § 17.50.140 to ensure that the light does not illuminate nearby and adjacent properties and residences.
- **PDF PS-2** All benches installed on the project site shall be designed not to be slept upon.
- **PDF PS-3** The proposed project will include security cameras that cover the terminal and parking lot areas, per the request of the City of Hanford Police Department. The project applicant will discuss with the City of Hanford Police Department the feasibility of installing cameras that can be monitored remotely at the Police Department.

d) Schools?

Less than Significant Impact

The project site is located within the service area of the Hanford Elementary School District (HESD) and Hanford Joint Union High School District (HJUHSD). The potential project impacts on each of these school districts is discussed below.



Hanford Elementary School District

Hanford Elementary School District (HESD) includes nine elementary schools and two junior high schools (Hanford Elementary School District, 2019). On June 14, 2019 an information request letter for the proposed KART Transit Station Project was sent via email to Gerry Mulligan, Director of Facilities and Operations at the Hanford Elementary School District. This letter described the proposed project, requested information regarding schools serving the project site, and asked about potential project impacts. On June 26, 2019 UltraSystems received a response via email from Gerry Mulligan, (Mulligan, 2019), refer to **Appendix L**. In the response to the information request letter, Mr. Mulligan stated that Lee Richmond Elementary School and JFK JR. High School are designated to serve the area in which the project site is located (Mulligan, 2019). The current capacity of Lee Richmond Elementary School (grades K-6) is 436 students and the current enrollment at the school is 458 students. JFK JR. High School (grades 7-8) has a capacity of 700 students and a current enrollment of 597 students (Mulligan, 2019).

When asked if the District anticipates any potential environmental impacts from the proposed project related to public school facilities, Mr. Mulligan stated "potential emission increase and traffic congestion." When asked what mitigation is recommended, Mr. Mulligan recommended "zero emission busses and stops near schools." Mr. Mulligan did not identify any other issues with the proposed project related to public school facilities.

Hanford Joint Union High School District

Hanford Joint Union High School District (HJUHSD) includes three high schools, one continuation high school, one adult school, and one community day school (California Department of Education, 2019). On June 14, 2019 an information request letter for the proposed KART Transit Station Project was sent via email to Benjamin Stidman, Director of Facilities and Transportation at the HJUHSD. This letter described the proposed project, requested information regarding schools serving the project site, and asked about potential project impacts. On July 10, 2019 UltraSystems received a response via email from Benjamin Stidman, the Director of Facilities and Transportation at the HJUHSD (Stidman, 2019); refer to **Appendix L**. In this letter it stated that Hanford High School is within the service area of the project site. The current school capacity is 1,700 students and the current enrollment at the school is 1,560 students (Stidman, 2019). Thus, Hanford High School has the capacity for 140 additional students. No potential environmental impacts are anticipated from the proposed project, no mitigation is recommended, and the HJUHSD does not see any other issues with the proposed project related to public school facilities.

The students generated per employee in commercial/industrial developments⁷⁷ is .069 for the Hanford Elementary School District and .026 for the Hanford Joint Union High School District (Odell Planning and Research, 2016, Table C-2 and Table C-3). As a "worst-case" analysis, we are presuming that all of the project employees live within the service area of these two school districts. The project site is expected to have a total of 43 employees,⁷⁸ resulting in an estimated three new HESD and one new HJUSD students. The addition of these students to each school district would not greatly affect student-teacher ratios or school capacity. Additionally, in compliance with Government Code

⁷⁷ Which is the land use that most closely matches that of the proposed project.

⁷⁸ The project site would have six Kings County Area Public Transit Agency (KCAPTA) employees, 32 bus operators, three security personnel, and two onsite employees who would sell tickets/concessions.



§ 17620,⁷⁹ the project would be required to pay any applicable school impact fees. Therefore, the proposed project would have a less than significant impact regarding impacts to schools in both the Hanford Elementary School District and the Hanford Joint Union High School District.

e) Parks?

Less than Significant Impact

Recreational services in the City of Hanford are provided by the City's Parks and Recreation Department, which maintains over 163 acres of city parks (City of Hanford, 2017b). Civic Center Park is the closest park to the project site and is located at 113 Court Street. This park is approximately 0.2 mile northwest of the project site. The park includes benches and a manicured lawn. Lacey Park, at 112 E. Florinda Street, is located approximately 0.6 mile north from the project site (Google Earth, 2019). This park includes facilities such as picnic shelters and play structures. Refer to **Figure 4.15-1** below, which shows the parks located within half a mile of the project site.

The Open Space, Conservation, and Recreation Element of the City's General Plan provides recreational definitions, standards, and policies, emphasizing open space for outdoor recreation and a diversity of active and passive recreational facilities and uses. The General Plan calls for a park acreage standard of 3.5 acres of developed park land per 1,000 residents. Currently the parkland acreage for the City of Hanford is 4.81 acres per 1,000 residents. Within a half mile radius of the proposed project site there are 9.71 acres of parkland and a ratio of 3.09 acres per 1,000 people (Dias, 2019).

The proposed project would not induce substantial population growth that may impact the park acreage standards established by the City of Hanford. The project would create employment opportunities both during the construction and operational phases. However, it is anticipated that employees from the local workforce would be hired during both the construction and operational phases of the project. The project is not of the scope or scale to induce people to move from out of the project area to work at the proposed project, such that new impacts to parks from new residents would occur. The project does not propose an increase in residential land uses nor would it add a significant number of persons to the City.

On June 14, 2019 an information request letter for the proposed KART Transit Station Project was sent via email to Craig Miller, the Parks and Recreation Director for the City of Hanford. This letter described the proposed project, requested information regarding park and recreation facilities serving the project site, and asked about potential project impacts.

⁷⁹ This section governs the consideration of impacts and mitigation related to schools conducted pursuant to CEQA. Section 65995 states that the payment of a fee, pursuant to Education Code §17620 and in the amount specified in §§65995.5 or 65995.7 of the Government Code, will fully and adequately mitigate the provision of school facilities related to new development (Quad Knopf, 2014, p. 6-33)





Figure 4.15-1 NEARBY PARKS AND RECREATIONAL FACILITIES

Path: \\Gissvrigis\Projects\7014_Kings_County_KartMXDs\7014_Kings_County_Kart_4_15_Parks_and_Rec_2019_07_28.mxd Service Layer Credits: Sources: Earl, HERE, Garmin, USGS, Intermap, INOREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community: City of Handroc, CA, 2009, UtilaSystems Environmental, Inc, 2019





On July 2, 2019 UltraSystems received a response via email from Alvin Dias, the City of Hanford Parks Superintendent (Dias, 2019); refer to **Appendix L**. In this letter it stated that the "Parks and Recreation Department does not foresee any environmental impact to our park and recreational facilities" and "does not foresee any environmental impacts, therefor [sic] the department has no mitigation recommendations" (Dias, 2019). Additionally, the Parks and Recreation Department does not see any potential issues with the proposed project related to park and recreation facilities (Dias, 2019). Therefore, based on the scope and nature of the proposed project and on the response from the City of Hanford Parks and Recreation Department, the proposed project would result in less than significant adverse physical impact on parks.

f) Other Public Facilities?

Less than Significant Impact

Library services in the City are provided by the Kings County Library System, which is comprised of 32 branch libraries. The Hanford Branch Library is located in downtown Hanford at 401 N. Douty Street, approximately 0.2 mile northwest of the project site (Quad Knopf, 2017, p. 105). The Hanford Branch Library would serve the project site (Rencher, 2019).

The project would create employment opportunities both during the construction and operational phases. It is anticipated that employees from the local workforce would be hired during both the construction and operational phases of the project. The project is not of the scope or scale to induce people to move from out of the project area to work at the proposed project. Therefore, a less than significant impact is anticipated from employees of the proposed project, both during the short-term construction phase and the long-term operational phase.

In response to the information request letter that was sent to the Kings County Library, Natalie Rencher, Library Director for Kings County Library, stated that the increased population using the transit station can impact the public library positively and/or negatively. An example of a positive impact would be persons coming into the area to use the library as it is intended. An example of a negative impact would be if certain populations congregate at the transit station and make their way over to the library. Ms. Rencher further stated that "the negative impact is not really a problem per se until certain behaviors not suitable for library use happens. The increase of baggage/bedding/carts that come with some individuals becomes a hindrance to those using the public library as it is intended" (Rencher, 2019).

The comment also states that the Hanford Branch Library's parking lot has absorbed many uses over the years for functions beyond library parking. The comment states that this could become a problem in the future (Rencher, 2019). The proposed project has no nexus or relation to parking lot uses and therefore, the project would have no impact on the library's parking lot.

The information request letter also asked: If the proposed project has the potential to impact public library facilities, what mitigation, if any, do you recommend to reduce potential impacts? The response from the library is to have clean public restrooms and water fountains available for the public (Rencher, 2019). The information request letter asked if there are any other issues with the proposed project related to public library facilities and the response from the library was the potential for increased use of the library's public restrooms and the statement that increased activity in the community means increased activity for the public library. The project proposes both public restrooms and drinking fountains. Therefore, less than significant impacts would occur and mitigation is not required.



4.16 Recreation

	Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the project 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?			Х	
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?				х

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

Less Than Significant Impact

The proposed project would demolish existing structures and include construction of a new transit station and commercial development. The approximately four-acre project site is located in the downtown area of the City of Hanford and has been previously developed. The proposed project includes employee break rooms, training rooms, passenger waiting areas, and leasable office space. The proposed project does not include any residential uses that may increase the use of existing recreational facilities. However, the project would include employees of the transit station as well as persons who work in the commercial office space proposed onsite. Employees of the transit station and others working onsite are anticipated to be from the surrounding area, so their impact on existing parks and other recreational facilities would be negligible. The parks nearest to the project site are Civic Center Park, located approximately 0.4 mile to the northwest of the project site and Ball Park, located approximately one mile to the south of the project site (Google Pro Earth, 2019). It is possible that those working at the project site may visit these parks; however, the potential impact of these visits would be less than significant.

The City has a park standard of 3.5 acres of park per 1,000 residents (Quad Knopf, 2017, p. 87). Hanford has 163 acres of city park land (City of Hanford, 2017b). The City's population is approximately 58,104 people as of January 2019 (California Department of Finance, 2019). This equates to approximately 2.8 acres of park land per 1,000 residents, which is below the City's standard. The proposed project would not impact this ratio. Thus, the project would have a less than significant impact on parks and recreation facilities.



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?

<u>No Impact</u>

The project does not propose new or expanded recreational facilities. Therefore, the project would not require the construction or expansion of recreational facilities that would have potential adverse effects on the environment. No impact would occur.



4.17 Transportation

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

In September 2019 Fehr and Peers prepared a Traffic Impact Assessment (TIA) for the proposed project, the results of which are discussed below. The TIA is provided in **Appendix K**.

Existing Traffic Conditions

Under existing conditions, all signalized study intersections operate within acceptable delay ranges and the addition of project traffic would not result in level of service (LOS) D, E or F conditions (Fehr and Peers, 2019, p. 29).⁸⁰ Refer to Table 4 in the Fehr and Peers Traffic Impact Assessment for details.

Project Trip Generation

Project trip generation estimates were prepared for the one-hour peak period during the weekday morning and evening commute when traffic volumes on the adjacent streets are typically the highest. These estimates were based on rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Edition) and driveway count data from the existing KART Transit Center. (Fehr and Peers, 2019, p. 18), as well as hourly bus arrivals and departures projected by KCAPTA.⁸¹

Existing area constraints limit KART service to one-hour headways⁸² for each route. As the existing transit center is not able to serve the expansion and improvement plans of KART, a new site has been identified that would allow KART to increase service frequency to provide 30-minute headways for local Hanford routes to better serve the transit needs of the community. The proposed project would

⁸⁰ The City of Hanford strives to maintain LOS C operations for vehicles; under some circumstances, LOS D may be considered acceptable (Fehr and Peers, 2098, p. 7).

⁸¹ Arrival and departure data provided in email from Angie Dow, Kings County Area Public Transit Agency, Hanford, CA to Michael Rogozen, UltraSystems Environmental Inc., Irvine, CA. September 25, 2019.

⁸² A headway is the amount of time between transit vehicle arrivals at a stop. For example, route that has a bus arrive once per hour would have a 60-minute headway.



increase service by decreasing headways. The traffic report conducted for the proposed project assumed that the headways for each fixed route would be halved, meaning that the number of buses accessing the relocated transit center could double. This is a "worst case" analysis of potential project impacts. The number of riders using the park-and-ride facilities could also increase. Combined, the project is expected to generate a net of 760 daily, 82 morning peak-hour vehicle trips (including buses) and 99 evening peak hour trips, as shown in Table 6 in the TIA, considering the trip generation of existing uses that would be removed with the project. Some of these trips would be relocated trips from the existing KART transit center.

Cumulative Traffic Impacts

In the Cumulative condition, all study intersections except one would operate at an acceptable level of service. The addition of project traffic would not result in acceptable operations degrading to unacceptable levels. Impacts would be less than significant and no mitigation is required because the project would not result in a signalized study intersection degrading from LOS C to LOS D or worse (Fehr and Peers, 2019, p. 29).

The West 7th Street at North 11th Avenue intersection is projected to operate at a deficient LOS D during the evening peak hour prior to the addition of project traffic in the cumulative condition. The project would add traffic but would not increase overall vehicle delay. This intersection has generally been built to its ultimate right-of-way and no additional physical improvements are planned. Widening beyond the existing cross-section could result in secondary impacts to pedestrians and bicyclists. As this intersection is in the downtown area where LOS D may be considered acceptable for vehicles if other improvements would degrade mobility for other travel modes, and the project does not increase average delay when LOS D conditions are projected, this impact is considered less than significant (Fehr and Peers, 2019, pp. 29-30).

Peak-Hour Signal Warrants

Peak-hour signal warrants would not be met at any of the unsignalized study intersections prior to the addition of project traffic. The project would not result in peak-hour signal warrants being met. Additionally, all unsignalized study intersections would operate at an acceptable service level prior to the addition of project traffic, and would continue to do so with the addition of project traffic. Impacts regarding peak-hour signal warrants would be less than significant and no mitigation is required because the project would not result in an unsignalized study intersection meeting signal warrants (Fehr and Peers, 2019, p. 30).

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

Less than Significant Impact with Mitigation Incorporated

The proposed project would not conflict with a program plan, ordinance or policy addressing the circulation system. The project would be required to comply with all applicable plans, programs and ordnances related to transportation and circulation, including but not limited to the plans/regulations below.



City of Hanford Pedestrian and Bicycle Master Plan

The principal goal of the City of Hanford's Pedestrian and Bicycle Master Plan is to provide the means to support bicycling and walking as an alternative mode of transportation for work, daily activities, and recreational trips (City of Hanford, 2016, p. ES-1)

Project Construction

During the construction phase, there is the potential for existing pedestrian facilities to be disrupted. Preparation of a construction management plan, per mitigation measure **TRANS-1** below, would reduce the potential for disruptions to existing pedestrian facilities during the project construction phase. The proposed project would expand transit opportunities in the City of Hanford (Fehr and Peers, 2019, pp. 30-32).

Project Operation

The existing Transit Center serves as a transfer point for eleven local routes and five regional routes and is located adjacent to the Hanford Amtrak station (HNF) and an at-grade railroad crossing. Existing area constraints limit KART service to one-hour headways for each route. As the existing transit center is not able to serve the expansion and improvement plans of KART, a new site has been identified that would allow KART to increase service frequency to provide 30-minute headways for local Hanford routes to better serve the transit needs of the community. However, the Traffic Impact Assessment assumed 30-minute headways for each fixed route as a "worst case" analysis of potential project impacts. (Fehr and Peers, 2019, p. i). This "worst case" analysis would double the number of bus trips compared to existing conditions.

A detailed project site plan has not yet been developed. It is anticipated that the project would maintain existing sidewalks where appropriate and construct new sidewalks along the project frontage to meet City standards. Insufficient details are provided to review potential pedestrian crossing locations (Fehr and Peers, 2019, p. 30). Therefore, mitigation measure **TRANS-2** below is provided to ensure that pedestrian flow to and from the project site is taken into consideration in the project's final site plan.

As detailed in the TIA prepared for the project, the project would relocate the transit center from its existing location adjacent to the Amtrak station to a new location approximately six blocks away. This could result in transit riders experiencing difficulty transferring between the Amtrak Station and the proposed new KART transit station. Service would be provided between the existing Amtrak Station and the proposed transit center on hourly headways. As Amtrak trains depart the station each hour, depending on direction, the connecting service would be timed to connect with trains; however, depending on the actual arrival of trains, the connection may not serve all passenger needs. Additionally, some riders may prefer to walk between the Amtrak Station and the Transit Center. Mitigation measure **TRANS-3** is recommended to assist pedestrians in traveling to and from the proposed project.

Mitigation Measures

MM TRANS-1 Prior to the issuance of a demolition or grading permit, the project applicant shall prepare and implement a Construction Management Plan subject to approval by the City of Hanford. The Plan shall include but is not limited to the following provisions:



- a) Identification of permitted hours for construction-related deliveries and removal of heavy equipment and material;
- b) Identification of where construction workers would park their personal vehicles during project construction with a requirement that at no time shall construction worker vehicles block any driveways. If complaints are received by the project applicant regarding issues with construction worker vehicle parking, the project applicant shall identify alternative parking options for construction workers so as not to interfere with adjacent commercial and residential parking availability;
- c) Identification of how emergency access to and around the project site will be maintained during project construction;
- d) Identification of haul routes for delivery or removal of heavy and/or oversized equipment or material loads. Where feasible, delivery or removal of oversized equipment or material loads shall be conducted during off-peak hour traffic periods;
- e) Maintain access to residence and business driveways in the immediate vicinity of the proposed project site at all times;
- f) Maintain pedestrian connections around the project site and safe crossing locations shall be considered for all pedestrian detours; and
- g) Maintain the security of the project site by erecting temporary fencing during the construction phase of the project. Any onsite night lighting used during the construction phase of the project shall be in compliance with City of Hanford lighting requirements.
- **MM TRANS-2** As the final site plan is developed, the project applicant shall provide sidewalk and intersection crossing design treatments consistent with City of Hanford requirements and that consider the expected pedestrian flows around the project site and to connecting streets. These plans shall be submitted to the City of Hanford for review.
- **MM TRANS-3** Prior to the issuance of an occupancy permit for the proposed transit station, pedestrian wayfinding shall be provided along the path of travel between the transit center and the Amtrak station.

Level of Significance After Mitigation

After implementation of mitigation measure **TRANS-1** above, the project would have less than significant construction-phase impacts on pedestrian facilities.

After implementation of mitigation measure **TRANS-2** above, the project would have less than significant impacts regarding pedestrian flow to and from the proposed project site.

After implementation of mitigation measure **TRANS-3** above, the project would have less than significant impacts regarding pedestrian wayfinding.



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

Less than Significant Impact

CEQA Guidelines § 15064.3, Determining the Significance of Transportation Impacts, describes specific considerations for evaluating a project's transportation impacts. Section 15064.3, subdivision (b) includes criteria for analyzing transportation impacts. For land use projects: "Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within 0.5 mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact."

In response to Senate Bill 743 (SB 743), the Office of Planning and Research (OPR) has updated the CEQA guidelines to include new transportation-related evaluation metrics. Draft guidelines were developed in August 2014, with final guidelines published in November 2017 incorporating public comments from the August 2014 and January 2016 guidelines. In December 2018 the California Natural Resources Agency certified and adopted the CEQA Guidelines update package along with an updated Technical Advisory related to Evaluating Transportation Impacts in CEQA (December 2018). Full compliance with the guidelines is expected by July 2020, after which vehicle delay-based level of service calculations cannot be the sole metric used to evaluate a project's impacts on the transportation system, and instead a vehicle miles traveled (VMT) metric is to be evaluated (Fehr and Peers, 2019, p. 6).

Transit projects are generally considered to have a less than significant impact on vehicle miles traveled, as the provision of transit services helps to reduce reliance on private vehicles and supports the state's goal of reducing greenhouse gas emissions. As transit projects are generally considered to have a less than significant impact on VMT, and neither Kings County nor the City of Hanford have adopted thresholds related to vehicle miles of travel, no VMT assessment was conducted for this project (Fehr and Peers, 2019, p. 6).

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

Less than Significant Impact

Vehicles would access the project site primarily via driveways on Harris Street and Brown Street. The project would comply with all applicable requirements of the City of Hanford regarding traffic-related design features and would be designed to provide adequate lines of sight, proper emergency access, and vehicle flow within the project Site. It would be designed to meet current City of Hanford design standards, including sidewalk design, and would not introduce incompatible uses (Fehr and Peers, 2019, p 32). Additionally, the project would not disrupt existing bicycle facilities during the construction phase and the project would not preclude the construction of bicycle facilities as identified in the City of Hanford Pedestrian and Bicycle Master Plan (Fehr and Peers, 2019, p. 31). Therefore, the project would not increase hazards due to a geometric design feature, and traffic hazard impacts would be less than significant.



d) Would the project result in inadequate emergency access?

Less Than Significant with Mitigation Incorporated

Construction

During project construction, the proposed project could impact the flow of traffic on adjacent streets, including, but not limited to East 7th Street, North Harris Street, North Brown Street, and East 8th Street. The project could impact traffic during the short-term construction phase via the movement of oversize construction equipment and trucks, delivering materials onsite and hauling materials offsite. Additionally, during project construction, travel lanes could be temporarily closed. Therefore, project construction has the potential to impact emergency response vehicles. implementation of mitigation measure **TRANS-1** is recommended to reduce potential impacts on emergency access to a less than significant level.

Operation

The proposed project would provide sufficient onsite space to accommodate the projected level of transit vehicle activities, such that transit vehicles would not spill back from project driveways, and would not affect through travel on the adjacent streets (Fehr and Peers, 2019, p. 33). The project would comply with applicable City regulations, such as the requirement to comply with the City's Fire Code with regard to providing adequate emergency access, as well as the California Building Standards Code. Prior to the issuance of building permits, the City of Hanford would review project site plans, including location of the proposed transit center, fences, access driveways and other features that may affect emergency access. As required by the City of Hanford, fire lanes would be provided that would accommodate emergency ingress and egress by fire trucks, police units, and ambulance/paramedic vehicles. All onsite access and sight-distance requirements would be in accordance with City and Caltrans design requirements. The City's review process and compliance with applicable regulations and standards would ensure that adequate emergency access would be provided at the project site at all times. Therefore, the proposed project would not result in inadequate emergency access and there would be no impacts in this regard.

Level of Significance After Mitigation

With the implementation of mitigation measure **TRANS-1** the proposed project would have a less than significant temporary construction impacts regarding emergency access.



4.18 Tribal and Cultural Resources

	Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	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)? 				x
	 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. 		X		

The Cultural Resources Report dated July 2019, prepared for the KART Transit Project by UltraSystems (**Appendix F**), describes the background research for the analysis of potential cultural resources data conducted for the project. This research included a cultural resources record search at the SSJVIC, a SLF research conducted by the NAHC, and a pedestrian survey assessment.

No prehistoric and one historic archaeological resource were observed during the field survey. During the record search at the SSJVIC for previous cultural resources surveys and recorded sites within the half-mile buffer zone, no prehistoric resources were found. Ten historic properties were identified within the half-mile buffer zone, but none were located within the Project's APE (see **Section 4.5,** Cultural Resources). The results of the pedestrian assessment identified a historic trash scatter which would be adversely affected by construction of the project, but no prehistoric sites or isolates. The cultural resource study findings at the SSJVIC suggest that there is a low potential for finding prehistoric cultural resources.



No tribal cultural resource sites were documented in the NAHC's Sacred Lands File search. No resources as defined by Public Resources Code § 21074 have been identified (**Attachment C**: "Native American Heritage Commission Records Search and Native American Contacts" in **Appendix F** to this Initial Study/Mitigated Negative Declaration). Additionally, the project site has not been recommended for historic designation for prehistoric and tribal cultural resources (TCRs).

- a) 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)?

<u>No Impact</u>

The Cultural Resources investigation determined that there are no listed or eligible for listing TCRs in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code § 5020.1(k) within the project site or within a half-mile buffer surrounding the project site. Therefore, the project would have no impact in this regard.

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.

Less than Significant Impact with Mitigation Incorporated

Assembly Bill 52 (AB 52) requires meaningful consultation with California Native American Tribes on potential impacts on TCRs, as defined in Public Resources Code § 21074. TCRs are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either eligible or listed in the California Register of Historical Resources or local register of historical resources (California Natural Resources Agency [CNRA], 2007).

As part of the AB 52 process, Native American tribes must submit a written request to a lead agency to be notified of projects within their traditionally and culturally affiliated area. The lead agency must provide written, formal notification to those tribes within 14 days of deciding to undertake a project. The tribe must respond to the lead agency within 30 days of receiving this notification if they want to engage in consultation on the project, and the lead agency must begin the consultation process within 30 days of receiving the tribe's request. Consultation concludes when either (1) the parties agree to mitigation measures (MMs) to avoid a significant effect on a tribal cultural resource, or (2) a party, acting in good faith and after reasonable effort, concludes mutual agreement cannot be reached.

A letter was sent by Ms. Angie Dow, Executive Director, of the Kings County Area Public Transit Agency (KCAPTA), the Project's Lead Agency, to the listed local Native American tribe asking if they



wished to participate in AB 52 consultation concerning the KART Transit Project. The letter was sent on May 23, 2019 by certified mail to the Santa Rosa Rancheria/Tachi Yokuts Tribe, and signed for on May 28th. KCAPTA did not receive a reply from the tribe. On June 12, 2019, Ms. Dow called the tribe, however tribal Chairperson Leo Sisco, was not available; Ms. Dow left a message describing the project and requesting a reply. On June 13, 2019, Ms. Dow again called Chairperson's Sisco's office but there was no answer. On June 21, 2019, Ms. Dow called the tribe again and spoke with Chairperson Sisco's secretary, who said that Mr. Sisco was not available; Ms. Dow left a message. Neither Mr. Sisco nor other representative of the tribe have responded to date. The AB 52 response period has concluded and multiple attempts to contact the tribe have been conducted by KCAPTA. Ms. Dow considers that the consultation process has been met and is concluded (Dow, personal communication; July 12, 2019).

No sites were documented in the NAHC's Sacred Lands File search. No resources as defined by Public Resources Code § 21074 have been identified (**Attachment C**: "Native American Heritage Commission Records Search and Native American Contacts" in **Appendix F** to this Initial Study/Mitigated Negative Declaration). Additionally, the project site has not been recommended for historic designation for prehistoric and TCRs. No specific Tribal resources have been identified.

Furthermore, no prehistoric archaeological resources were observed during the field survey. The previous cultural resources surveys within the 0.5-mile buffer zone resulted in no archaeological sites or isolates being recorded. During the cultural resources record search at the SSJVIC, no prehistoric resources were found. Ten historic properties were identified within the 0.5-mile buffer zone, but they are not within the APE. The results of the pedestrian assessment indicate it is highly unlikely that prehistoric properties will be adversely affected by construction of the project. The cultural resource study findings at the SSJVIC suggest that there is a low potential for finding resources.

The land at the site was used for residential, commercial and civic buildings in the early 20th century when minimal grading and disturbance to the native soil was performed prior to construction. Consequently, the potential for subsurface cultural and or historical deposits is considered to be moderate. Therefore, mitigation measure TCR-1 is recommended.

Mitigation Measure

MM TCR-1: If unanticipated discoveries are made during project construction, all work shall stop within a 30-foot radius of the discovery. The Kings County Area Public Transit Agency shall hire a qualified archeologist to assess the discovery. Work shall not continue until the discovery has been evaluated by a qualified archaeologist and the local Native American representative has been contacted and consulted to assist in the accurate recordation and recovery of the resources.

MM TCR-1 requires consultation of a qualified archaeologist and the local Native American representative, if <u>unanticipated</u> discoveries are made during construction activities. With implementation of **MM TCR-1**, potential project impacts on TCRs would be less than significant.

The single contacted tribe, the Santa Rosa Reservation / Tachi Yokut Tribe, did not respond, and did not note the presence of TCRs at or near the project site during several telephone calls placed to them. There is no substantial evidence that TCRs are present on the project site, including no sites listed with the SLF. Therefore, the project would have less than significant impacts related to TCRs.



4.19 Utilities and Service Systems

	Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			Х	
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			Х	
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?			х	
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?			X	

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

Less than Significant Impact

Water Supply: As detailed in threshold 4.19 b) below, there would be sufficient water supplies to serve the project site. Therefore, the proposed project would not require new or expanded water facilities. The project would have a less than significant impact in this regard.



Wastewater Treatment: The City's sanitary sewer system involves more than 212 miles of main sewer lines and 22 pump stations (City of Hanford, 2019b).

The City's wastewater treatment facility, located south of Houston Avenue and east of Eleventh Avenue, provides for treatment, disposal, and reuse of effluent which meets all of the State's discharge requirements, for the entire city of Hanford (Quad Knopf, 2014, p. 6-9). The City's plant treats nearly 1.9 billion gallons of sewage each year. The latest treatment plant expansion was completed in 2004, increasing the City's treatment capacity from 5.5 to 8.0 mgd, equivalent to an additional service for 8,000 new single-family dwellings (City of Hanford, 2019c).

The project proposes a transit center development on an approximately four-acre site. As shown in **Table 4.19-1**, the proposed project is estimated to generate approximately 2,080 gallons per day of effluent. The wastewater estimated to be generated by the proposed project would be a fraction (approximately 0.04%) of the City's wastewater treatment facility daily capacity. In addition, the sewage generation from the existing uses located on the project site would be eliminated, reducing the net amount of new sewage generation. Therefore, there is sufficient capacity available to meet the needs of the proposed project.

Table 4.19-1ESTIMATED PROJECT WASTEWATER GENERATION

Land Use Generation Rate Gallons Per Day Per Acre (GPD/acre) ¹ Net Acres		Net Acres	Wastewater Generated (GPD)	Percentage of Average Daily Flow
Public Facilities	520	4	2,080	0.04%

Notes:

¹ Akel Engineering Group, 2017b Final Sewer System Master Plan, September 2017, Table ES.1 Planning and Design Criteria, pp. ES-6.

The proposed project will involve offsite sewer improvements to connect the sewer lines from the project site to the existing sewer network. All sewer line sizes and connections are subject to review by the City. No new treatment facilities or expanded entitlements would be required. Therefore, the project would have a less than significant impact regarding wastewater treatment.

Stormwater Drainage: The City operates and maintains a storm drainage system covering the majority of the City, including the project site (Akel Engineering Group, 2017a, p. ES-2). The major irrigation ditches that flow through the city are operated and maintained privately by Lakeside Water District and the Peoples Ditch Company (Quad Knopf, 2014, p. 6-13). Stormwater runoff generated on the project site under current conditions is generally carried by building gutters off of the site and onto the adjacent streets where it enters the storm collection system.

Project compliance with regulatory requirements would reduce potential erosion/siltation impacts during the construction phase of the project to a less than significant level because implementation of a SWPPP and associated BMPs would reduce project site runoff carrying surface pollutants offsite to the maximum extent possible. The proposed project would be designed in compliance with all applicable City of Hanford regulations regarding stormwater runoff and the project would be reviewed by the City of Hanford Public Works Department to ensure that the development would not create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems. Refer to **Section 4.10**, *Hydrology and Water Quality*, for additional information.



Electric Power: Electric power service to the site is provided by Southern California Edison Company (SCE) via 12 kV and 66 kV lines. Natural gas is provided by Southern California Gas Company (SoCalGas), which maintains a local system of transmission lines, distribution lines and supply regulation stations (Quad Knopf, 2014, p. 6-19).

The proposed project is located in a developed area, and electric power infrastructure is well established. SCE typically utilizes existing utility corridors to reduce environmental impacts, and has energy-efficiency programs to reduce energy usage and maintain reliable service year-round (Southern California Edison, 2019). The project would be constructed in accordance with applicable Title 24 regulations, and would not necessitate the construction or relocation of electric power facilities. Therefore, a less than significant impact would occur.

Natural Gas: SoCalGas is the primary distributor of retail and wholesale natural gas across Southern California, including the City of Hanford. SoCalGas provides services to residential, commercial, and industrial consumers, and also provides gas for electric generation customers in Southern California.

In its 2018 California Gas Report, SoCalGas analyzed an 18-year demand period, from 2018-2035 to determine its ability to meet projected demand (California Gas and Electric Utilities, 2018. p. 63). SoCalGas expects total gas demand to decline 0.74 percent annually from 2018 to 2035 as a result of energy-efficiency standards and programs, renewable electricity goals, modest economic growth in its service region, and advanced metering infrastructure (California Gas and Electric Utilities, 2018, p. 66). Transportation-related industrial uses account for 2.7 percent of total industrial gas demand, and the proposed project is not of the size or scope to increase this demand (California Gas and Electric Utilities, 2018, p. 73). Moreover, SoCalGas plans on implementing aggressive energy-efficiency programs that will result in natural gas savings across all sectors that will ensure longevity of its natural gas supplies and adequate generation rates (California Gas and Electric Utilities, 2018, p. 78). Therefore, anticipated natural gas supply is adequate to meet demand in the SoCalGas region, and the proposed project is not expected to impact this determination. Thus, no natural gas facilities would have to be constructed or relocated, and a less than significant impact would occur.

Telecommunications Facilities: AT&T and Comcast are currently available in Hanford. AT&T provides telephone services that include Integrated Services Digital Network (ISDN) and all other necessary high-technological services. Many cellular and long-distance services are also available. Comcast, Dish Network, and Direct TV provide television services as well as internet access (Quad Knopf, 2014, p. 6-20). The proposed project would not interfere with operation of any of these provider's facilities, and a less than significant impact would occur.

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

Less than Significant Impact

The City of Hanford manages the water supply for of the city, including the project area. The City maintains 206 miles of main lines and 15,870 service connections. The city's water system consists of 13 supply wells, one standby well, three elevated storage tanks (all three of which are abandoned), one existing 0.5 million gallon ground-level storage tank, three 0.5 million gallon ground-level storage tanks, and a piping network for distributing the water throughout the city (2 million gallon storage tank at Grangeville and Centennial Drive facility and a 1 million gallon storage tank at the



Fargo Avenue facility). Hanford relies on groundwater for domestic water supply (Quad Knopf, 2014, p. 6-6). The City is located above the San Joaquin Valley Groundwater Basin, for which the Kings County Water District (KCWD) is the principal groundwater management agency (Akel Engineering Group, 2016, p. 6.1).

The 2015 Urban Water Management Plan (UWMP) prepared for the City (Akel Engineering Group, 2016) estimated the future demands and supplies for the City's service area. To determine the reliability of its water supplies, the City analyzed anticipated water supply and demand for normal, dry, and multiple dry years. As shown in **Table 4.19-2** below, because the City utilizes groundwater as its sole source of supply, the available "supply" drawn from the aquifer in any year is equal to the system-wide water demand for that particular year (Akel Engineering Group, 2016, p. 7.6).

Year	Normal Year ¹		Single Dry Year ¹		Multiple Dry Years ¹ (3)	
	Supply	Demand	Supply	Demand	Supply	Demand
2020	18,440	18,440	20,468	20,468	20,468	20,468
2025	20,937	20,937	23,240	23,240	23,240	23,240
2030	23,433	23,433	26,011	26,011	26,011	26,011
2035	25,930	25,930	28,782	28,782	28,782	28,782

Table 4.19-2DETAIL OF WATER SUPPLY AND DEMAND1

Notes:

¹ Volumes are in Acre-Feet (AF)

Source: Akel Engineering Group, 2016. 2015 Urban Water Management Plan, pp. 7.6-7.7

As discussed previously, the City uses groundwater as its sole source of supply and no known opportunities currently exist for diversifying sources of supply. To reduce the burden on groundwater resources during periods of prolonged drought, the City has water conservation ordinances that can be implemented to prevent and prohibit the wasting of water, while also encouraging the community to conserve (Akel Engineering Group, 2016, p. 7.7).

Moreover, although the project would use water during project operation, increased water use from projects such as the proposed project have been accounted for in the City's latest UWMP. In addition, the water usage from the existing project site uses would be eliminated, reducing the net amount of new water demand. The UWMP found that with its current water supplies, planned future water supplies, and water conservation, the City will be able to reliably provide water to its customers. The demand for water that would occur as a result of the project would not be significant because adequate water supplies and facilities are available to serve the proposed project, and reasonably foreseeable future development during normal, dry and multiple dry years. Therefore, less than significant impacts would occur regarding water supplies.

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



Less than Significant Impact

As described in **Section 4.19 a)** above, the volume of wastewater estimated to be generated by the project represents a fraction of the existing daily capacity of the wastewater treatment facility providing service in the area. Therefore, the estimated wastewater to be generated by the project would be within the existing capacity of the wastewater treatment provider and less than significant impacts would occur.

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

Less than Significant Impact

The City of Hanford provides refuse collection, as well as segregated green waste and recyclable collection within the incorporated limits of the City and in designated county areas. The solid waste is taken to a disposal and recycling facility at Hanford-Armona Road and SR 43, which is operated by Kings County Waste Management Authority, a joint powers agency of which the City of Hanford is a member (Quad Knopf, 2017, p. 97). The facility processes residential, commercial, and industrial wastes. The facility is designed to recover up to 47 percent of the Kings County Waste Management Authority waste stream. After processing, waste is disposed of at the Kettleman Hills Landfill. The current permitted solid waste disposal at the Kettleman Hills Landfill is 8,000 tons per day. As of 2000, the facility had 6,000,000 cubic yards of capacity remaining (CalRecycle, 2019a).

Project construction and operation would generate solid waste requiring disposal. Materials generated during construction of the project would include paper, cardboard, metal, plastics, glass, concrete, lumber scraps and other materials. During construction (short-term) and operation (long-term), bulk solid waste, excess building material, fill, etc., would be disposed of in a manner consistent with State of California Integrated Waste Management Act of 1989 (CIWMA) and would be removed from the project site. Existing regulations related to recycling during construction and operation phases of the project require that the project would provide readily accessible areas that serve the entire building and are identified for the depositing, storage, and collection of nonhazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, and metals. The project's waste generation during construction would be temporary and would be a fraction of the Kettleman Hills Landfill's daily 8,000-ton capacity. Therefore, temporary solid waste impacts would be less than significant.

The project is anticipated to have 43 employees which, using the solid waste generation rate in **Table 4.19-3**, would result in an estimated generation of 51.6 tons of waste per year. As discussed above, the current permitted solid waste disposal at the Kettleman Hills Landfill is 8,000 tons per day. Therefore, the project's waste generation during project operation would represent a fraction of the Kettleman Hills Landfill capacity.



<u>Table 4.19-3</u> ESTIMATED PROJECT-GENERATED SOLID WASTE

Land Use	Generation Rate ¹	Waste (tons/year)
Transportation-related light industrial	1.20 (tons/employee/year)	51.6

Notes:

¹ Cal Recycle, 2015. 2014 Generator Based Characterization of Commercial Sector Disposal and Diversion in California. Accessed online at: <u>https://www2.calrecycle.ca.gov/WasteCharacterization/PubExtracts/2014/GenSummary.pdf</u> on February 18, 2019.

Since sufficient permitted landfill capacity exists to support operation of the proposed project, no adverse impact on either solid waste collection service or the landfill disposal system would occur. Therefore, project impacts on existing solid waste disposal facilities would be less than significant.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less than Significant Impact

In 1989, the California Legislature enacted the California Integrated Waste Management Act (AB 939), in an effort to address solid waste problems and capacities in a comprehensive manner. The law required each city and county to divert 50 percent of its waste from landfills by the year 2000.

The California Integrated Waste Management Board (CIWMB) requires all counties to adopt an Integrated Waste Management Plan (IWMP). The CIWMB requires the IWMP be updated every five (5) years. Kings County updated the IWMP in 2016 (CalRecycle, 2019b). The City of Hanford, KWRA and Kings County work cooperatively in IWMP updates, though Kings County Planning Department is the Lead Agency for IWMP updates. The IWMP contains the mandatory elements of a Source Reduction and Recycling Element (SRRE) and a Household Hazardous Waste Element (HHWE). In addition, this document contains a Siting Element and the Non-Disposal Facility Element for the City of Hanford. Policies pertaining to solid waste, source reduction, and recycling are identified in the Source Reduction and Recycling Element (SRRE) and the Household Hazardous Waste Element (HHWE) of the *Kings County Integrated Waste Management Plan*, and are made a part of the County's General Plan Resource Conservation Element (County of Kings, 2010, pg. RC-36).

Solid waste generated by the project would be collected by the City and transported offsite to the disposal and recycling facility at Hanford-Armona Road and SR 43 for reuse, recycling and/or disposal, as appropriate. After processing, remaining waste would be disposed of at the Kettleman Hills Landfill.

The proposed project would comply with the County's IWMP and the City's waste reduction procedures and comply with applicable elements of AB 1327, Chapter 18 (California Solid Waste Reuse and Recycling Access Act of 1991) and other applicable local, State, and federal solid waste disposal standards, thereby ensuring that the solid waste stream to regional landfills is reduced in accordance with existing regulations. Therefore, impacts are considered less than significant.



4.20 Wildfire

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

CAL FIRE is legally mandated to periodically map Fire Hazard Severity Zones on State Responsibility Areas (SRAs), as well as recommend Very High Fire Hazard Severity Zones in Local Responsibility Areas (LRAs). CAL FIRE established the Fire and Resource Assessment Program (FRAP) to develop a statewide, consistent logic and science-based model for Fire Hazard Zoning to meet the needs of the adoption of new building standards. The CAL FIRE FRAP's mapped Fire Hazard Severity Zones for SRAs and Very High Fire Hazard Severity Zones in LRAs are shown on **Figures 4.20-1** and **4.20-2**. The project site is not located in or near any SRAs or LRAs classified as Very High Fire Hazard Severity Zones (CAL FIRE, 2007a and 2007b). As shown on **Figures 4.20-1** and **4.20-2**, the closest SRAs include a High Fire Hazard Severity Zone located approximately 26 miles northeast of the project site and a Moderate Fire Hazard Severity Zone located approximately 37 miles west and southwest of the project site. The closest Very High Fire Hazard Severity Zone LRA for Kings County is located approximately 36 miles southwest of the project site.





Figure 4.20-1 FIRE HAZARD SEVERITY ZONE - STATE RESPONSIBILITY AREA

7.5

n





Moderate High

Very High

Figure 4.20-2 FIRE HAZARD SEVERITY ZONE - LOCAL RESPONSIBILITY AREA

UltraSystems

10 Miles

15 Kilometers

5

7.5



a) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

<u>No Impact</u>

As detailed above, the project site is not located in or near an SRA or an LRA Fire Hazard Severity Zone and thus the proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan with regards to wildfire. Therefore, the proposed project would have no impact regarding threshold a) above and no further analysis is required.

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

<u>No Impact</u>

As detailed above, the project site is not located in or near an SRA or an LRA Fire Hazard Severity Zone and thus the proposed project would not exacerbate wildfire risks or expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Therefore, the proposed project would have no impact regarding threshold b) and no further analysis is required.

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

<u>No Impact</u>

As detailed above, the project site is not located in or near an SRA or an LRA Fire Hazard Severity Zone and thus the proposed project would not 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. Therefore, the proposed project would have no impact regarding threshold c) and no further analysis is required.

d) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact

As detailed above, the project site is not located in or near an SRA or an LRA Fire Hazard Severity Zone and thus the proposed project would not 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. Therefore, the proposed project would have no impact in this regard and no further analysis is required.



4.21 Mandatory Findings of Significance

Would the project:		Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	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 a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
b)	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)	Environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

a) Would 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 a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant Impact with Mitigation Incorporated

The project site is located in an urbanized area, which provides low habitat value for special-status plant and wildlife species. No special-status plants or wildlife were observed within the project area. The project site contains disturbed undeveloped land and developed and/or paved land. The undeveloped patch is vegetated with non-native, ruderal vegetation as discussed previously.

Hoary bats and San Joaquin kit fox are the only special-status mammal species with known occurrences in the vicinity of the project site. Hoary bats are not federally listed or state-listed, but



maternal breeding colonies are protected. Hoary bats, which have a low likelihood of occurrence, have the potential to roost in the foliage of trees on the site. No San Joaquin kit fox, dens or potential dens, or sign of San Joaquin kit fox were observed on the project site during field site reconnaissance.

With implementation of the project, the existing buildings on the site would be demolished and replaced with a new transit station and commercial development. Removal of trees and removal of buildings containing active bat roosts, particularly during the nesting season (typically April through August), could result in the loss of individual bats, bat colonies, or their habitat. Implementation of mitigation measure **BIO-1** would reduce potential roosting and breeding bat impacts from the project to a less-than-significant level.

Existing shrubs and trees on the project site could also provide nesting habitat for native migratory birds in the area. Project construction could adversely impact birds and potential nests on the project site. The buildings on the project site would be demolished and existing landscaping would be removed prior to construction of the proposed project. To avoid or minimize direct and indirect effects on migratory non-game nesting birds, and their nests, young, and eggs, the following measures shall be implemented. Implementation of mitigation measure **BIO-2** would reduce potential impacts on nesting birds from the project to a less-than-significant level.

With implementation of mitigation measures **BIO-1** and **BIO-2**, the project would result in less than significant impacts on Hoary bats and nesting bird species.

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

Less than Significant Impact

Section 4.17 (Transportation) indicates that in the Cumulative condition, all study intersections except one would operate at an acceptable level of service. The addition of project traffic would not result in acceptable operations degrading to unacceptable levels. Impacts would be less than significant and no mitigation is required because the project would not result in a signalized study intersection degrading from LOS C to LOS D or worse (Fehr and Peers, 2019, p. 29).

The West 7th Street at North 11th Avenue intersection is projected to operate at a deficient LOS D during the evening peak hour prior to the addition of project traffic in the cumulative condition. The project would add traffic but would not increase overall vehicle delay. This intersection has generally been built to its ultimate right-of-way and no additional physical improvements are planned. Widening beyond the existing cross-section could result in secondary impacts to pedestrians and bicyclists. As this intersection is in the downtown area where LOS D may be considered acceptable for vehicles if other improvements would degrade mobility for other travel modes, and the project does not increase average delay when LOS D conditions are projected, this impact is considered less than significant (Fehr and Peers, 2019, pp. 29-30).

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



Less than Significant Impact with Mitigation Incorporated

Section 4.9 (Hazards and Hazardous Materials) indicated that construction and operation of the project would involve transport, storage, and use of chemical agents, solvents, paints, and other hazardous materials commonly associated with construction activities. Chemical transport, storage, and use would comply with RCRA; CERCLA; OSHA; California hazardous waste control law; DOSH; SJVAPCD; and City of Hanford Fire Department requirements.

In August 2019, UltraSystems prepared a Phase I Environmental Site Assessment for the proposed project site (**Appendix I** to this document). During the site reconnaissance, an abandoned auto repair facility was observed within the eastern building at 225 North Harris Street. UltraSystems observed six below-grade hydraulic lifts, multiple unidentified substance containers, and significant staining of the concrete surface. Mitigation measure **HAZ-1** is recommended to reduce potential impacts from the abandoned auto repair facility located at 225 North Harris Street.

Two underground storage tanks located to the west of the shop building at 225 North Harris Street were closed in place at the project site in 1991. Mitigation measure **HAZ-2** is recommended to reduce potential impacts from the USTs located to the west of the shop building at 225 North Harris Street.

A gasoline station was located at 232 East 7th Street from at least 1950 to 1960. Mitigation measure **HAZ-3** is recommended to reduce potential impacts from the suspected former gasoline station and the unknown disposition of the fueling system located at 232 East 7th Street in the City of Hanford, California.

The Phase I Environmental Site Assessment prepared for the proposed project site states that based on the years of construction (1903-1968), asbestos-containing materials and lead-based paint surveys should be completed for the structures on the project site prior to demolition (UltraSystems, 2019, p. v). Mitigation measure **HAZ-4** is recommended to reduce potential impacts from LBP and ACM to less than significant levels.

After implementation of mitigation measures **HAZ-1** through **HAZ-4**, potentially hazardous materials impacts from previous uses/activities on the project site would be reduced to a less than significant level.


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6.0 LIST OF PREPARERS

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6.2 Responsible Agency

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7.0 MITIGATION MONITORING AND REPORTING PROGRAM

The Mitigation Monitoring and Reporting Program (MMRP) has been prepared in conformance with § 21081.6 of the Public Resources Code and § 15097 of the California Environmental Quality Act (CEQA) Guidelines, which requires all state and local agencies to establish monitoring or reporting programs whenever approval of a project relies upon a Mitigated Negative Declaration (MND) or an Environmental Impact Report (EIR). The MMRP ensures implementation of the measures being imposed to mitigate or avoid the significant adverse environmental impacts identified through the use of monitoring and reporting. Monitoring is generally an ongoing or periodic process of project oversight; reporting generally consists of a written compliance review that is presented to the decision-making body or authorized staff person.

It is the intent of the MMRP to: (1) provide a framework for document implementation of the required mitigation; (2) identify monitoring/reporting responsibility; (3) provide a record of the monitoring/reporting; and (4) ensure compliance with those mitigation measures that are within the responsibility of the lead agency and/or project applicant to implement.

The areas requiring mitigation are: Air Quality (4.3) Biological Resources (4.4) Cultural Resources (4.5) Geology and Soils (4.7) Hazards and Hazardous Materials (4.9) Noise (4.13) Transportation (4.17) Tribal Cultural Resources (4.18)

The areas that do not require mitigation are: Aesthetics (4.1) Agriculture and Forestry (4.2) Energy (4.6) Greenhouse Gases (4.8) Hydrology and Water Quality (4.10) Land Use and Planning (4.11) Mineral Resources (4.12) Population and Housing (4.13) Public Services (4.15) Recreation (4.16) Utilities and Service Systems (4.19) Wildfires (4.20)

The following table lists impacts, mitigation measures adopted by the Kings County Area Public Transit Agency in connection with approval of the proposed project, level of significance after mitigation, responsible and monitoring parties, and the project phase in which the measures are to be implemented. Only those environmental topics for which mitigation is required are listed in this Mitigation Monitoring and Reporting Program.



Issue Area	Mitigation Measures	Level of Significance After Mitigation	Responsible Party / Monitoring Party	Implementation Stage
Air Quality				
Threshold 4.3 c) Would the project expose sensitive receptors to substantial pollutant concentrations?	MM AQ-1 Prior to commencing and construction activity, the Applicant will provide notices that show a schedule for major construction activities that will occur through the duration of the construction period. In addition, the notification will include the identification and contact number for a community liaison and designated construction manager that would be available onsite to monitor construction activities. The construction manager shall be responsible for complying with all project requirements related to PM10 generation. He or she will be located at the onsite construction office during construction hours for the duration of all construction activities. Contact information for the community liaison and construction manager will be located at the construction manager will be located at the available office, City Hall, the police department, and on a sign onsite.	Less Than Significant	Project Applicant	Prior to commencement of project construction
Biological Resources				
Threshold 3.3 a) Would the project 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 U.S. Fish and Wildlife Service?	MM BIO-1: Bats Identify and protect roosting and breeding bats on the project site and provide alternative roosting habitat. The project applicant shall implement the following measures to protect roosting and breeding bats found in a tree or structure to be removed with the implementation of the project. Prior to tree removal or demolition activities, the project applicant shall retain a qualified biologist to conduct a focused survey for bats and potential roosting sites within buildings to be demolished or trees to be removed. The surveys can be conducted by visual identification and can assume presence of hoary bats or the bats can be identified to a species level with the use of a bat echolocation detector such as an "Anabat" unit. If no roosting sites or bats are found, a letter report confirming absence shall be sent to the California Department of Fish and Wildlife (CDFW) and no further mitigation is required. If roosting sites or	Less Than Significant	Project Applicant	Prior to tree removal or demolition activities



Issue Area	Mitigation Measures	Level of Significance After Mitigation	Responsible Party / Monitoring Party	Implementation Stage
	hoary bats are found, then the following monitoring and exclusion, and habitat replacement measures shall be implemented. The letter or surveys and supplemental documents shall be provided to the City of Hanford prior to demolition permit issuance.			
	a. If bats are found roosting outside of nursery season (May 1st through October 1st), then they shall be evicted as described under (b) below. If bats are found roosting during the nursery season, then they shall be monitored to determine if the roost site is a maternal roost. This could occur by either visual inspection of the roost bat pups, if possible, or monitoring the roost after the adults leave for the night to listen for bat pups. If the roost is determined to not be a maternal roost, then the bats shall be evicted as described under (b). Because bat pups cannot leave the roost until they are mature enough, eviction of a maternal roost cannot occur during the nursery season. A 250-foot (or as determined in consultation with CDFW) buffer zone shall be established around the roosting site within which no construction or tree removal shall occur.			
	b. Eviction of bats shall be conducted using bat exclusion techniques, developed by Bat Conservation International (BCI) and in consultation with CDFW that allow the bats to exit the roosting site but prevent re-entry to the site. This would include, but not be limited to, the installation of one-way exclusion devices. The devices shall remain in place for seven days and then the exclusion points and any other potential entrances shall be sealed. This work shall be completed by a BCI-recommended exclusion			



Issue Area	Mitigation Measures	Level of Significance After Mitigation	Responsible Party / Monitoring Party	Implementation Stage
	 and carried concurrently with any scheduled bird exclusion activities. c. Each roost lost (if any) will be replaced in consultation with the CDFW and may include construction and installation of BCI-approved bat boxes suitable to the bat species and colony size excluded from the original roosting site. Roost replacement will be implemented before bats are excluded from the original roost sites. Once the replacement roosts are constructed and it is confirmed that bats are not present in the original roost site, the structures may be removed or sealed. 			
Threshold 3.3 a) Would the project 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 U.S. Fish and Wildlife Service?	 MM BIO-2: Nesting Birds Preconstruction Nesting Bird Surveys. If project activities begin during nesting bird/raptor season (between January 1 and September 15), no earlier than one week prior to ground-disturbing activities or vegetation trimming or removal, a qualified biologist shall conduct preconstruction nesting bird clearance surveys within the project site and within a 100-foot radius around the project site for nesting birds, and other sensitive species. Project activities that will remove or disturb potential nest sites should be scheduled outside the nesting bird season, if feasible. Migratory bird breeding season is January 15 to August 15, general bird breeding season is February 1 to September 15, and Conduct brush removal, tree trimming, building demolition, or grading activities outside of the nesting season. California Department of Fish and Wildlife biologists have defined the nesting season as February 1st through August 15th. The nesting bird nesting season is typically from February 1 through August 31, but can vary 	Less Than significant	Project Applicant	Prior to tree removal or demolition activities



Issue Area	Mitigation Measures	Level of Significance After Mitigation	Responsible Party / Monitoring Party	Implementation Stage
	slightly from year to year, usually depending on weather conditions. Raptors are known to begin nesting early in the year and ends late. The raptor nesting bird season begins January 1 to September 15.			
	• If project activities that will remove or disturb potential nest sites (e.g., trees and shrubs) cannot be avoided between January 1 and August 31, a qualified biologist shall conduct a pre-construction survey for nesting birds within the limits of project disturbance within seven calendar days prior to mobilization, staging and other project-related disturbance. Preconstruction surveys shall be conducted no more than three days prior to vegetation trimming or removal, grubbing or grading, structure removal, or other construction-related disturbance.			
	• If an active bird nest is located during the pre- construction survey and potentially will be affected, a no-activity buffer zone shall be delineated on maps and marked in the field by fencing, stakes, flagging, or other means up to 500 feet for raptors, or 200 feet for non-raptors. Materials used to demarcate the nests shall be removed as soon as work is complete or the fledglings have left the nest. The qualified biologist shall determine the appropriate size of the buffer zone based on the type of activities planned near the nest and the species of the nesting bird. Buffer zones shall not be disturbed until a qualified biologist determines that the nest is inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, or the young will no longer be affected by project activities. Periodic monitoring by a biological monitor will be performed to determine when nesting is			



Issue Area	Mitigation Measures	Level of Significance After Mitigation	Responsible Party / Monitoring Party	Implementation Stage
	 complete. After the nesting cycle is complete, project activities may begin within the buffer zone. If neither nesting birds nor active nests are observed during the pre-construction survey(s). 			
	or if they are observed and would not be affected (i.e. are outside the buffer zone described above), then project activities may begin and no further nesting bird monitoring will be required.			
Cultural Resources			I	
Threshold 4.5 a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	MM CUL-1 A historical archaeological resource consisting of a domestic trash deposit is present within the project site. A qualified archaeologist shall be retained to provide monitoring in the area of the trash deposit on three lots on the north and south sides of East 8th Street. If subsurface elements or features of the historic deposit are encountered, the archaeologist shall be afforded the necessary time and funds to recover, analyze, and curate the find(s). Construction activities may continue on other parts of the project site while evaluation and treatment of historical or unique archaeological resources takes place.	Less Than Significant	Project Applicant	During Construction
Threshold 4.5 b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	MM CUL 2 If prehistorical and/or historical archaeological resources are discovered during construction, the contractor shall halt construction activities in the immediate area and notify the Kings County Area Public Transit Agency (KCAPTA). An on-call qualified archaeologist shall be notified and afforded the necessary time to recover, analyze, and curate the find(s). The qualified archaeologist shall recommend the extent of archaeological monitoring necessary to ensure the protection of any other resources that may be in the area and afforded the necessary time and funds to recover, analyze, and curate the find(s). Construction activities may continue on other parts of the building	Less Than Significant	Project Applicant	During Construction



Issue Area	Mitigation Measures	Level of Significance After Mitigation	Responsible Party / Monitoring Party	Implementation Stage
	site while evaluation and treatment of historical or unique archaeological resources takes place.			
Threshold 4.5 c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?	MM CUL-3 If human remains are encountered during excavations associated with this project, all work shall stop within a 30-foot radius of the discovery and the Kings County Coroner will be notified (§ 5097.98 of the Public Resources Code). The Coroner will determine whether the remains are recent human origin or older Native American ancestry. If the coroner, with the aid of the supervising archaeologist, determines that the remains are prehistoric, they will contact the NAHC. The NAHC will be responsible for designating the Most Likely Descendant (MLD). The MLD (either an individual or sometimes a committee) will be responsible for the ultimate disposition of the remains, as required by § 7050.5 of the California Health and Safety Code. The MLD will make recommendations within 24 hours of their notification by the NAHC. These recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials (§ 7050.5 of the Health and Safety Code).	Less Than Significant	Project Applicant	During Construction Excavations
Geology and Soils				
Threshold 4.7 f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	MM GEO-1 If paleontological resources are uncovered during construction activities, the construction contractor shall halt construction activities in the immediate area and notify the Kings County Area Public Transit Agency. The on-call paleontologist shall be notified and afforded the necessary time and funds to recover, analyze, and curate the find(s). Subsequently, the monitor shall remain onsite for the duration of the ground disturbance to ensure the protection of any other resources that may be in the area.	Less Than Significant	Project Applicant	During project construction



Issue Area	Mitigation Measures	Level of Significance After Mitigation	Responsible Party / Monitoring Party	Implementation Stage
Hazards and Hazardous Materi	als	•		•
Threshold 4.9 c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	MM HAZ-1 The project applicant shall ensure that subsurface sampling is conducted upon removal of the six below- grade hydraulic lifts located within the eastern building at 225 North Harris Street, Hanford, California. If significant contamination is encountered, a Soil Management Plan (SMP) shall be prepared to outline procedures to establish appropriate process and control measures to ensure contaminated soils are managed safely and in accordance with all applicable environmental requirements	Less Than Significant	Project Applicant	Upon removal of the six below-grade hydraulic lifts located within the eastern building at 225 North Harris Street
Threshold 4.9 c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	MM HAZ-2 Prior to the issuance of a grading permit, the project applicant shall ensure that subsurface sampling is conducted in the vicinity of the former USTs, located to the west of the shop building at 225 North Harris Street in Hanford, California. If significant contamination is encountered, a SMP shall be prepared to outline procedures to establish appropriate process and control measures to ensure contaminated soils are managed safely and in accordance with all applicable environmental requirements.	Less Than Significant	Project Applicant	Prior to issuance of a grading permit
Threshold 4.9 c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	MM HAZ-3 Prior to the issuance of a grading permit, the project applicant shall ensure that subsurface sampling is conducted to address the former gasoline station, and a geophysical survey conducted to verify the underground storage tanks are no longer in place at 232 East 7th Street in Hanford, California. If significant contamination is encountered, a SMP shall be prepared to outline procedures to establish appropriate process and control measures to ensure contaminated soils are managed safely and in accordance with all applicable environmental requirements.	Less Than Significant	Project Applicant	Prior to issuance of a grading permit



Issue Area	Mitigation Measures	Level of Significance After Mitigation	Responsible Party / Monitoring Party	Implementation Stage
Threshold 4.9 c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	MM HAZ-4 Prior to the issuance of a demolition permit for the structures on site, the project applicant shall ensure that ACM and LBP surveys are completed. ACM and LBP materials, if present, shall be properly removed and disposed of (in accordance with all applicable laws and regulations) prior to demolition of onsite structures.	Less Than Significant	Project Applicant	Prior to issuance of a demolition permit
Threshold 4.9 d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	MMs HAZ-1 through HAZ-3 as stated above are the recommended action for this threshold section.	Less Than Significant	Refer to mitigation measures HAZ-1 through HAZ-3 above.	Refer to mitigation measures HAZ-1 through HAZ-3 above.
Noise				
Threshold 4.13 a) Would the project generate 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?	MM N-1 If surrounding residents or businesses complain of excessive noise during construction, then the construction contractor will conduct noise monitoring in the residential or commercial area of concern during the suspected noise-producing construction activities. If the monitored noise levels exceed background levels by 5 dBA or more, then the construction contractor will mitigate noise levels using temporary noise shields, noise barriers or other mitigation measures to comply with those restrictions or standards. (See below.)	Less Than Significant	Construction Contractor	During project construction



Issue Area	Mitigation Measures	Level of Significance After Mitigation	Responsible Party / Monitoring Party	Implementation Stage
Threshold 4.13 a) Would the project generate 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?	 MM N-2 The construction contractor will use the following source controls, except where not physically feasible: Use of noise-producing equipment will be limited to the interval from 7 a.m. to 6 p.m., Monday through Friday. For all noise producing equipment, use types and models that have the lowest horsepower and the lowest noise generating potential practical for their intended use. The construction contractor will ensure that all construction equipment, fixed or mobile, is properly operating (tuned-up) and lubricated, and that mufflers are working adequately. Have only necessary equipment onsite. Use manually-adjustable or ambient sensitive backup alarms 	Less Than Significant	Construction Contractor	During project construction
Threshold 4.13 a) Would the project generate 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?	 MM N-3 The contractor will use the following path controls, except where not physically feasible: Install portable noise barriers, including solid structures and noise blankets, between the active noise sources and the nearest noise receivers. Temporarily enclose localized and stationary noise sources. Store and maintain equipment, building materials, and waste materials as far as practical from as many sensitive receivers as practical. 	Less Than Significant	Construction Contractor	During project construction



Issue Area	Mitigation Measures	Level of Significance After Mitigation	Responsible Party / Monitoring Party	Implementation Stage
Threshold 4.13 a) Would the project generate 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?	MM N-4 Advance notice of the start of construction shall be delivered to all noise sensitive receivers adjacent to the project area. The notice shall state specifically where and when construction activities will occur, and provide contact information for filing noise complaints with the contractor and the City.	Less Than Significant	Construction Contractor	Prior to project construction
Transportation				
Threshold 4.17 a) Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	 MM TRANS-1 Prior to the issuance of a demolition or grading permit, the project applicant shall prepare and implement a Construction Management Plan subject to approval by the City of Hanford. The Plan shall include but is not limited to the following provisions: a) Identification of permitted hours for construction related deliveries and removal of heavy equipment and material; b) Identification of where construction workers would park their personal vehicles during project construction with a requirement that at no time shall construction worker vehicles block any driveways. If complaints are received by the project applicant regarding issues with construction worker vehicle parking, the project applicant shall identify alternative parking options for construction workers so as not to interfere with adjacent commercial and residential parking availability. 	Less than Significant	Project Applicant	Prior to the issuance of a demolition or grading permit



Issue Area	Mitigation Measures	Level of Significance After Mitigation	Responsible Party / Monitoring Party	Implementation Stage
	 c) Identification of how emergency access to and around the project site will be maintained during project construction. 			
	d) Identification of haul routes for delivery or removal of heavy and/or oversized equipment or material loads. Where feasible, delivery or removal of oversized equipment or material loads shall be conducted during off-peak hour traffic periods.			
	e) Maintain access to residence and business driveways in the immediate vicinity of the proposed project site at all times.			
	 f) Maintain pedestrian connections around the project site and safe crossing locations shall be considered for all pedestrian detours 			
	g) Maintain the security of the project site by erecting temporary fencing during the construction phase of the project. Any onsite night lighting used during the construction phase of the project shall be in compliance with City of Hanford lighting requirements.			
Threshold 4.17 a) Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	MM TRANS-2 As the final site plan is developed, the project applicant shall provide sidewalk and intersection crossing design treatments consistent with City of Hanford requirements and that consider the expected pedestrian flows around the project site and to connecting streets. These plans shall be submitted to the City of Hanford for review.	Less than Significant	Project Applicant	As the final site plan is developed
Threshold 4.17 a)Would the project conflict with aprogram plan, ordinance orpolicy addressing the circulationsystem, including transit,	MM TRANS-3 Prior to the issuance of an occupancy permit for the proposed transit station, pedestrian wayfinding shall be provided along the path of travel between the transit center and the Amtrak station.	Less than Significant	Project Applicant	Prior to the issuance of an occupancy permit for the proposed transit station



Issue Area	Mitigation Measures	Level of Significance After Mitigation	Responsible Party / Monitoring Party	Implementation Stage
roadway, bicycle and pedestrian facilities?				
Threshold 4.17 d) Would the project result in inadequate emergency access?	Refer to mitigation measure TRANS-1 above.	Less than Significant	Project Applicant	Prior to the issuance of a demolition or grading permit
Tribal and Cultural Resources		-	-	
Threshold 4.18 a) ii) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: A 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 for the resource to a California Native American tribe?	MM TCR-1 If unanticipated discoveries are made during project construction, all work shall stop within a 30-foot radius of the discovery. The Kings County Area Public Transit Agency shall hire a qualified archeologist to assess the discovery. Work shall not continue until the discovery has been evaluated by a qualified archaeologist and the local Native American representative has been contacted and consulted to assist in the accurate recordation and recovery of the resources.	Less Than Significant	Project Applicant	During Construction